ReadSoft Email-based Approval

Configuration Guide

Version: 7.6

Date: 2019-10-31

KOFAX

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About Kofax ReadSoft Email-based Approval™

ReadSoft Email-based Approval, previously called MOBILE APPROVAL, allows users to approve, reject or add a note to a document through email. This is different to working with documents using a smartphone. For using a phone interface to handle documents, see the *ReadSoft Mobile Installation and Configuration Guide*.

The basic function of using ReadSoft Email-based Approval follows these simple steps.

1. A user receives an email indicating that they have a document to approve, reject, or add a note to.

2. In the received email, the user clicks on an approve, reject or add note link that opens the user's email client and populates a new email message with the appropriate subject and body text information.

3. The user sends the message of the approval or rejection of the document.

4. The user receives a reply email, showing the updated status of the document.

Deployment

This topic describes how to deploy the Web Application to Apache Tomcat.

System requirements

For the system requirements for ReadSoft Email-based Approval, see the *PROCESS DIRECTOR Web Application Technical Specifications* document.

Installation file

ReadSoft Email-based Approval is a Java Web Application. The deployment file is *approval-app.war*.

The installation files are sent as ZIP files and are password protected (to ensure that they are not blocked by email server protection filters). The password is **readsoft**.

Deploy to Tomcat

To deploy ReadSoft Email-based Approval to Tomcat, complete the following steps.

1. Stop Tomcat (if it is running).

2. Place *approval-app.war* in the `../Tomcat/webapps/` directory.

3. Start Tomcat.

Tomcat decompresses the WAR file to a new folder: `approval-app`.

Configuration files

The main configuration file is *web.xml*, which is saved in the `../webapps/approval-app/WEB-INF/` folder. This file specifies the location of some other configuration files.

All the parameters in *web.xml* can also be specified using an *approval.properties* file that uses a key = value notation. This requires that the web application server set a system property called `com.ebydos.webapp.config` that points to this property file.

Specify the location of approval-app.properties

To specify the location of the *approval-app.properties* file for Windows running Tomcat 5.5 or later, complete the following steps.

1. Open the **Configure Tomcat** application.

2. Go to **Start > All Programs > Apache Tomcat > Configure Tomcat**.

3. Select the **Java** tab.
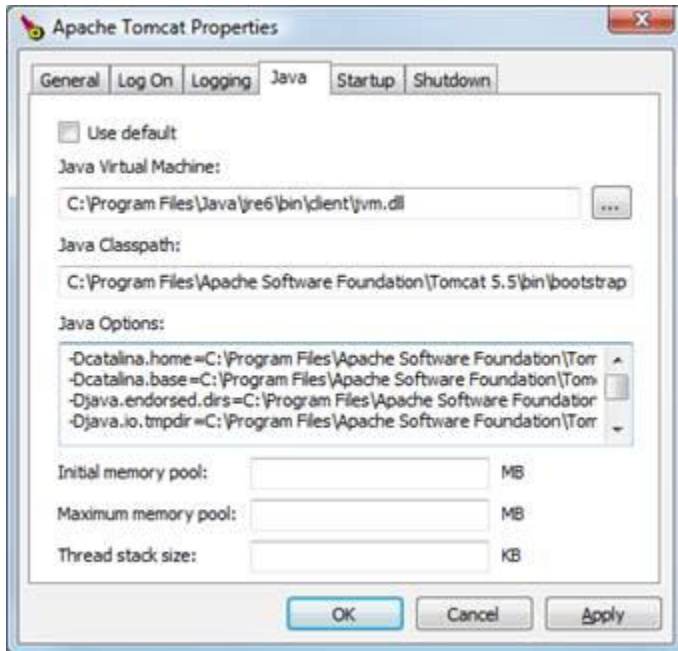
4. Enter the path of the *approval-app.properties* file for the `-Dcom.ebydos.webapp.config` variable in **Java Options**.

   You must use the `%context%` variable because you are using more than one ReadSoft Web Application.
   Example:
   More than one Web Application: –
   `Dcom.ebydos.webapp.config=c:/your/path/%context%.properties`

If the *approval-app.properties* file cannot be found using the default method and if no specific path has been set in the Tomcat configuration, ReadSoft Email-based Approval uses the *pdweb-app.properties* file in its own internal folder: `.../webapps/pdweb-app/WEB-INF/conf/`.

Connect to SAP systems

This topic describes how to connect ReadSoft Email-based Approval to your SAP system.

Overview

Connection method

ReadSoft Email-based Approval connects to SAP systems through a Remote Function Call (RFC). To configure the Web Application, the SAP Basis team must first create and configure an SAP user. For Kofax ReadSoft PROCESS DIRECTOR Accounts Payable™, Kofax supplies an authorization profile file that the Basis team can upload and assign to the user created for the Web Application.

Configuration file

The *saplogon.properties* file is used to configure the connection to the SAP system and is located in the `../webapps/wcconfig/pdweb-app/WEB-INF/conf/` directory.

Parameters

The *saplogon.properties* file contains the following parameters. The `sysid` portion of the parameter should be replaced by the SAP system ID.

```
sysid.activate
sysid.client
sysid.user
sysid.passwd
sysid.sysnr
sysid.system
sysid.ashost
sysid.msghost
sysid.group
sysid.sso
sysid.ext_auth_svc
sysid.ext_search
sysid.jcotrace
sapsystem
```

Connect to an SAP application server

The following example entries in *saplogon.properties* illustrate a typical connection to a single application server:

```
TR1.activate = yes
TR1.client = 120
TR1.user = system
TR1.passwd = abc123
TR1.lang = EN
TR1.ashost = your.server.local
TR1.sysnr = 0
TR1.maxconnections = 10
```

In the example, the `system` user has the `abc123` password to connect to the application server located at `your.server.local`. Each parameter uses the `TR1` prefix as the SAP system ID, while the `TR1.client` parameter is the client number.

`TR1.activate` must be set to `yes` to enable subsequent entries.

Connect to multiple application servers

ReadSoft Email-based Approval can connect to more than one SAP system. This is specified in the *saplogon.properties* file.

