Jobsworth Project Management 4.0

jw40doc.140127

Jobsworth Project Management 4.0: Installation and Manual
jw40doc.140127

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Contents

Preface

Welcome to the jobsworth project management, support ticketing and CRM system. This software is licensed under the AGPLv3.

Jobsworth can be used for helpdesk support ticketing, customer liasion, resource management (eg. systems and password tracking) and has a range of CRM type functionality. Plan your projects, see your schedule, know if you're slipping behind and why. Time Tracking and extensive reports help you show your clients exactly what you've done and for how long.

- no restrictions or limits

- interactive gantt chart & scheduling

- flexible reporting

- tracks and indexes all changes

- notifications via email, rss & ical

- ldap integration

- acounting / billing system integration

- custom attributes

- inbound and outbound email integration

- sophisticated access control

- services (SLA)

- resources

- .. much much more

Further project details can be seen at Ohloh (https://www.ohloh.net/p/jobsworth) ↗ .

Support

The primary support is through the mailing list (https://groups.google.com/forum/#!forum/jobsworth) ↗ or if you have a bug report, create an issue (https://github.com/ari/jobsworth/issues) ↗ in the tracker. If you want to write up details of a new feature you'd like to see, please use the wiki wiki (https://github.com/ari/jobsworth/wiki) ↗ .

Contributing

Code contributions are welcome to this project and the best way to go about it is to fork the git repository:

```
https://github.com/ari/jobsworth
```

Please read the DEVELOPMENT.md file in this directory for more information. Join the developer mailing list (https://groups.google.com/forum/#!forum/jobsworth-dev) ↗ to discuss ideas or ask questions.

I Installation

1 base OS installation

The base installation of Jobsworth 4.0 is very easy (big improvement to previous releases), once a server with some SQL-database and a servlet container has been set up. For those of you not setting up such servers frequently, I have added some more screenshots and commands, that might help you speeding up the installation process.

> **Note**
>
> The following installation instructions are based on FreeBSD® 9.2. Other Unix-like operating systems may also work, once a LAMP server has been set up. Especially pathes to configuration files differ in various distributions from FreeBSD® and have to be adapted individually.

First of all get an operating system on a dedicated machine running. Typically Jobsworth only uses server functionality, therefore a graphical user interface (e.g. Gnome or KDE) is not necessary. If you are new to server installation, such GUI would help you to find your way around (e.g. looking on the web for HowTo's).

2 Database

Install the database-server package. You can either use mysql or postgresql. The following example shows the setup of *mysql* . After invoking mysql from the command-line you should see a screen like this:

```
$ mysql
Welcome to the MySQL monitor. Commands end with -; or \g.
Your MySQL connection id is 6
Server version: 5.5.33 Source distribution


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Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.


Type -'help;' or -'\h' for help. Type -'\c' to clear current input statement.


mysql>
```

> ⚠️ **Important**
>
> If you see any minus-signs in the screenshot above: This is some unresolved rendering error problem (for PDFs only?). Be aware that those minus-signs shall NOT be typed as part of the configuration scripts that will follow.

Now type in the following commands to create the jobsworth database and an admin-user. Feel free to adjust database-name, user-id and password and note it for later configuration. Then quit mysql-console.

```
CREATE DATABASE mydb DEFAULT CHARACTER SET utf8
CREATE USER -'monty'@'localhost' IDENTIFIED BY -'some_pass';
GRANT ALL PRIVILEGES ON *.* TO -'monty'@'localhost' WITH GRANT OPTION
quit
```

> **Note**
>
> At a later stage in this installation process Jobsworth will setup all tables and initial data on its first call.

To enable the start of mysql during start of your server, the following entry has to be inserted into your startup configuration file (e.g. /etc/rc.conf)

```
mysql_enable="YES"
```

3 Apache

Installation of Apache Web-Server on most OS distributions is pretty straightforward. Just install the packages delivered with your distribution. For this example I have installed Apache V2.2.

To enable the start of Apache Web-Server during start of your server, the following entry (depending on your OS and apache version) has to be inserted into your startup configuration file (e.g. /etc/rc.conf)

```
apache22_enable="YES"
```

In any browser type in the URL of your Jobsworth server. For example:

```
http://172.20.50.4
```

A simple screen shows, that Apache is running.
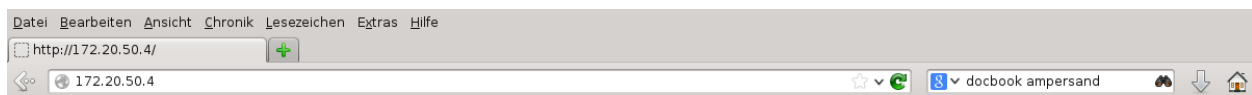
FIGURE 3.1: APACHE WORKS

4 Servlet container

Install Apache Tomcat (or another java servlet container) and make sure you can get to the default installation home page. How to install Tomcat or some other servlet container is beyond the scope of these instructions (still, some more details will follow here) but the basic details can be found in the documentation (http://tomcat.apache.org/tomcat-7.0-doc/) ↗ . Don't be afraid of all those XML configuration files in Tomcat; mostly they can be left to default values.

