

jAPS 2.0 – Plugin Mail

Do It The jAPS Way

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jAPS 2.0 – Plugin Mail

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Abstract

This document aims to describe the structure of the Mail (`jpmail`) plugin.

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Chapter 1. Scope of the Document

Introduction

The purpose of this document is to provide a complete description of the Plugin Mail (`jpmail`) structure.

Target Audience

This document is intended for those who wish to know the capabilities of the jAPSPugin Mail (`jpmail`) and is considering the possible integration into a running production environment or in its Development Environment (IDE Eclipse Project).

The document is addressed to both System Administrators and java Developers.

Prerequisites

In order to take maximum advantage from the present document, it is necessary to have basic knowledge about: Java platform, Eclipse development tools, the servlet engine Apache Tomcat, PostgreSQL dbms, jAPS 2.0 Framework.

Moreover, it's necessary to have read *jAPS 2.0 Plugin Pattern* document.

Resources

Additional informations may be obtained through the following mailing-lists:

- `<japs-devs@lists.sourceforge.net>`, focused on developers
- `<japs-users@lists.sourceforge.net>`, focused on final users

Is it also possible to refer to the documentation found in the:

jAPS 2.0 Project - Developer Website [<http://dev.japsportal.org/>]

Chapter 2. Specifications

The Plugin `Mail` provides basic functionality for sending email both in plain text or HTML, with or without attachments. This service is the basis for all the plugins that require sending emails.

The plugin is structured so as to be inserted in an instance of jAPS without affecting the core.

Table 2.1. Characteristics Summary

Code	Name	Type	Plugin Version	jAPS 2.0 Version
jpmail	Mail	PurePlugin	1.2	2.0.10
jpmail	Mail	PurePlugin	1.1	2.0.8, 2.0.6
jpmail	Mail	PurePlugin	1.0	2.0.2

Characteristics of the Plugin Mail

Features

This plugin provides the functionality of sending emails from a configured sender in the system.

The main goal of this plugin is to provide general functionalities in the service of particular implementations; exposed functionalities are in the exclusive service of other modules who need sending emails in order to work; for instance: User Registration, Newsletter etc.

Other modules can send emails, using the interface exposed by the Plugin Mail, customizing the following fields:

- Sender (from senders configured in the service)
- Subject
- Body
- Recipient (Primary recipients (to), Carbon Copy recipients (cc) and also Blind Carbon Copy recipients (bcc))
- Message Body Type (plain text, HTML, mixed; with or without attachments)

The modules has an user interface of the Back-end area through which a superuser can configure the service. The user interface adheres perfectly to the graphics and setting of the Back-end area and is accessible through a menu item `Plugins`. Moreover, It allows to configure, separately, the smtp server and the system senders addresses.

Configuration

This plugin needs an xml configuration, in the `db Port`, where are defined the smtp host, with username and password, a flag for debug mode, a list of senders composed of code and email address.

An example of the configuration:

```
<mailConfig>
  <senders>
    <sender code="CODE1">EMAIL1@EMAIL.COM</sender>
    <sender code="CODE2">EMAIL2@EMAIL.COM</sender>
```

```
</senders>
<smtp debug="true" >
  <host>out.virgilio.it</host>
  <user></user>
  <password></password>
</smtp>
</mailConfig>
```

All these parameters are mandatory, except for the debug attribute, if It is not present is considered "false".

Back-end Interface

This plugin provides user interface of the Back-end area accessible through a menu item *Plugins*, sub-menu *eMail Management*. There are two sub-items, the first leads to the SMTP server configuration page, the other leads to the Sender Configuration page.

Chapter 3. Installation and Integration

Installation and Integration

Technical Specification

This plugin is *PurePlugin*, its installation doesn't modify any existing system function already present.

The package

The package contains all the plugin directory (directory `doc`, `src` and the `Readme` file) defined by *jAPS2.0 Plugin Pattern* document.

In particular, the directory `src` is structured as described below:

- The `java` directory. It contains java sources and the jUnit tests for the plugin.
- The `sql` directory. It contains sql scripts for the `Port` and test databases.
- `webapp` directory. It contains all the necessary files to the webapp. In particular, the directory contains files (`jsp`) related to user interfaces and configuration files themselves. It contains also Spring beans configuration (Business layers), Struts 2 configuration (Presentation layer) and the static resources for the plugin (`css`, `images` and `js`).

Integration in Production Environment

From now we will use the name `myportal` when referring to your deployed jAPS 2.0 Application.

In order to execute the integration in a web application based on jAPS 2.0, and compatible declared, the steps to be performed are:

Note

The integration activity must be performed after stopping the container.

- Copy the content of `src/webapp/WEB-INF/lib` directory, from the provided package, to `myportal/WEB-INF/lib/` directory.
- Copy the content of `src/webapp/WEB-INF/plugins/` directory, from the provided package, to `myportal/WEB-INF/plugins/` directory.
- Execute the queries in `portScript.sql` file (`src/sql` directory in the provided package) in the `Port` db or your jAPS application.
- The script assumes `production` as value of `version`, modify It if version is different in the production environment. Modify also the smtp server configuration and sender addresses as needed.

Installation in a Development Environment

From now we will use the name `myproject` when referring to your jAPS 2.0 Eclipse project.

In order to execute the installation in an Eclipse project based on jAPS 2.0, and compatible declared with this plugin, the steps to be performed are:

- Copy the content of `src/webapp/WEB-INF/lib/` directory, from the provided package, to `myproject/WebContent/WEB-INF/lib/` directory excluding the file `jAPSPlugin-jpmail-1.1.jar`.

- Copy the content of `src/webapp/WEB-INF/plugins/` directory, from the provided package, to `myproject/WebContent/WEB-INF/plugins/` directory. If `myproject/WebContent/WEB-INF/plugins/` is not already present, create it.
- Copy the content of `src/webapp/resources/plugins/` directory, from the provided package, to `myproject/WebContent/resources/plugins/` directory.
- Execute the queries in `portScript.sql` file (`src/sql` directory in the provided package) in the `Port` db or your `jAPS` application.

The script is assumes `production` as value of `version` (modify It if version is different in the db of your application). Modify also the `smtp` server configuration and sender addresses as needed.

- Execute the queries in `portTestScript.sql` file (`src/sql` directory in the provided package) in your test `port` db.
- Copy the content of `src/java/main/com` directory, from the provided package, to `myproject/src/com` directory.
- Copy the content of `src/java/test/test` directory, from the provided package, to `myproject/src/test`.
- If the file `myproject/src/japs-struts-plugin.xml` is already present, copy the content of `<struts>` tag from `src/java/main/jpphotogallery_japs-struts-plugin.xml` file, of the provided package, to existent `myproject/src/japs-struts-plugin.xml` file.

If the file `myproject/src/japs-struts-plugin.xml` is not already present, then copy the `src/java/main/jpphotogallery_japs-struts-plugin.xml`, from the provided package, to `myproject/src/` directory and rename it as `japs-struts-plugin.xml`.

- To verify proper sending of mails, in the `jUnit` tests, modify the `MAIL_ADDRESSES` constant of the `test.com.agiletec.plugins.jpmail.util.JpmailTestHelper.java` class.

After the steps just described, launch the Eclipse project and verify new menu items in the Back-end are present.

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