For example:

```
sapsystem = TR1
TR1.activate = yes
TR1.client = 120
TR1.user = system
TR1.passwd = abc123
TR1.ashost = your.server.local
TR1.sysnr = 0
TR1.maxconnections = 10
PD1.activate = yes
PD1.client = 120
PD1.user = system2
PD1.passwd = xyz789
PD1.ashost = my.server.local
PD1.sysnr = 0
PD1.maxconnections = 10
```

The `sapsystem` parameter specifies the default system; in this case, `TR1`.

Alternatively, you may specify `$(SAPSYSTEM)` (a variable) for `sapsystem` and the system ID will be determined from the Web Application system property ID. For example, in Tomcat, this is done by adding `-DSAPSYSTEM=TR1` to the **Java Options**.

Connect to an SAP message server

You must use the following two parameters to connect to an SAP message server.

Parameter	Description
sysid.msghost	The address of the SAP message server.
sysid.group	The name of the message server group.

Note: The `sysid.ashost` parameter is not needed.

Example:

```
QA1.activate = yes
QA1.client = 120
QA1.user = system
QA1.passwd = abc123
QA1.msghost = your.server.local
QA1.group = space
QA1.sysnr = 0
QA1.maxconnections = 10
```

Configuration parameters

This topic describes all the parameters for configuring ReadSoft Email-based Approval. The following configuration files can be edited directly or through ReadSoft Email-based Approval.

- *scheduler.xml*

- *web.xml*

- *settings.properties*

scheduler.xml

ReadSoft Email-based Approval can operate on a schedule of your choice. You must determine the days and times on which ReadSoft Email-based Approval should run. To set the schedule days and times, complete the following steps.

1. Log in to the ReadSoft Email-based Approval web page.

2. Select the **Schedule** tab.

3. Set one of the following options.

    1. Permanently

        ReadSoft Email-based Approval runs continuously.

2. Every day:

ReadSoft Email-based Approval runs every day, but only during the times you specify here.

3. Selected days of the week:

ReadSoft Email-based Approval runs only on the days and times you specify.
For all the options, you must specify the **Interval** to determine how often ReadSoft Email-based Approval should check for new email.

web.xml

Main settings path

This is set in `WEB-INF\web.xml` for internal configuration. This is the path to the main ReadSoft Email-based Approval core configuration file.

```
<init-param>
<param-name>settings</param-name>
<param-value>WEB-INF\conf\settings.properties</param-value>
</init-param>
```

Available languages

The internal configuration for available languages is set in `WEB-INF\web.xml`.

Use this parameter to configure the available languages for the Web Application. The ISO codes of the supported languages are separated by the comma sign.

The first language code is the default language and is selected, if:

- The user is not logged on and the browser locale is not in the list specified.

- The user's locale is not in the list specified.

```
<init-param>
<param-name>languages</param-name>
<param-value>de,en</param-value>
</init-param>
```

Note: Only English and German are currently supported.

Session timeout

This is the maximum inactive time interval. In the schedule window, there is a loop for calling the servlet and asking about the status within ReadSoft Email-based Approval.

The value is in seconds.

```
<init-param>
<param-name>normaltimeout</param-name>
<param-value>1800</param-value>
</init-param>
```

Trace file directory

```
<init-param>
<param-name>tracedir</param-name>
<param-value>C:\…..\….</param-value>
</init-param>
```

The Web Application writes a trace file, `trace.yyyy.mm.dd.log`. By default, this file is written to the log directory of the Web Application servers (Apache Tomcat or SAP WAS). A subfolder with the name of the Web Application is automatically created. With this parameter, you can explicitly set the path to the trace files. The subfolder mentioned is automatically created.

This parameter is not handled if in the *log.properties* file, the `logDir` property is set.

Folder for configuration files

```
<init-param>
<param-name>configdir</param-name>
<param-value>Path</param-value>
</init-param>
```

When you define this parameter, configuration files are read from the specified path with `WEB-INF\conf` appended. If this parameter is missing, the configuration files are read from the `WEB-INF\conf` folder of the Web Application's context.

Scheduler configuration file

This is the path for the *scheduler.xml* file, where the scheduler information is stored. Default is `WEB-INF\conf`.

Select the logon language

```
<init-param>
<param-name>languageselection</param-name>
<param-value>0</param-value>
</init-param>
```

If this parameter is set to 1, the Web Application displays a language selection box below the user/password input fields. The user can then choose from the configured languages. In addition, the two following values are also available:

- **Default**: The language is taken from the user's master data. If this is empty, the default language is taken.

- **: The browser language is taken.**

Use the browser language

```
<init-param>
<param-name>browserlocale</param-name>
<param-value>0</param-value>
</init-param>
```

Usually, the website is displayed according to the browser's language setting prior to log on. After logging on, the language is taken from the language specified in the user's master data. When setting this parameter to 1, the language is not changed after login. This method is necessary if you want to differentiate between the special settings of a language family. For example, the user language can only be en = English, which defaults to American English, but with the full language model of a browser, you can differentiate between enUS (America) and enGB (UK). This is the only way to give UK users the common date format, DD/MM/YYYY, instead of the American date format, MM/DD/YYYY.

If you select a language that is not supported by the Web Application, it is shown in English, but the conventions for displaying a date or decimal number are taken from the chosen country's language settings.

The value for browserlocale can be set to a two or four character ISO country code (for example, de or enUS). In such cases, the language setting is handled as if it was set in the browser settings.

Configure the link area

```
<init-param>
<param-name>showlinks</param-name>
<param-value>15</param-value>
</init-param>
```

The link area of the application consists of Product logo (1), Disclaimer (2), Copyright (4) and Homepage link (8). You can numerically add the values together to specify which of these will be displayed.

Value	Product logo (1)	Disclaimer (2)	Copyright (4)	Homepage (8)
1	X			
2		X		
3	X	X		
4			X	
5	X		X	
6		X	X	
7	X	X	X	

Value	Product logo (1)	Disclaimer (2)	Copyright (4)	Homepage (8)
8				X
9	X			X
10		X		X
11	X	X		X
12			X	X
13	X		X	X
14		X	X	X
15	X	X	X	X

Alternative messages files

```
<init-param>
<param-name>messageconfig</param-name>
<param-value>WEB-INF\conf\Messages</param-value>
</init-param>
```

This parameter allows you to set custom messages by specifying an alternative message folder. ReadSoft Email-based Approval will first check the specified folder for *Messages_xx.properties*, where xx is the possible language code, such as *Messages_en.properties* for an English message file.