There is one file you will need to edit and that is context.xml. This file defines all the configuration for your application. Copy the example (https://github.com/ari/jobsworth/blob/master/config/context.example.xml) ↗ into the tomcat configuration folder and set all the variables to reasonable choices for your system.

> ⚠️ **Important**
>
> Please note that line-breaks in the following listing might be confusing. Always load actual context.example.xml (https://github.com/ari/jobsworth/blob/master/config/context.example.xml) ↗ file for your reference!

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!--
This file is an example. You will need to customise it for your own needs, and
rename it
to context.xml. In Apache Tomcat is belongs inside a folder called -"config".  ❶


You can change the mysql driver to postgresql and you will need to replace all the
variables
which look like this ${VARIABLE} either at runtime using a script, or by editing
this file
directly.
-->


<Context swallowOutput="true">
  <Resource name="jdbc/jobsworth"
            removeAbandoned="true"
```

```
            auth="Container" type="javax.sql.DataSource"
            maxActive="100" maxIdle="30" maxWait="10000"
            username="${DBUSER}" password="${DBPASS}" ❷
            driverClassName="com.mysql.jdbc.Driver" batchSize="-1"
            url="jdbc:mysql://${DBSERVER}:3306/${DBNAME}? ❸
autoReconnect=true&zeroDateTimeBehavior=convertToNull&useUnicode=true&characterEncoding=utf8"
            validationQuery="select 1"/>

  <!-- The base domain of the running application. The actual URL you use to
access the system is the name of the tenant followed by this. So you might
have -'company1.acme.com' and -'company2.acme.com' -->
  <Parameter name="config.domain" value="acme.com" override="false"/>


  <!-- Jobsworth can be branded as something else -->
  <Parameter name="config.productName" value="jobsworth" override="false"/>


  <!-- SSL is good. But you may want to turn it off while you are first setting
this up -->
  <Parameter name="config.ssl" value="true" override="false"/>


   <!-- A path to a folder on disk where jobsworth will store task attachments -->
  <Parameter name="config.storeroot" value="/var/jobsworth/assets" override="false"/
>


  <!-- What domain will mail from jobsworth come from? -->
  <Parameter name="config.email_domain" value="acme.com" override="false"/>


  <!-- Some emails like password resets will come from this user name. So in this
example, it will be jobsworth@acme.com -->
  <Parameter name="config.email_replyto" value="jobsworth" override="false"/>


  <!-- The from user name. This is usually the same as the reply-to username -->
  <Parameter name="config.email_from" value="jobsworth" override="false"/>


  <!-- Something to put at the start of every subject on emails from jobsworth -->
  <Parameter name="config.email_prefix" value="'[jobsworth]'" override="false"/>
```

```
  <!-- Jobsworth SMTP settings ---> ❹
  <Parameter name="config.smtp_host" value="mail.acme.com" override="false"/>
  <Parameter name="config.smtp_port" value="25" override="false"/>
  <Parameter name="config.smtp_domain" value="acme.com" override="false"/>


  <!-- This value is used for integration with your incoming mail server. Change
it! --->
  <Parameter name="config.secret" value="changeThisValueToSomethingRandom"
override="false"/>


  <!-- Jobsworth email notification of errors --->
  <Parameter name="config.error_email_prefix" value="'[jobsworth error]'"
override="false"/>
  <Parameter name="config.error_sender_address" value="jobsworth@acme.com"
override="false"/>
  <Parameter name="config.error_exception_recipients"
value="['support@example.com','sysadmin@example.com']" override="false"/>


</Context>
```

❶ If you are unsure, which "config" folder: search for a folder containing a subfolder "ROOT". It most probably is close to this. On my FreeBSD installation the config folder is located at:

```
/usr/local/apache-tomcat-7.0/conf
```

❷ Do not use variables ($ and {} chars) but enter UID and Password enclosed in parenthesis (except you have external scripts defining those variables), e.g.:

```
username: -"uid" password: -"pw"
```

❸ Example:

```
url="jdbc:mysql://172.20.50.4:3306/mydb?
```

Remarks above are mandatory for getting Jobsworth running. All remarks below will add e-mail capabilities and may be configured later.

❹ Please fill in host, port and domain as given from your e-mail provider.

To enable the start of Tomcat Servlet container during start of your server, the following entry has to be inserted into your startup configuration file (e.g. /etc/rc.conf)

```
tomcat7_enable="YES"
```

In any browser type in the URL of your Jobsworth server followed by port 8080. For example:

```
http://172.20.50.4:8080
```

If you see the following screen, your Tomcat installation has been successfull.

FIGURE 4.1: **TOMCAT WORKS**

5 E-Mail

When jobsworth sends outgoing emails for task updates, they will have a reply address which looks like this:

```
task-1234@acme.domain.com.au
```

If a user hits reply to that email, you want it to be appended to the task comments. Here's how to set this up for sendmail; adapt the script for your own mail server. Mail can be running on a different server to jobsworth because we use HTTP to push the mail from your mail server to jobsworth.

Sendmail: Add an entry to /etc/mail/local-host-names for your hostname:

```
acme.domain.com.au
```

Add an entry to /etc/mail/aliases to create an alias that will hand off emails to a script:

```
jobsworth: -"|/usr/local/share/jobsworth/mail_script.sh"
```

Add an entry to /etc/mail/virtusertable to redirect all emails to your domain to the above alias

```
@acme.domain.com.au          jobsworth
```

run

```
make; make restart
```

in /etc/mail to rebuild the sendmail databases. Now create a script at /usr/local/share/jobsworth/mail_script.sh with the following contents

```
#!/bin/sh
SECRET=password1234
URL=https://acme.domain.com.au/emails
cat $2 -| -/usr/local/bin/curl --s --k ---data-urlencode secret=${SECRET} ---data-
urlencode email@- ${URL}
```

Make sure you change the password and you make it the same as the password in the context.xml file.

6 Jobsworth

Stop tomcat. With FreeBSD use the following command:

```
service tomcat7 stop
```

Enter Tomcat web-directory e.g.

```
/usr/local/apache-tomcat-7.0/webapps
```

and delete (or better rename) the subdirectory ROOT. Now copy the latest version of Jobsworth installation file ROOT.war (https://github.com/ari/jobsworth/releases) ↗ into the Tomcat web-directory. Finally enable Tomcat again with

```
service tomcat7 start
```

The ROOT.war-file will now be extracted into a ROOT subdirectory. Give it a few seconds to complete before you continue.

> **Tip**
>
> For the installation of any new version of Jobsworth you only have to replace the ROOT.war file.

II Administration

7 Login

After you have successfully managed the installation part, it's time to login and start exploring Jobsworth 4.0.

Open the browser of your choice (currently supported are: Internet Explorer, Firefox, Chrome) and type in the URL of your Jobsworth server followed by port 8080. For example:

```
http://172.20.50.4:8080
```

This will lead you to the following login screen.
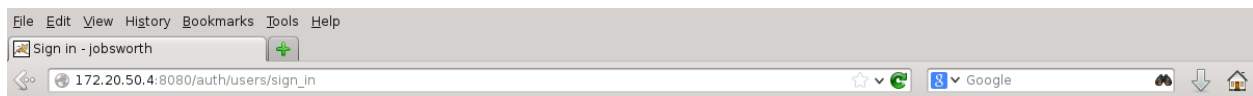
⚠ Important

The default user after installation is *admin/password* . During first login all data-base tables will be generated and filled with some initial content. This may take a while. Please stay patient. For security reasons change the password as soon as possible.

8 Menu Items

Jobsworth needs some basic preparation (e.g. project and company setup), before each function can be used. Nevertheless the Author decided to describe the menu in the order it appears on the screen. A kind of workflow may be added later.

8.1 Overview

8.1.1 Dashboard

here we are
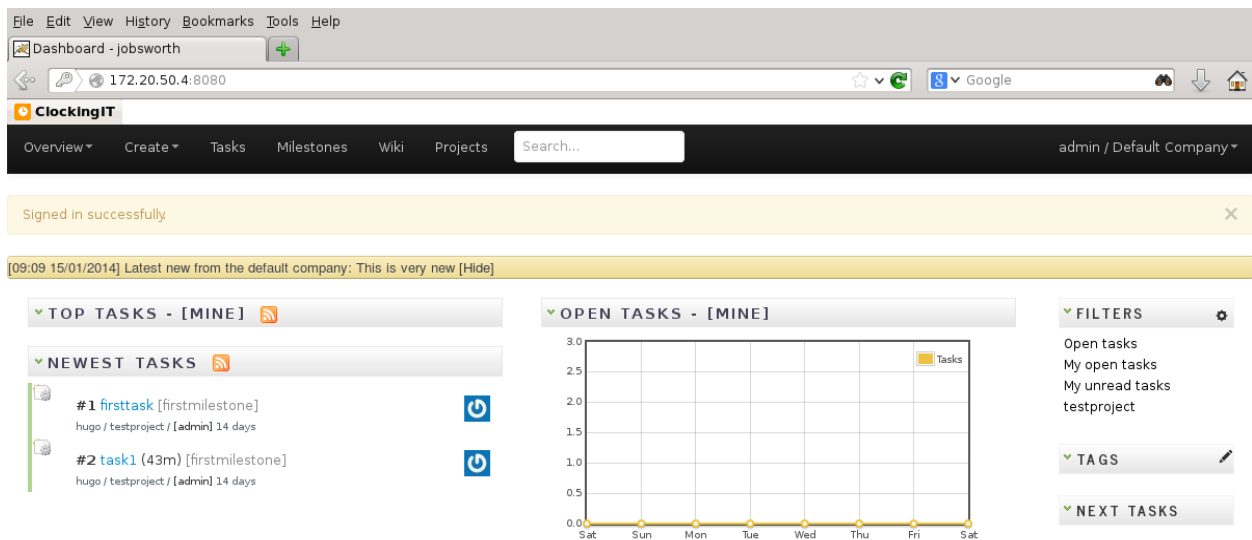
FIGURE 8.1: DASHBOARD

8.1.2 Planning

This screen will allow you to plan your tasks.

> **Note**
>
> This screen looks pretty empty after install and will make sense, once some tasks have been generated.

FIGURE 8.2: PLANNING

8.1.3   Billing

