

# GWFetchMail 2.5

## Administrator Guide

10. Feb. 2010

 **TDP**  
[www.groupwise.cz/GWFetchMail](http://www.groupwise.cz/GWFetchMail)

## About application

GWFetchMail is the ultimate tool to collect e-mail from one or more external POP mailboxes and route them into your GroupWise system. As GWFetchMail is a back-end service running on a server, the mail will be collected even if you have not started your GroupWise client. This is ideal for those situations when you have external mailboxes and people within your organization with for example PDA's connected to GroupWise would need access to these messages at all times.

### What is this ?

GWFetchMail will connect to external mail servers using the POP3 protocol to collect all mail messages from the accounts you have specified and will forward them into your GroupWise system. The number of mailboxes, domains and servers is unlimited. As GWFetchMail is an application running as a service (daemon) on a server (for example on a GroupWise server), the POP3 messages are downloaded continuously regardless whether users have started their GroupWise client or not. This way messages will also be easily available on a mobile device. You can decide to which GroupWise mailbox and shared folder the messages will be delivered using a set of routing rules for each source.

Here are some of the available features as well as the benefits:

- **Redundancy** - Download messages from backup domain mailboxes – the number of domains and servers is optional and unlimited;
- **Availability** - The POP3 download services will run continuously, regardless whether the user has started the GroupWise client or not;
- **Flexibility** – Possibility to create sets of rules to route messages (a set of rules for each source). This way messages can be routed to certain GroupWise mailboxes and shared folders;
- **Mobility** - Downloaded messages can be easily delivered to a mobile device;
- **Firewall Security** – As GWFetchMail runs on a server, you only need to create a single exception on your firewall to allow the application serving any number of users;
- **Content Security** – As GWFetchMail transfers all messages to your GroupWise GWIA, all security and authorization checks regarding these e-mails will still be in place, which is not the case if you use client based POP3 access;
- **Simplicity** – Authorized users can configure the GWFetchMail service by simply saving a specially formatted e-mail message with appropriate data like POP3 server address, name and password;

- **Stability** – Possibility to restrict the maximum number of messages in a single cycle, and to set a date in the past to allow processing only messages delivered later;
- **Server Based** - Running on a server; requires JAVA SUN 1.6.0\_11 or higher; can run on a GW server.

Authorized users can configure the service directly from the GroupWise client by simply saving a message containing the server address, user name and password.

Messages are delivered to GroupWise through GWIA and pass through preset control mechanisms. Therefore, using GWFetchMail isn't very risky. To prevent system overload, you can limit the maximum number of messages downloaded from every mail box within a single cycle and the maximum age of messages to be processed.

### Correlation Database

Messages are downloaded from the source mailbox always just once. Upon successful downloading, a record is made in the correlation database, and messages already downloaded are ignored when the received messages in the pop3 mailbox are checked later.

The correlation database is stored in the folder containing the application in the sub-folder `corr`. A sub-folder is created automatically for each pop3 mailbox defined in the configuration file or for user configuration with the name composed of the user name and address of the mailbox, which contains relevant database files. If database files are deleted, all messages shall be transferred during the next access to the mailbox.

## **Installation**

System requirements:

*Java Sun JRE/JDK 1.6.0\_11 or higher; GroupWise 8.0 s Hot Patch 1 or higher.*

The installation process is very simple. Just copy the file `GWFetchMail_2.5.bin`, which is a part of the archive, in which the application is distributed, to the server, add the launching authorization using the command `chmod +x GWFetchMail_2.5.bin` and launch it. The installation script shall check whether the corresponding version of Java JRE/JDK is available and allow picking a path to a destination, to which the application shall be installed.

*Note – The application can be installed manually without using the installation script. If the `GWFetchMail_2.5.bin` file is launched with the `-x` parameter, the contents shall be unzipped into the current folder. Then you need to follow instructions provided in the Manual Installation Instructions.*

To allow the application accessing GroupWise without entering login data of individual users, it has to be registered as a "Trusted Application" on the GW server. This can be done, for example, using the GWTrustedApp.exe utility (in the GWTrustedApp folder).

The best way is to map the target volume as a drive (ie. G:\) through the Novell Client and execute GWTrustedApp.exe with the path to the primary domain database, and application name as a parameters (ie. C:\>GWTrustedApp.exe G:\pridom GWFetchMail)

The utility then displays the respective TrustedKey (for example: 21A88AA102E50000B18DAD009E00C70021A88AA202E50000B18DAD009E00C700), which must be entered into the configuration file (see Configuration); at the same time, the application is registered for the respective domain, which can be verified using, for example, ConsoleOne.