Color themes

Parameter: `theme.Mobile Approval`

Value: `a relative folder`

Default: `themes\Mobile Approval`

The graphic style of the application is driven by themes. A theme is a copy of the application's set of graphic elements, as well as the style sheet. A `theme` is a subfolder in the `themes` folder in the application's root directory (or external image applications). The default theme for ReadSoft Email-based Approval is shipped with the application. A theme is selected by setting the parameter.

```
<init-param>
<param-name>theme.application</param-name>
<param-value>themes/application</param-value>
</init-param>
```

settings.properties

File: `\WEB-INF\conf\settings.properties`

Web: **Parameters > Parameters configuration**

This file contains the main configuration settings for ReadSoft Email-based Approval. It can be found in the `WEB-INF\conf\` directory of the Web Application or in an external configuration directory of your specification.

This configuration file is divided into sections. Elements are sorted in ascending order, by name.

Configuration files

Setting	Valid values	Description
`config.filename.logwriter`		The path to the log settings file.
`config.filename.mimetypes`		The path to the MIME types settings file. It lists the supported MIME types.
`config.filename.sap`		The path to the SAP server and logon settings file.

General settings

Setting	Valid values	Description
`general.directory.languagefiles`		The path where statistic message templates are saved.
`general.statistics`	true/false	Set to true to record statistics.
`general.timeslice.minutes`	Positive integer	The time between checking for new email and the sending of the email response.

`general.reply.error.codes`		A list of the SAP error codes that you wish to display to users
		
		Valid format:
		
		`/COCKPIT/<error code 1>;/COCKPIT/<error code 2>`
		
		or
		
		`/EBY/<error code 1>;/COCKPIT/<error code 2>`
		
		Example:
		
		`/COCKPIT/WC.133;/COCKPIT/WC.22`
		
		If SAP returns one of these error codes, an email containing the error message is sent to the user.

Setting	Valid values	Description
general.autostart	true/false	The default value is false. When set to true, the Email-based Approval Web Application starts automatically after Tomcat is restarted.

Mail settings

Setting	Valid values	Description
mail.pop3.folder mail.imap.folder		Name of the folder that ReadSoft Email-based Approval checks for incoming messages; for example, INBOX.
mail.pop3.host mail.imap.host		Name of the POP3/IMAP server.
mail.pop3.password mail.imap.password		Password for the POP3/IMAP account.
mail.pop3.port mail.imap.port		Port number of the POP3/IMAP server.
mail.pop3.socketFactory.class		Optional; specifies the name of the class that implements the javax.net.SocketFactory interface. This class is used to create POP3 sockets. javax.net.ssl.SSLSocketFactory can be used.
mail.pop3.socketFactory.fallback	true/false	
mail.pop3.socketFactory.port		The port to use when using the specified socket factory. If left blank, the default port is used.
mail.pop3.user mail.imap.user		User name for the POP3/IMAP account.
mail.pop3.user.address mail.imap.user.address		The email address of the user for the POP3/IMAP account.
mail.smtp.auth	true/false	Set to true to allow only authorized emails to be sent.
mail.smtp.from		The email address that is displayed in the **From** field for the emails sent to suppliers by ReadSoft Email-based Approval.
mail.smtp.host		Name of the SMTP server.

Setting	Valid values	Description
mail.smtp.password		Password for the SMTP account.
mail.smtp.port		Port number of the SMTP server.
mail.smtp.socketFactory.class		Optional; specifies the name of the class that implements the javax.net.SocketFactory interface. This class is then used to create SMTP sockets. javax.net.ssl.SSLSocketFactory can be used.
mail.smtp.socketFactory.fallback	true/false	
mail.smtp.socketFactory.port		The port to use when using the specified socket factory. If left blank, the default port is used.
mail.smtp.starttls.enable	true/false	

Other SMTP settings can be added if necessary. For information on what kind of properties can be set, consult a third-party reference for JavaMail.

Mail logging settings

Depending on the type of event, there are five different kinds of log emails that ReadSoft Email-based Approval can send.

- Administration
- Application closing
- Errors
- Information
- Warnings

For each type, you can specify:

- Whether or not an email is sent when the event type occurs.
- The email subject and the text that is displayed at the start of every email, before the content of the logs.

Setting	Valid values	Description
maillogger.admin.mailaddress		The email address of the ReadSoft Email-based Approval administrator.
maillogger.from.mailaddress	Name <email address>	The name and email address that are displayed in the **From** field for log emails. Example: **Email-based Approval Logs** <name@company.com>

Setting	Valid values	Description
`maillogger.logwindow`	on/off	Turns the Log Window feature on or off. If the Log Window feature is turned on, all the available log information is written in the current system log window. If ReadSoft Email-based Approval is running as a Windows NT service, you must use the **Services** control panel to modify the logging service and enable the **Allow interaction of service and desktop** setting.
`maillogger.message.admin.send`	true/false	Enables or disables the administration log emails.
`maillogger.message.admin.subject`		The subject for the administration emails.
`maillogger.message.admin.text`		The text that is displayed at the start of every administration email, before the content of the logs.
`maillogger.message.close.send`	true/false	Set to true if application closing log emails will be sent.
`maillogger.message.close.subject`		The subject for the application closing emails.
`maillogger.message.close.text`		The text that is displayed at the start of every application closing email, before the content of the logs.
`maillogger.message.error.send`	true/false	Set to true if error log emails will be sent.
`maillogger.message.error.subject`		The subject for the error emails.
`maillogger.message.error.text`		The text that is displayed at the start of every error email, before the content of the logs.
`maillogger.message.info.send`	true/false	Set to true if information log emails will be sent.
`maillogger.message.info.subject`		The subject for the information emails.
`maillogger.message.info.text`		The text that is displayed at the start of every information email, before the content of the logs.
`maillogger.message.warning.send`	true/false	Set to true if warning log emails will be sent.
`maillogger.message.warning.subject`		The subject for the warning emails.
`maillogger.message.warning.text`		The text that is displayed at the start of every warning email, before the content of the logs.