FIGURE 8.3: BILLING

8.1.4 History

FIGURE 8.4: HISTORY

8.2   Create

8.2.1   Create Task

FIGURE 8.5: CREATE TASK

> 💡 **Tip**
>
> Task dependencies are described here: Task dependencies (https://github.com/ari/jobsworth/wiki/Dependencies) ↗ . Needs some work to get included here.

8.2.2   Create Project

FIGURE 8.6: CREATE PROJECT

8.2.3   Create Milestone

FIGURE 8.7: CREATE MILESTONE

8.2.4   Create Person

FIGURE 8.8: CREATE PERSON

8.2.5   Create Company

FIGURE 8.9: CREATE COMPANY

> ⚠️ **Important**
>
> You might get confused by terms *company* and *customer* that are not used consistently. The admin is assigned to one company (e.g. default_company) and creates multiple instances of customers he is working for or people are employed by. Be aware that people always can see all customers (important for running multiple projects on one jobsworth server).

TABLE 8.1: CREATE COMPANY INPUT FIELDS

Field	Purpose
Name	Enter a new customer name. People, Projects and Tasks are assigned to customers.
Contact Name	Enter the user's name of a previously defined person or leave the field empty for now.
Active	Select this customer to be active or inactive.

Once you have created the new customer, type in the name in the search button on the top. A new (extended) customer view will open which in addition contains multiple tabs.

TABLE 8.2: EDIT COMPANY TABS

Tab	Purpose
Active Users	Shows all active users belonging to the customer.
Inactive Users	Shows all inactive users belonging to the customer.
Current Projects	Shows assigned projects and associated milestones. From here you can enter those by just clicking the names.
Completed Projects	Shows completed projects.
Score Rules	Lets you create, edit and delete companies (customer's) score rules.
Sites	Shows all business units or locations of the customer.
Resources	Shows all defined resources of this customer. Click on an item to enter the detail page
Services	??? unclear to me

8.2.6 Create Resource