*Note – The communication using the SOAP protocol must be allowed on the side of GroupWise, which is forbidden in the default settings! SOAP protocol can be enabled through the ConsoleOne in POA configuration.*

## Licensing

The number of required licenses is based on the number of source POP3 mailboxes, the contents of which should be downloaded by the application. Domain licenses and user mailbox licenses are granted separately. A license file may contain both types of licenses. The license file(s) must be stored in the folder, in which the application is installed, in the licenses subfolder, or – respectively – in a folder defined in the configuration file (see Configuration).

If no license file is found in the respective folder upon the first launch, the application shall be launched in the trial mode – messages will be downloaded but the Subject field of all messages transferred to GroupWise shall contain the text TRIAL \*. The trial mode shall be terminated automatically after the application detects a valid license file in the respective folder.

Unless the folder contains a sufficient number of licenses for all source mailboxes, the content of mailboxes, to which no licenses apply, will not be downloaded (their names will be entered in the log). Licenses are allocated to source mailboxes step-by-step, and not necessarily in the sequence, in which they are listed in the configuration file. If in the case of too few licenses it is necessary to pick manually any mailboxes, the contents of which should not to be downloaded, just add the option disabled="true" in the configuration file in the source mailbox parameter, for example: <POP3 host="pop3.centrum.cz" username="psmith" password="pwd487" suffix=" [Centrum]" delete="false" ruleset="tdp" disabled="true" />

*Note – License files can be added while the application is running; the number of licenses is checked in every cycle.*

In the user box, which is set as `adminAccountId` in the configuration file, messages will be generated automatically notifying of approaching expiry of any license file (with the first notice to be generated thirty days in advance and another one day before the expiry). A warning message will be generated also if any license file with expired validity or any invalid or damaged file is stored in the license folder – in such cases the message will be generated every day (or as soon as the application is started).

## Configuration

The configuration is performed in two ways. The basic configuration is performed using the configuration xml file (see Annexes), the name of which is used as a parameter when the application is launched. In the launching script, the default name `config.xml` is used. The file must be saved in the application folder.

*Note – The names of parameters in the configuration file are case sensitive.*

The other type of configuration is the “user configuration”, which allows authorized users setting the message downloading from external mailboxes directly using the GroupWise client (see User Configuration).

*Note – For any potential configuration changes to apply, the application has to be restarted after the configuration file is modified. The user configuration is updated automatically in set intervals.*

### A detailed description of parameters of the configuration file:

```
<param name="basePath" value="/opt/tdp/GWFetchMail/" />
```

The path to the location, in which the application is installed

```
<param name="updateDelay" value="60" />
```

The waiting interval between individual POP3 mailboxes checks. It is set in seconds. Unless the parameter is set, the default value of 30 seconds shall apply.

```
<param name="gwConfigUpdateDelay" value="300" />
```

The interval in which the user configuration is updated. It is set in seconds. Changes in the user configuration become effective only after it is updated.

```
<param name="configFolderName" value="GWFM" />
```

The name of the folder in GroupWise, from which the user configuration is loaded. If a user has a folder with this name in a GroupWise mailbox, the application goes through all messages contained in the folder and tries to load the local configuration.

```
<param name="gwConfigUser" value="username" />
```

User, the ID of which is used to download a distribution list – they must be authorized to read it.

```
<param name="gwConfigDistributionList" value="testList3"/>
```

The name of the distribution list, which defines the list of users being allowed to configure the message downloading themselves (see User Configuration)

```
<param name="adminAccountId" value="pkures"/>
```

The user, to the address of which messages on terminating or expired licenses (see Licensing) or on the application not running are sent.

```
<param name="watchdogTimeout" value="1800"/>
```

The interval, in which it is checked whether the application is running. It is set in seconds. If any preset external mailbox is not accessed successfully during an interval consisting of the value above and the value set for `updateDelay` (here: 1860), an email message shall be sent to the mailbox of an account set in the `adminAccountId` parameter containing the information about the application not running (the contents of such message can be modified in the respective template – see Message Templates).

```
<param name="userMailboxTransferLimit" value="1000"/>
```

The maximum number of messages transferred during a single cycle from each POP3 mailbox set by a user. If the number of messages in the mailbox exceeds the preset limit, the messages will be transferred during more cycles.

```
<param name="domainMailboxTransferLimit" value="20"/>
```

The maximum number of messages transferred within a single cycle from each domain mailbox. If the number of messages in the mailbox exceeds the preset limit, the messages will be transferred during more cycles.

```
<param name="userMailboxMaxDaysLimit" value="5"/>
```

Using the optional parameter `userMailboxMaxDaysLimit`, the downloading of messages from user-defined mailboxes can be restricted only to messages, which have been in the mailbox for a period shorter than the set value (the number of days from the message delivery). For example, in this case messages stored in the mailbox for 6 or more days shall be ignored.

```
<param name="domainMailboxMaxDaysLimit" value="7"/>
```