SAP Connection an Remote Function Call

Setting	Valid values	Description
sap.logon.system		The SAP system that ReadSoft Email-based Approval connects to. **Note**: Further SAP system settings are saved in the *saplogon.properties* file.
sap.rfc.value.flag.delete		The RFC function sets the delete flag in its export parameter, and if this value matches sap.rfc.value.flag.delete, the email will be deleted, without any information being sent to the sender.

Statistics

Setting	Valid values	Description
b	ISO 639-2 language code	The language of the statistic emails. For example, a value of DE for German sets the use of statisticMessage_de.txt (file located in the wcconfig\WEB-INF\conf\lang\ directory.)
statistics.mail.addresses.from	Name <email address>	The name and email address that are displayed in the **From** field for statistic emails. Example: **Email-based Approval Statistics** <name@company.com>
statistics.mail.addresses.to		The email address of the receiver.
statistics.mail.subject		The subject of the email.
statistics.send.every	hour, day, month, year	The frequency of sending statistic emails. You can use one or more values. Multiple values must be separated by a semicolon. Example: hour;day
statistics.tempfiles.dictionary		The directory where the temporary statistic files are saved.

Verifier (spam) settings

Use these settings to filter out spam email so that ReadSoft Email-based Approval processes incoming email from only authentic suppliers.

Setting	Valid values	Description
`verifier.blacklist`	true/false	Set to true to enable the use of a blacklist (list maintained in the runtime object).
`verifier.blacklist.resettime.hours`		Time (in hours) until the blacklist object is cleared.
`verifier.blacklist.resettime.maxmails`		This defines the maximum number of emails that a user can send to ReadSoft Email-based Approval within the time set in verifier.blacklist.resettime.hours.
`verifier.blacklist.resettime.minutes`		The time interval, in minutes, to reset the blacklist.
`verifier.maxmailsize.bytes` (Optional setting)	Positive integer	Optional; the maximum size (in bytes per email) of emails allowed by ReadSoft Email-based Approval. Emails greater than the amount specified here will not be processed. Example: 524288 (0.5 Megabytes)
`verifier.regex.subject` (Optional setting)		Optional regular expression; this expression will be evaluated on each subject line, and if a match is found, the mail will be ignored. Only one regular expression string is allowed. **Note**: In the configuration file, the backslash symbol (\) outside the character string must be set as \\. For example: `.\\ **SPAM.\\**`
`verifier.timeslice.maxmails` (Optional setting)	Positive integer	The maximum number of emails that ReadSoft Email-based Approval is allowed to process within the time limit. If the number exceeds this amount, ReadSoft Email-based Approval will close. By default, the time limit is determined by the `general.timeslice.minutes` parameter, or from the Scheduler, if it has been set.

Email servers

Refer to the following topics for information about connecting to the email server that is used to receive the emails.

Supported protocols

ReadSoft Email-based Approval requires an email account that can be accessed using POP3 or IMAP. It does not support the MAPI protocol used by Microsoft Exchange. This email account should be used for only incoming requests for ReadSoft Email-based Approval. No other emails should be present on this account (such as statistics or logs – a different account should be used for these). POP3 must be activated on the server.

SSL settings

Some email servers accept only SSL connections with a valid certificate. You can specify this certificate information by using the following parameters for Java Virtual Machine.

Parameter	Description
`javax.net.ssl.trustStore`	The path to the file that contains the KeyStore object used by the default TrustManager.
`javax.net.ssl.trustStorePassword`	The password for the KeyStore object used by the default TrustManager.
`javax.net.ssl.trustStoreType`	The type of KeyStore object used by the default TrustManager.
`javax.net.ssl.keyStore`	The path to the file that contains the KeyStore object used by the default KeyManager.
`javax.net.ssl.keyStorePassword`	The password for the KeyStore object used by the default KeyManager.
`javax.net.ssl.keyStoreType`	The type of KeyStore object used by the default KeyManager.

The parameters can be specified using one of three methods:

- In the Apache Tomcat Properties dialog box
- In the *settings.properties* file
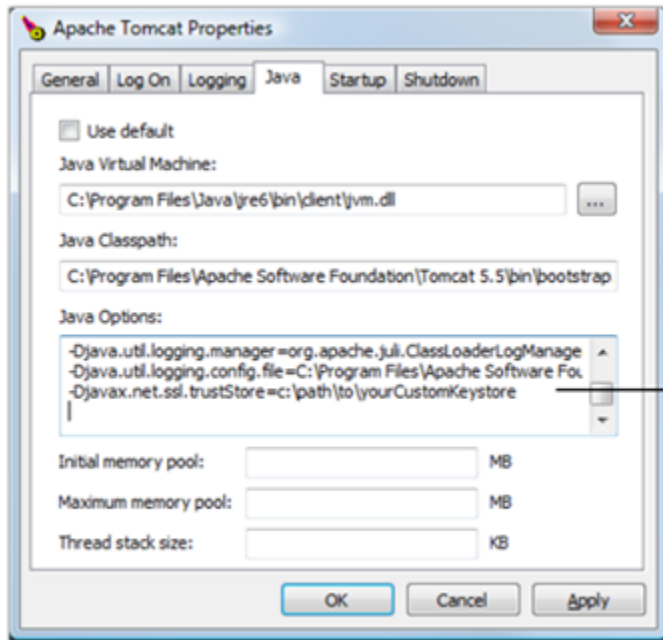- In a Java KeyStore file

Configure Apache Tomcat

To configure Apache Tomcate, complete the following steps.

1. Start the **Configure Tomcat** application.

    It can be started from the Windows Start Menu or by running `tomcat5w.exe` in the Tomcat `bin` directory.

2. Enter the parameters in the **Java Options** text box on the **Java** tab.

settings.properties

Enter the Java environment `property=value` pairs in the ReadSoft Email-based Approval *settings.properties* file. For example:

```
javax.net.ssl.trustStore=c:\path\to\yourCustomKeystore
```

Note: Do not add the `-D` Java option before each entry.

Use a Java KeyStore file

To use a Java KeyStore (jks) file, complete the following steps.

1. Set the path to the certificate in the `trustStore` configuration.

2. Modify the Apache Tomcat *server.xml* configuration file. In the `keystoreFile` settings, point to the local path where the `trustStore` certificate is available.

    For example.