Using the optional parameter `domainMailboxMaxDaysLimit`, the downloading of messages from domain mailboxes can be restricted only to messages, which have been in the mailbox for a period shorter than the set value (the number of days from the message delivery). For example, in this case messages stored in the mailbox for 8 or more days shall be ignored.

```
<SMTP host="172.22.30.71" port="25" />
```

The address and port of SMTP server

```
<connections>
```

```
  <gwSOAP address="http://172.22.30.71" port="7191" trustedAppName="GWFetchMail"
  trustedAppKey="288B46F105F6000081FA8E0062001100288B46F205F6000081FA8E0062001100"/>
</connections>
```

In the "connections" section, path to GroupWise servers are set. For servers, the `trustedAppKey` must be entered allowing the application to work with

GroupWise as a "trusted application" (see Installation). As the `trustedAppName` parameter, the name of the application used upon its registration in the domain database is entered (GWFetchMail).

```
<sources>
  <POP3 host="172.22.72.193" username="jdoe" password="pass456" delete="true"
ruleset="tdp" />
  <POP3 host="pop3.centrum.cz" username="psmith" password="pwd487" suffix="
[Centrum]" delete="false" ruleset="tdp" disabled="false" />
  <POP3 host="ssl:pop.gmail.com" port="995" username="joedoe" password="pwd123"
suffix=" [Gmail]" ruleset="tdp2" />
</sources>
```

In the "sources" section, path to source domain mailboxes are set. The value of the `host` parameter (the address of the source mailbox) can be entered as a domain or IP address. If a secured `ssl` connection must be used to access the mailbox, the address must be provided with the `ssl:` prefix and the `port` parameter with the number of the respective port must be added. The other parameters are the user name and password for the access to the `pop3` mailbox.

The value specified in the optional `suffix` parameter shall be inserted replacing the original text in the message subject and can be used, for example, for processing using rules or for simple distinguishing of messages coming from external sources.

The optional `delete="true"` parameter can be used to set whether messages should be deleted after being forwarded from the source folder. Unless the parameter is set, its value is considered set on "false", i.e. messages are not removed.

*Note – If the `delete="true"` parameter is set the correlation database is not used for the respective mailbox (see Correlation Database).*

The `ruleset` parameter is used to define which set of routing rules shall apply when processing messages from the respective mailbox (see below).

*Note – The functionality of the `delete` parameter depends on the settings of the source mailbox. If, for example, it is set for the Gmail account messages should not be deleted after being downloaded using the `pop3` protocol, they shall not be deleted even if it is set in the configuration file of the GWFetchMail application that they should be deleted.*

```
<ruleset id="tdp">
  <rewrite src="(joe)@doe.cz" tgt="jdoe@tdp.cz"/>
  <rewrite src="(psmith)@centrum.cz" tgt="smith@tdp.cz"/>
  <rewrite src="(.)@centrum.cz" tgt="jdoe@tdp.cz"/>
</ruleset>

<ruleset id="tdp2">
  <rewrite src="(.)@gmail.com" tgt="$1@tdp.cz"/>
</ruleset>
```

In the "ruleset" section, a set of routing rules is defined to be applied to downloaded messages. You can use any number of rules sets; sets are

allocated to source mailboxes using the `ruleset id` parameter. The `src` parameter is used to define the form of the address of the source message – if a message with the corresponding address (or address corresponding with the applied form) is found, it shall be forwarded to the address entered in the `tgt` parameter. Regular expressions can be used for such definition. The application meets the rules step by step, so it is good first to define exceptions and then general rules.

## User configuration

Users may set the forwarding from external mailboxes themselves if their names are specified in the configuration distribution list (see the `gwConfigDistributionList` parameter). The user configuration is loaded from messages located in the folder with the name defined in the `configFolderName` parameter.

First, the application checks the existence of the respective folder in mailboxes of users specified in the configuration distribution file. If such folder is found, `GWFetchMail` goes through all messages stored in it regardless the senders, subjects or types.

If a line beginning with the POP3 prefix is found in a message, the following values separated by space in the line shall be used as configuration parameters, for example:

```
POP3 pop3.centrum.cz:110 jdoe pwd487 [centrum]
pop3 172.22.72.193 msmith pwd489 *localbox*
POP3 ssl:pop.gmail.com:995 masvobo pwd948 (gmail)
```

In which `pop3.centrum.cz:110` is the address and port of the source mailbox (an IP address could be set as well), `jdoe` is the user name and `pwd487` is the mailbox password. If secured connection is required for access, the address must begin with the `ssl:` prefix.

The value `[centrum]` provided after the password shall be inserted after the text of the subject and can be used, for example, to create a rule or to simply differentiate messages from external sources.