    ```
    keystoreFile="E:\tomcat\newkeystore\tomcat.jks" keystorePass="tomcat"
    ```

3. Run the `keytool` command to add the certificate to `trustStore`.

```
C:\Program Files\Java\jre1.8.0_45\bin>keytool -importcert -file e:\customkeystor
e\petronas_cert.cer -keystore "C:\Program Files\Java\jre1.8.0_45\lib\security\ca
certs" -alias "cen302-pop3"
Enter keystore password:
```

The password is the same as for the *server.xml* file. The default password for the Java cacert is "changeit".

4. Confirm that the certificate is trustworthy.

```
Trust this certificate? [no]:  y
Certificate was added to keystore
```

Note: If you get a message that access is denied, allow access to the *tomcat.jks* file.

Configuration for Microsoft Office 365

The following example depicts the SSL configuration that is required for Microsoft Office 365.

```
mail.pop3s.folder = Inbox
mail.pop3s.host = outlook.office365.com
mail.pop3s.password = {$PASSWORD}
mail.pop3s.port = 995
mail.pop3s.socketFactory.class = javax.net.ssl.SSLSocketFactory
mail.pop3s.user = {$USER}
mail.pop3s.user.address = {$USER}
mail.smtp.from = {$USER}
mail.smtp.password = {$PASSWORD}
mail.smtp.host = smtp.office365.com
mail.smtp.port = 587
mail.smtp.starttls.enable = true
mail.smtp.auth=true
```

Tip:

- {$USER} = Approval user email

- {$PASSWORD} = Approval user password

Note: In this example, the same user is used for both POP3 and SMTP.

Statistics messages

There are templates for sending and displaying statistics. The templates are placed in the `WEB-inf\conf\lang` directory by default, but their current position can be set in the main settings by using the `general.directory.languagefiles` property. The files must use `UTF8` encoding and their name must start with `statisticMessage` and the file extension, `txt`. For different languages, the file name ends with the underscore symbol (_) and language abbreviation (for example; `statisticMessage_en.txt`). The default file does not have a language shortcut in its syntax. Using the Web Application, it is possible to change the text by selecting the **Parameters** tab, and then the **Statistics message** menu.

Lines that start with the number sign (#) are treated as a comment and will not be sent in the email text. This number sign must be at the very beginning of the line.

The first non-comment line is the statistics email subject.

There are some variables that can be replaced by statistics data. They start and end with the percent (%) sign.

The `%date_from()%` and `%date_to()%` variables define the time scope of the start and end of the collection of statistics. The date format must be within the parentheses symbols to be accepted by the `java.text.SimpleDateFormat` function.

Some possible date format symbols:

- d: Day in month
- M: Month in year
- y: Year
- H: Hour in day (0-23)
- m: Minute in hour
- s: Second in minute

To add clear text, add an apostrophe (`'`) symbol at the beginning and end of the clear text string.

Example: `%date_from(dd.MM.yyyy 'at' HH:mm:ss)%`

For information on possible time formatting, see the `SimpleDateFormat` java class.

`%statistics_type()%:` Type of statistics: 1 – last, 2 – hour, 4-day, 8-month, 16-year

`%mails_received()%:` Number of received emails; you can format this number

Sample statistics lines	For 168 received emails
`%mails_received()%`	168
`%mails_received(5;0)%`	00168
`%mails_received(5; )%`	168
`%mails_received(2; )%`	168
`%mails_received(10;-)%`	-------168

Other possible variable formats:

Variable	Description
`%mails_sent()%`	Number of sent emails
`%sap_system_calls%`	Number of SAP system calls
`%mails_blocked()%`	Number of blocked emails
`%block_reason_subject()%`	Number of blocked emails because of subject
`%block_reason_blacklist()%`	Number of blocked emails for addresses on the black list
`%block_reason_mailsize()%`	Number of blocked emails whose sizes were larger than allowed

Variable	Description
`%block_reason_rfc_return()%`	Number of blocked emails that had the same SAP RFC return code for the email status, as set for sap.rfc.value.flag.delete in the general settings

Below is a table of the variables possible between `%list_begin%` and `%list_end%`:

Variable	Description
`%list_mailaddress%`	Email address of list element
`%list_received()%`	Number of received emails for the given list element
`%list_sent()%`	Number of sent emails for the given list element
`%list_blocked()%`	Number of blocked emails for the given list element

Log settings

Parameters

File: `...\WEB-INF\conf\log.properties`

Item	Default	Options	Details
level	WARNING	OFF FATAL ERROR WARNING INFO DEBUG	Only messages with a level higher or equal to the specified level are written to the log.
logDir	The trace tries to find the log directory of the application server and creates a folder name like the application there.	`...\\path`	The trace is written to this path. If the path is not absolute, it is relative to the working directory of the application servers.
logName	`wctrace.%date.log`		The name of the trace file. If the name contains the %date pattern, it is replaced by the current date.
separator	Semicolon (`;`)		The separator between the columns of a trace file's line.
dateFormat	`dd.mm.yyyy`		The date format in the log.
timeFormat	`hh.mm.ss.SSS`		The time format in the log.
host	*None – host is not shown in the log.*		The hostname of the application server. If the name is specified as `%host`, the name is automatically taken from the HTTP request.
appName	*None – application name is not shown in the log.*		The name of the application.
showDate	yes	yes no	To show/not show the date in the log.
dailyFile	yes	yes no	To create/not create a new log file every day.

Log file syntax

```
[Date]<Sep>Time<Sep>[Host<Sep>][Application<Sep>]SessionID<Sep>Level<Sep>Message
```

Square brackets indicate optional values.

`<Sep>` is the separator character.

The `message` is free-formatted text.

ReadSoft Email-based Approval prefixes an error number and additional separator if the log level of an entry is FATAL, ERROR or WARNING.
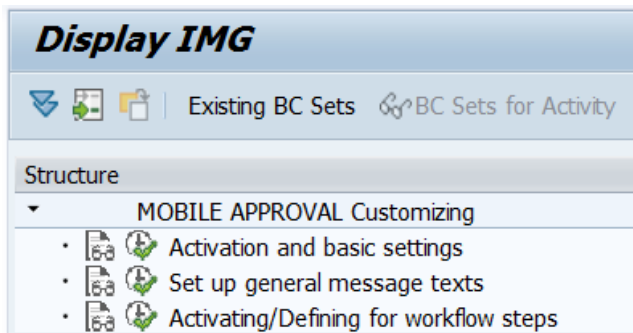
IMG

This topic describes how to activate ReadSoft Email-based Approval for workflow steps, and other options.

Accounts Payable

Overview

The `/COCKPIT/MAI` transaction opens the configuration menu for ReadSoft Email-based Approval (former MOBILE APPROVAL) in ReadSoft PROCESS DIRECTOR Accounts Payable.

Activation and basic settings

`/COCKPIT/MAI1`

The only configuration in this node is the email address for ReadSoft Email-based Approval.
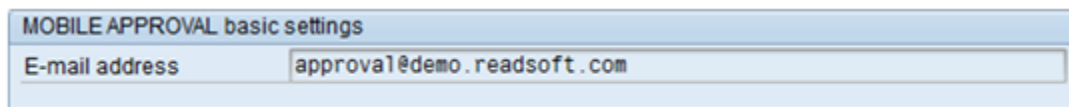
This email address is the reply `mailto:` link in the ReadSoft Email-based Approval emails sent to the workflow recipients.

Set up general message texts

`/COCKPIT/MAI3`

Setting	Description
Texts	
Success message	The body text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) was successful.
Error message	The body text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) could not be performed.
Header: To whom it may concern	
Success message	The subject line text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) was successful.
Error message	The subject line text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) could not be performed.
Definitions of operation (for text substitution)	

Setting	Description
Release	The text that will be displayed in the link (or for HTML mails, on the button) that the user clicks to release/approve the document.
Reject	The text that will be displayed in the link (or for HTML mails, on the button) that the user clicks to reject the document.
Add a note	The text that will be displayed in the link (or for HTML mails, on the button) that the user clicks to add a note.

An email template is used to fill the content of the email that is sent to the users after they perform an action. In the templates, aliases can be set. For example, `&DOCNO&. &MA_ACTION&` is useful to inform the user about the action to which the email relates.

Note: Success and error emails are sent only if **Reply to MA** is activated in the ReadSoft Email-based Approval workflow steps settings.

Activating/Defining for workflow steps

`/COCKPIT/MAI2`

Setting	Description
Workflow step	The ID of the workflow step.
Set MOBILE APPROVAL for workflow steps	

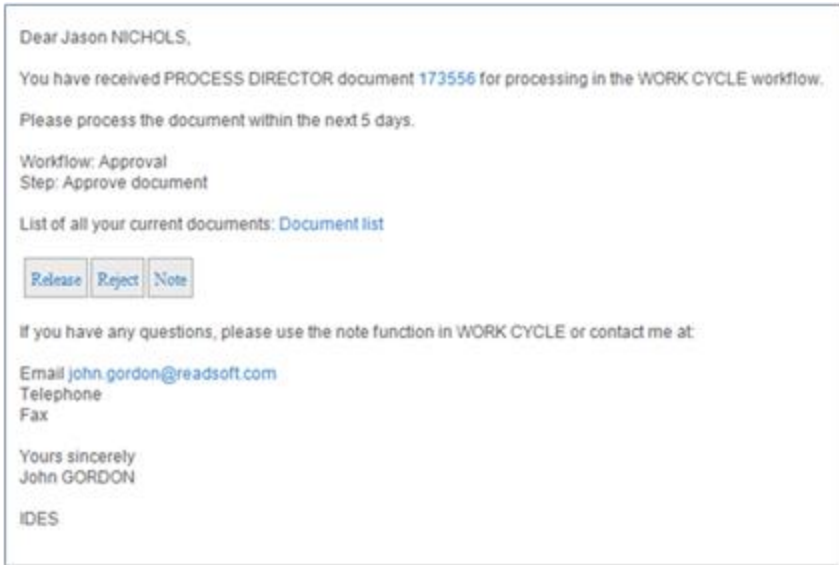| Setting	Description
MOBILE APPROVAL active	Activates the use of ReadSoft Email-based Approval for the workflow step.
Attach workflow log	The log history of the current workflow is attached to the email (as a PDF).
Attach PDF with document data to email	The document data is attached as a PDF. To use this feature, you must specify an SAP Smart Form for MM and FI documents (see below). SAP Smart Forms are available in SAP R/3 4.6C and later.
Reply to MA	Sends an email back to users after they have performed an action successfully. (For actions that encounter errors and are not performed successfully, email notifications are always sent and are not controlled by this setting.)
Display MM document data	
Form name	The ID of the SmartForm used for displaying the data of the MM document in a workflow (in PDF). To use this feature, you must activate **Attach PDF with document data to email** (see above).
Display FI document data	
Form name	The ID of the SmartForm used for displaying the data of the FI document in a workflow (in PDF). To use this feature, you must activate **Attach PDF with document data to email** (see above).

Email links

There are three aliases for the links included in email texts.

Alias	Description
&MOBILE_APPROVE&	The mailto URL to approve the document.
&MOBILE_REJECT&	The mailto URL to reject the document.
&MOBILE_NOTE&	The mailto URL to add a note to the document.

Depending on whether the email is sent in HTML or plain text, these URLs are embedded in the respective buttons, or appear as text.

Dear Jason NICHOLS,

You have received PROCESS DIRECTOR document 173556 for processing in the WORK CYCLE workflow.

Please process the document within the next 5 days.

Workflow: Approval
Step: Approve document

List of all your current documents: Document list

| Release | Reject | Note |

If you have any questions, please use the note function in WORK CYCLE or contact me at:

Email john.gordon@readsoft.com
Telephone
Fax

Yours sincerely
John GORDON

IDES

Example HTML email

Dear Jason NICHOLS,

You have received PROCESS DIRECTOR document
http://localhost:8080/webcycle-app/init.do?sapsystem=TR1&GUID=6084C615C85B2346AFF0CAFA70584C49
for processing in the WORK CYCLE workflow.
Please process the document within the next 5 days.