*Note – If downloading of messages from a single pop3 mailbox is defined in multiple ways, for example in the configuration file and, at the same time, by a user, messages shall be downloaded only once, but two licenses shall apply!*

## Message Templates

Templates define the content of messages to inform an authorized person about the expiring effectiveness / invalidity of license files and about potential malfunctioning of the application (see Licensing and Configuration sections). They are located in the application folder, in the `templates` subfolder. One template is available for each message type: `expiringLicense.flt` for the information about the expiring validity of a license file; `expiredLicense.flt`

for the information about the expired validity of a license file; `invalidLicense.flt` for the information about an invalid or damaged license file; and `watchdogTimeout.flt` for the information about synchronization not being carried out. Files are created in the UTF-8 format without BOM and can be modified in any text editor supporting this format.

## **Log**

The application creates records of activities and saves them in files in the logs folder, or – respectively – in the folder set in the `logback.xml` file (the default setting is: `/opt/tdp/GWFetchMail/logs`). Two files are created automatically for every day with named containing the date of the respective day (such as `gwfm-2009-06-09`) and filename extensions of `.log` for records on common application procedures, and `.err` containing only potential errors and problems to be found easily if needed.

# Annexes

## Sample configuration file

```
<?xml version="1.0" encoding="UTF-8"?>
<cfg>
<param name="basePath" value="/opt/tdp/GWFetchMail/" />
<param name="updateDelay" value="20" />
<param name="gwConfigUpdateDelay" value="60" />
<param name="configFolderName" value="GWFM" />
<param name="gwConfigUser" value="jdoe" />
<param name="gwConfigDistributionList" value="DList1" />
<param name="adminAccountId" value="jdoe" />
<param name="userMailboxTransferLimit" value="10" />
<param name="domainMailboxTransferLimit" value="20" />
<param name="userMailboxMaxDaysLimit" value="3" />
<param name="domainMailboxMaxDaysLimit" value="5" />

<SMTP host="172.22.30.71" port="25" />

<connections>
  <gwSOAP address="http://172.22.30.71" port="7191" trustedAppName="GWFetchMail"
trustedAppKey="1014B681141D0000B0862700E90052001014B682141D0000B0862700E9005200" />
</connections>

  <sources>
    <POP3 host="172.22.72.193" username="jdoe" password="pass456" delete="true"
ruleset="tdp" />
    <POP3 host="pop3.centrum.cz" username="psmith" password="pwd487" suffix="
[Centrum]" delete="false" ruleset="tdp" />
    <POP3 host="ssl:pop.gmail.com" port="995" username="joedoe" password="pwd123"
suffix=" [Gmail]" ruleset="tdp2" />
  </sources>

  <ruleset id="tdp">
    <rewrite src="(joe)@doe.cz" tgt="jdoe@tdp.cz" />
    <rewrite src="(psmith)@centrum.cz" tgt="smith@tdp.cz" />
    <rewrite src="(.*)@centrum.cz" tgt="jdoe@tdp.cz" />
  </ruleset>

  <ruleset id="tdp2">
    <rewrite src="(.*)@gmail.com" tgt="$1@tdp.cz" />
  </ruleset>
</cfg>
```

## Manual Installation Instructions

# For GWFetchMail 2.5 on Linux (tested on SLES 10 SP1, but should work for another distributions as well)

# Log in as root/superuser

# Copy the file GWFetchMail\_2.5.bin to the current folder

# Download Sun JRE/JDK 1.6\_11 or higher 'jre-6u13-linux-i586.rpm.bin'

# JAVA installation:

**chmod +x jre-6u13-linux-i586.rpm.bin**

**./jre-6u13-linux-i586.rpm.bin**

# Follow the installation instructions (use the space key to go through the license agreement faster)

# GWFetchMail Installation:

**chmod +x GWFetchMail\_2.5.bin**

**./GWFetchMail\_2.5.bin -x**

# This unzips the installation files into the 'GWFetchMail' subfolder in the current folder.

**cp -r GWFetchMail/opt/\* /opt/**

**cp GWFetchMail/etc/init.d/GWFetchMail /etc/init.d/**

**chmod +x /etc/init.d/GWFetchMail**

# If necessary, modify the /etc/init.d/GWFetchMail: file

#

# JAVA\_HOME - Set the path to the destination, in which jre is installed (default: '/usr/java/jre1.6.0\_13' nebo '/usr/java/current')

#

# If you want to install the application into a folder other than the default /opt/tdp/GWFetchMail, please check/change also:

# APP\_DIR in the /etc/init.d/GWFetchMail file

# The basePath parameter in the config.xml file (/opt/tdp/GWFetchMail/config.xml)

# Login paths in the logback.xml file (a part of the FileNamePattern tag - change only the path before /logs/gwfm-%d{... } )

# Setting GWFetchMail as daemon

**chkconfig GWFetchMail on**

# Launching

**/etc/init.d/GWFetchMail start**

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## ASM

a very small and fast Java bytecode manipulation framework

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