Workflow: Approval
    Step: Approve document

List of all your current documents:
http://localhost:8080/webcycle-app/init.do?sapsystem=TR1&WC_USER=SMITH

Release mailto:approval@demo.readsoft.com?subject=B4F4D771263C924BBF17165B4E8DE337
Reject mailto:approval@demo.readsoft.com?subject=1EC5A4B87DF29849B60653C3239A9F47
Note mailto:approval@demo.readsoft.com?subject=411098161C475D48ABFD24F3D4EE66FC

If you have any questions, please use the note function in WORK CYCLE or contact me at:
Email   jason.nichols@readsoft.com
Telephone
Fax

Yours sincerely
John GORDON

IDES

Example plain text email

The aliases are included in the text template. There are built-in templates that you can use or modify:

- /COCKPIT/WEB_CYCLE_TEMPL_HTM (HTML emails)
- /COCKPIT/WEB_CYCLE_START (Plain text emails)

Edit these texts using SE61:

Settings	
Document Class	General text
Language	English

Document	
Name	/COCKPIT/WEB_CYCLE_START

[Create]

[Display] [Change]

The email aliases for the /COCKPIT/WEB_CYCLE_START template:

Dear &WEB_CYCLE_USER_NAME&,

You have received PROCESS DIRECTOR document &HEADER-DOCNO& for processing in the WORK CYCLE workflow.
Please process the document within the next &DUE_DAYS& days.

Workflow: &WEB_CYCLE_DESCRIPTION&
   Step: &WEB_CYCLE_STEP_DESCRIPTION&

Link to process the document:
&WEB_CYCLE_SINGLE_DOCUMENT_LINK&

Link to list of all your current documents:
&WEB_CYCLE_DOCUMENT_LIST_LINK&

Links to WORK CYCLE processing via e-mail (MOBILE APPROVAL)
&MOBILE_APPROVE&
&MOBILE_REJECT&
&MOBILE_NOTE&

If you have any questions, please use the note function in WORK CYCLE or contact me at:
Email   &SENDER_EMAIL&
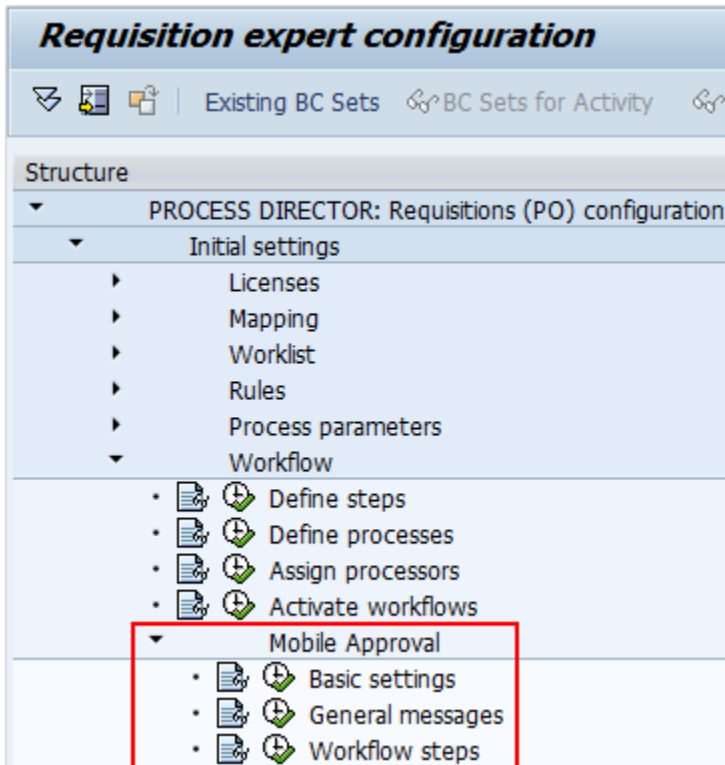Telephone &SENDER_PHONE&
Fax   &SENDER_FAX&

Yours sincerely
&SENDER_NAME&
&SENDER_FUNCTION&
&SENDER_DEPARTMENT&
&SENDER_COMPANY&

Kofax ReadSoft PROCESS DIRECTOR™

Overview

To open the configuration menu for ReadSoft Email-based Approval in ReadSoft PROCESS DIRECTOR, go to `/EBY/PDB0C` and select the appropriate process type.

Initial settings > Workflow > Mobile Approval

Basic settings

`/EBY/PDWC_VMABS`

Initial settings > Workflow > Mobile Approval

The only configuration in this node is the email address for ReadSoft Email-based Approval.

You can specify different addresses for different SAP systems.

SAP System ID	E-Mail Address
RS1	approval@demo.readsoft.com
RS2	mobile@demo.readsoft.com

Setting	Description
SAP System ID	The SAP system for which the ReadSoft Email-based Approval email address is valid.
E-Mail Address	This email address is the reply `mailto:` link in the ReadSoft Email-based Approval emails sent to the workflow recipients.

General messages

`/EBY/PDWC_VMAMES`

Initial settings > Workflow > Mobile Approval

Setting	Description
Success email	
Subject	The subject line text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) was successful.
Body	The body text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) was successful. You can use a standard ReadSoft PROCESS DIRECTOR documentation object for this text.
Error email	

Setting	Description
Subject	The subject line text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) could not be performed.
Body	The body text for the confirmation email sent to a ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) could not be performed. You can use a standard ReadSoft PROCESS DIRECTOR documentation object for this text.
Button names	
Approve	The text displayed in the link (or for HTML mails, on the button) that the user clicks to approve the document.
Reject	The text displayed in the link (or for HTML mails, on the button) that the user clicks to reject the document.
Add a note	The text displayed in the link (or for HTML mails, on the button) that the user clicks to add a note.

An email template is used to fill the content of the email that is sent to the users after they perform an action. In the templates, aliases can be set. For example, `&DOCNO&. &MA_ACTION&` is useful to inform the user about the action to which the email relates.

Note: Success and error emails are sent only if **Reply to MA** is activated in the MOBILE APPROVAL workflow steps settings.

Workflow steps

`/EBY/PDWC_VMAST`

Initial settings > Workflow > Mobile Approval

Setting	Description
Workflow step	The ID of the workflow step.
MOBILE APPROVAL for workflow steps	
MOBILE APPROVAL act.	Activates the use of ReadSoft Email-based Approval for the workflow step.
Reply to MA	Sends a confirmation email back to the ReadSoft Email-based Approval user to inform them that their action (approve, reject, add note) was successful. For actions that encounter errors and are not performed successfully, email notifications are always sent and are not controlled by this setting. You can specify the text of these emails in the General messages settings.
Attach log	Attaches the workflow log of the current workflow to the email.
Attach PDF doc.	Attaches the document data as a PDF. You must specify a SmartForm for the PDF.

Email links

The following are the aliases for the links included in email texts:

Alias	Description
`&MOBILE-APPROVE&`	The mailto URL to approve the document.
`&MOBILE-APPROVE_HTML&`	The mailto URL to approve the document in the HTML version.
`&MOBILE-REJECT&`	The mailto URL to reject the document.
`&MOBILE-REJECT_HTML&`	The mailto URL to reject the document in the HTML version.
`&MOBILE-NOTE&`	The mailto URL to add a note to the document.
`&MOBILE-NOTE_HTML&`	The mailto URL to add a note to the document in the HTML version.

Depending on whether the email is sent in HTML or plain text, these URLs are embedded in the respective buttons, or appear as text.

From: Bartosz Kolodziej
To: Hilary Thomas
Cc: Hilary Thomas
Subject: Please process this workflow document

Dear THOMAS2,

The document Requisition 13678 has been sent to you for processing. Please process the document by 31.12.9999.

Workflow: Demo2
Step: Demo step 2

Link to the document

Approve | Reject | Note

If you have any questions, please contact me at:

Email: bartosz.kolodziej@readsoft.com
Telephone:
Fax:

Yours sincerely,
Mr. KOLODZIEJ

Example HTML email

Please process document 13696

Bartosz Kolodziej

Sent: Tue 3/11/2014 5:07 PM
To: Bartosz Kolodziej
Cc: malpa@malpa.pl
Attachments: Workflow log.PDF; Doc. data.PDF

Dear Mr. KOLODZIEJ,

The document Requisition 13696 has been sent to you for processing. Please process the document by 13.03.2014.

Workflow: giant step for mankind
Step: 1st wf step

Link to the document: http://sapn47.ebydos.local:8080/pdweb-app/init.do?
sapsystem=S47&ACTION=OTHER~&GUID=E00BA91F0454CF4AB18757ABCB5308CC

Links to workflow processing via e-mail (MOBILE APPROVAL)
Approve: mailto:MobApproval.Test@readsoft.com?subject=PD-270C8B9E498A074CAF551702C40CB3F5967577014830345C2266AAE3E8ACA94E
Reject: mailto:MobApproval.Test@readsoft.com?subject=PD-270C8B9E498A074CAF551702C40CB3F5B1CB72B978FDD8AF7AFC5B67E89C29A4
Add note: mailto:MobApproval.Test@readsoft.com?subject=PD-
270C8B9E498A074CAF551702C40CB3F58CEF8DD6CDA553AF638FD4A1DDC80B88

If you have any questions, please contact me at:
Email: bartosz.kolodziej@readsoft.com
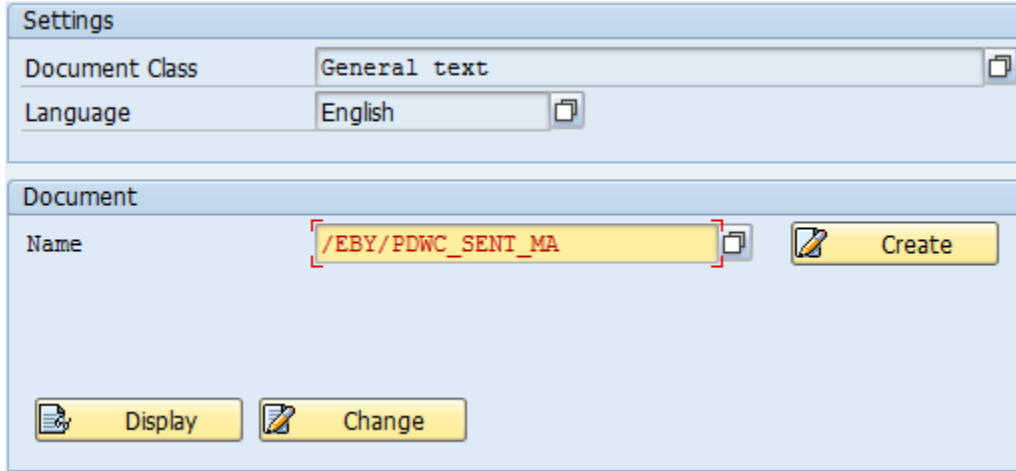Telephone:
Fax:

Yours sincerely,
Mr. KOLODZIEJ

Example plain text email

The aliases are included in the text template. There are built-in templates that you can use or modify:

- /EBY/PDWC_SENT_HTML_MA (HTML emails)
- /EBY/PDWC_SENT_MA (Plain text emails)

Edit these texts using SE61:

Settings	
Document Class	General text
Language	English

Document	
Name	/EBY/PDWC_SENT_MA Create

Display   Change

The email aliases for the /EBY/PDWC_SENT_MA template:

Dear &RECIPIENT-ADDRESS-TITLE_P& &RECIPIENT-ADDRESS-FIRSTNAME&
&RECIPIENT-ADDRESS-LASTNAME&,

The document &HEADER-OBJ-TXT& &HEADER-NUMBR& has been sent to you for processing. Please process the
document by &WORKFLOWSTEP-WC_STEP_DUEDATE&.

&LAST_NOTE&

Workflow: &WORKFLOW-WC_DESCR&
Step: &WORKFLOWSTEP-WC_STEP_DESCR&

Link to the document: &URL&&ACTION=OTHER~&GUID=&HEADER-GUID&

Links to workflow processing via e-mail (MOBILE APPROVAL)
&MOBILE-APPROVE&
&MOBILE-REJECT&
&MOBILE-NOTE&

If you have any questions, please contact me at:
Email: &SENDER-ADDRESS-E_MAIL&
Telephone: &SENDER-ADDRESS-TEL1_NUMBR& &SENDER-ADDRESS-TEL1_EXT&
Fax: &SENDER-ADDRESS-FAX_NUMBER& &SENDER-ADDRESS-FAX_EXTENS&

Yours sincerely,
&SENDER-ADDRESS-TITLE_P& &SENDER-ADDRESS-FIRSTNAME& &SENDER-ADDRESS-LASTNAME&
&SENDER-ADDRESS-FUNCTION&
&SENDER-ADDRESS-DEPARTMENT& =