FIGURE 8.10: CREATE RESOURCE

Resource is a generic term for anything that you want to be relevant in planning a project. I could be for example:

- Websites

- Computers

- Rooms

- Whiteboards

- Projectors

- ... and more

Be sure to define appropriate resource-types prior to defining the individual resources.

> 💡 **Tip**
>
> More information on resource-management can be found here: Resource Management (https://github.com/ari/jobsworth/wiki/Resource-management) ↗ . Needs some work to get included here.

8.3   Tasks
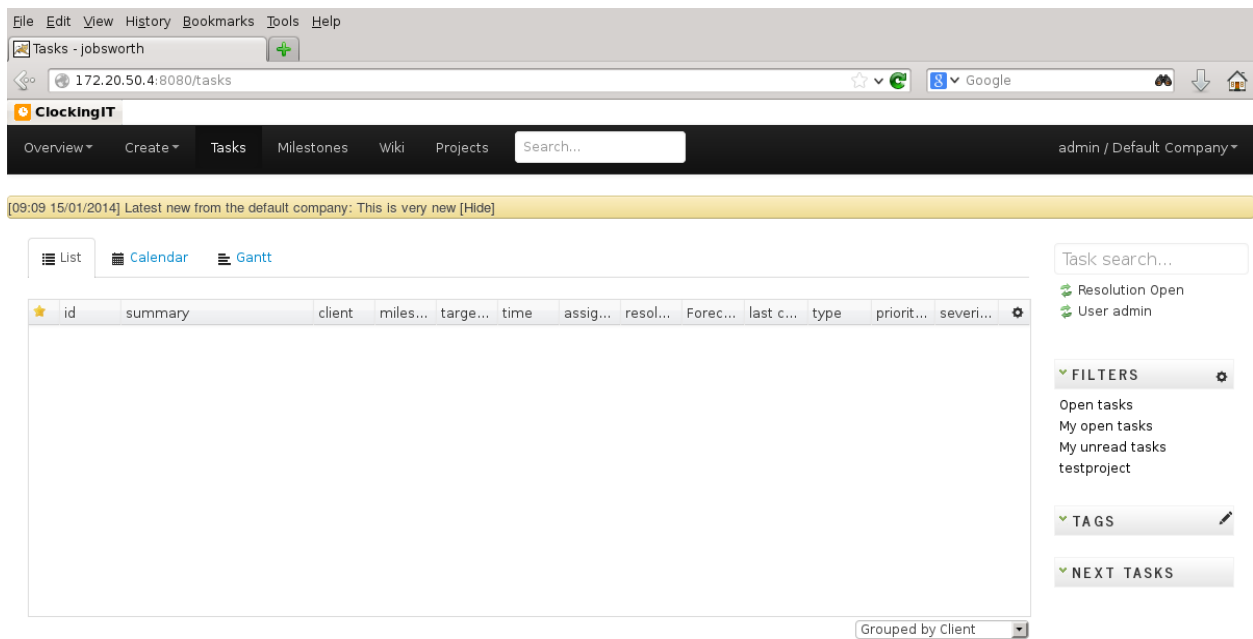
FIGURE 8.11: TASKS

8.4 Milestones
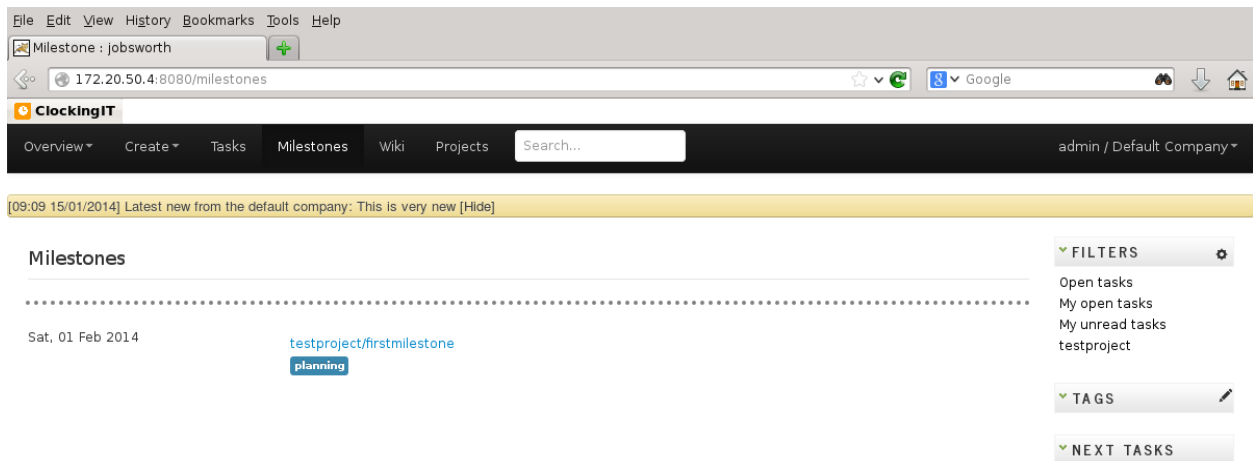
FIGURE 8.12: MILESTONES

8.5   Wiki
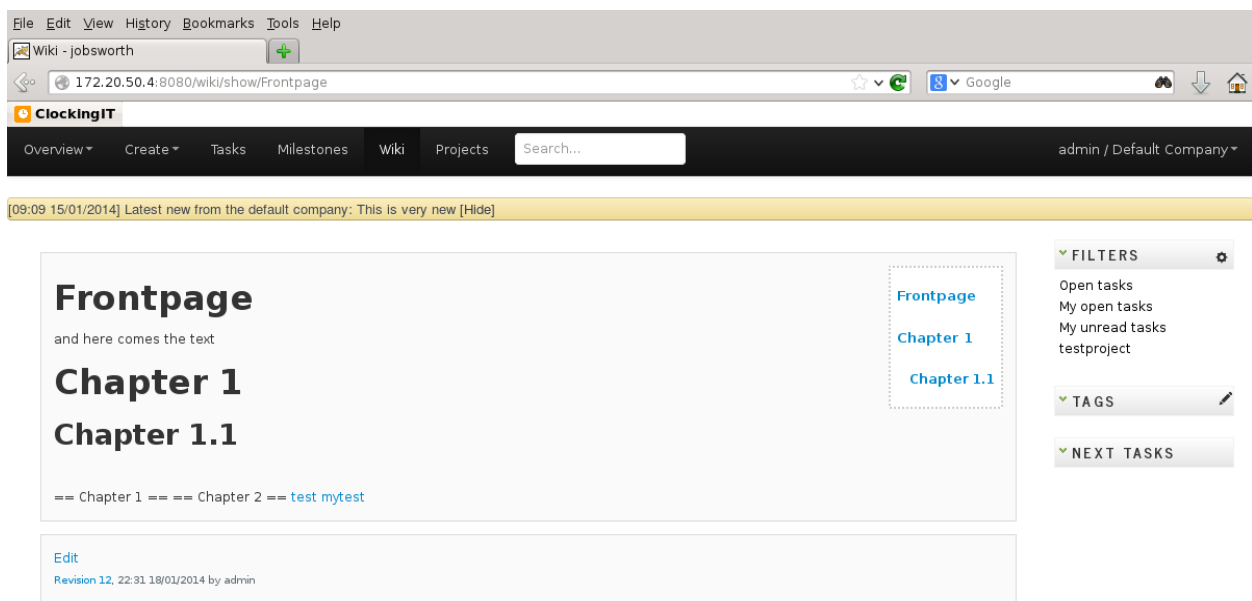
FIGURE 8.13: WIKI

8.6   Projects
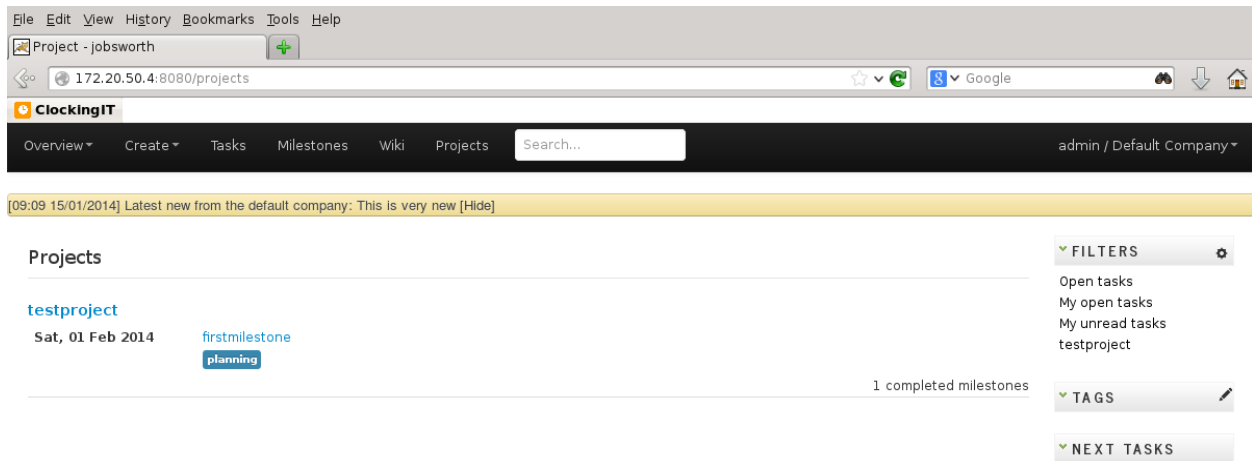
FIGURE 8.14: PROJECTS

8.7   Search

The search field allows you to find items in different categories. Type in at least three consecutive characters (the underline character will act as a wildcard-char) and depending on the context you will be prompted with a result list containing items of following catgories:

- Company / Customers

- Milestones

- People

- Projects

- Resources

- Tasks

After selection you will be led to the items detail page.

8.8 MyAccount

8.8.1 General

FIGURE 8.15: GENERAL

8.8.2   Access Control

FIGURE 8.16: ACCESS CONTROL

8.8.3   E-Mail Adresses

FIGURE 8.17: E-MAIL ADRESSES

8.8.4 Task Filters

FIGURE 8.18: TASK FILTERS

8.8.5 Projects Permissions

FIGURE 8.19: PROJECTS PERMISSIONS

8.8.6 Work Plan

FIGURE 8.20: WORK PLAN

8.9   Company Admin

8.9.1   General

FIGURE 8.21: GENERAL

8.9.2   Score Rules
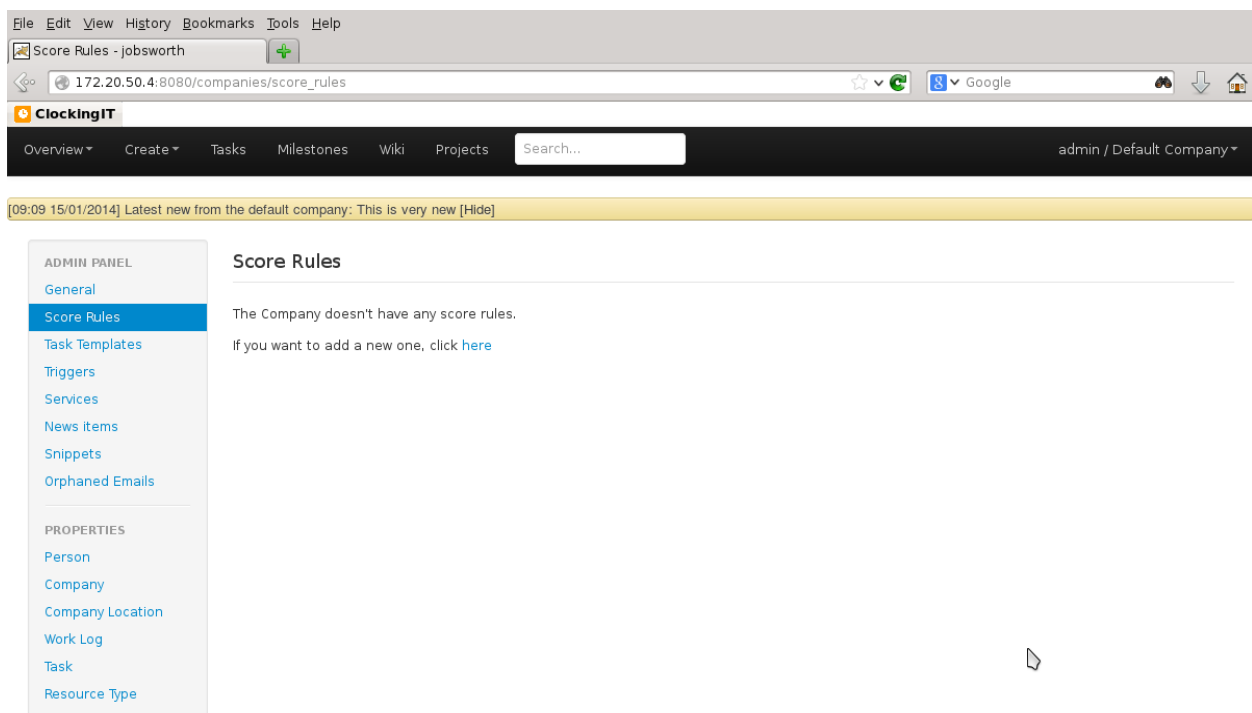
FIGURE 8.22: SCORE RULES

8.9.3 Task Templates
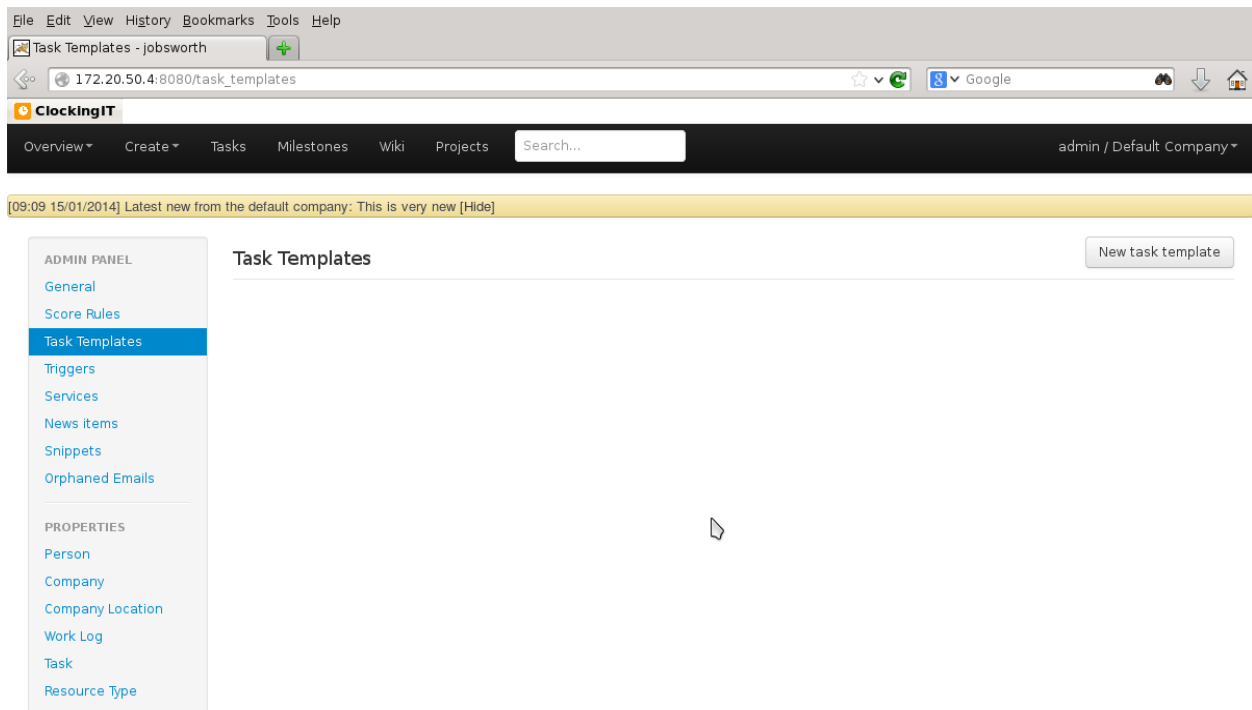
FIGURE 8.23: TASK TEMPLATES

FIGURE 8.24: NEW TASK TEMPLATE

8.9.4   Triggers
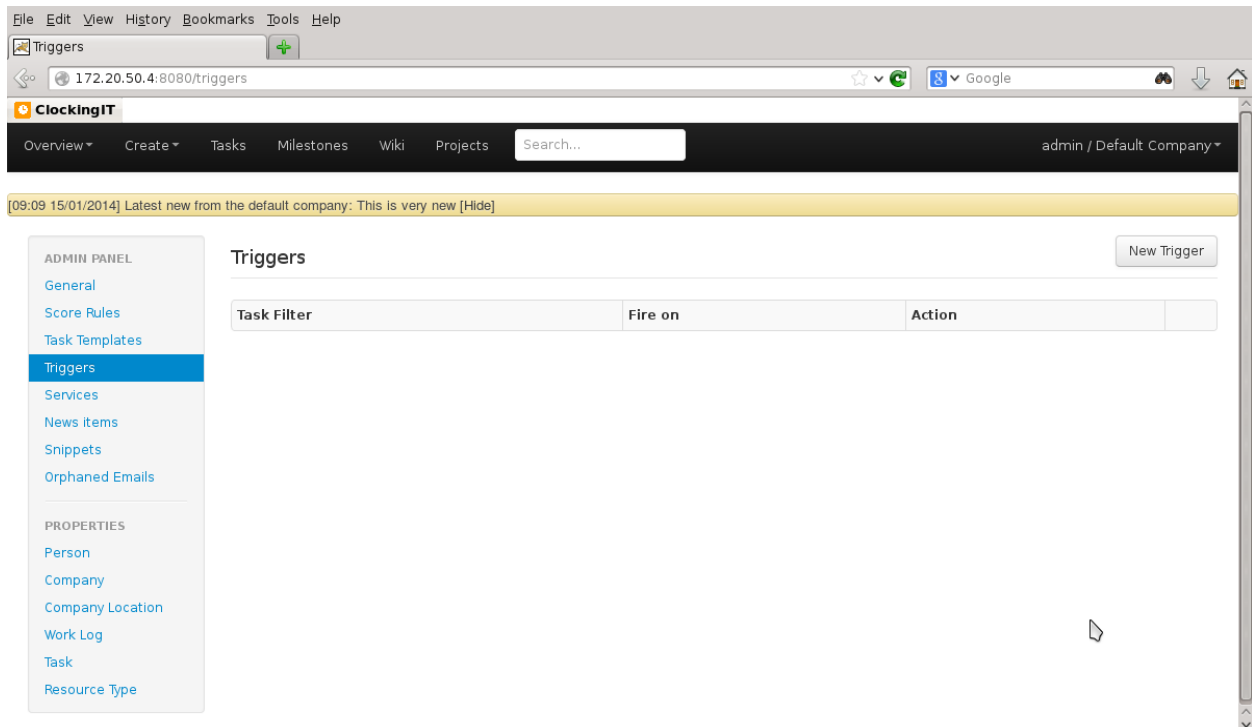
FIGURE 8.25: TRIGGERS
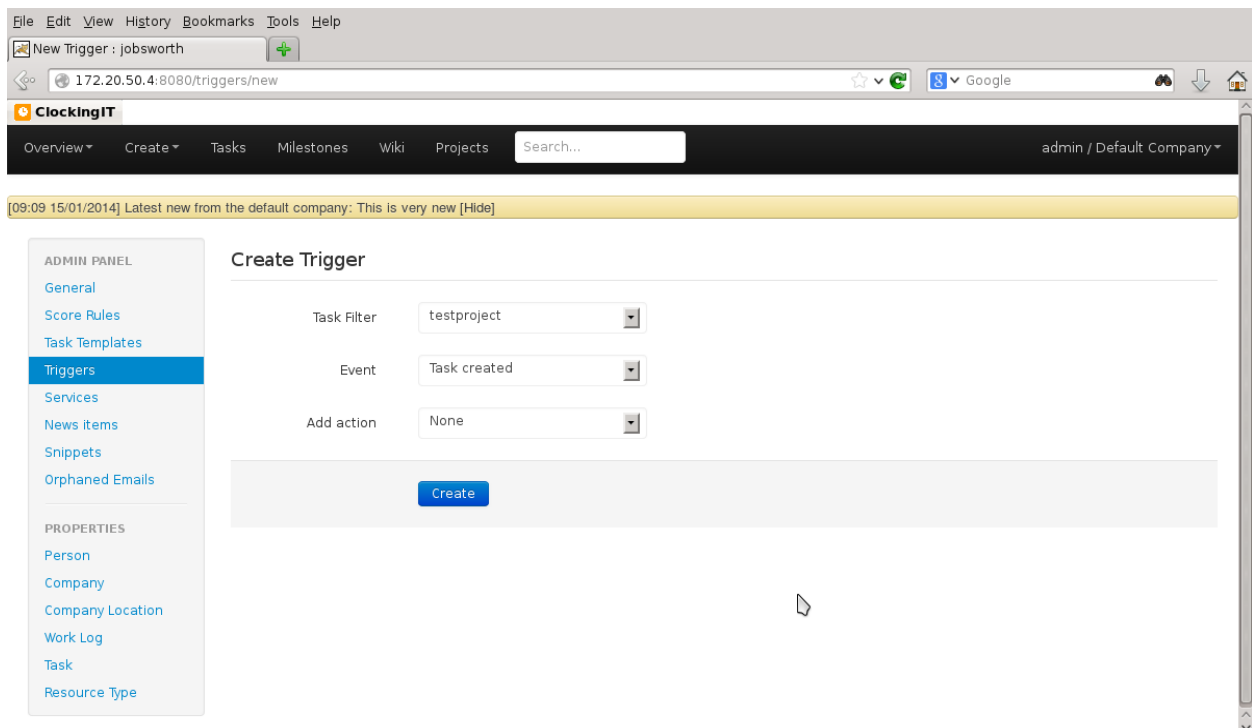
FIGURE 8.26: NEW TRIGGER

8.9.5 Services
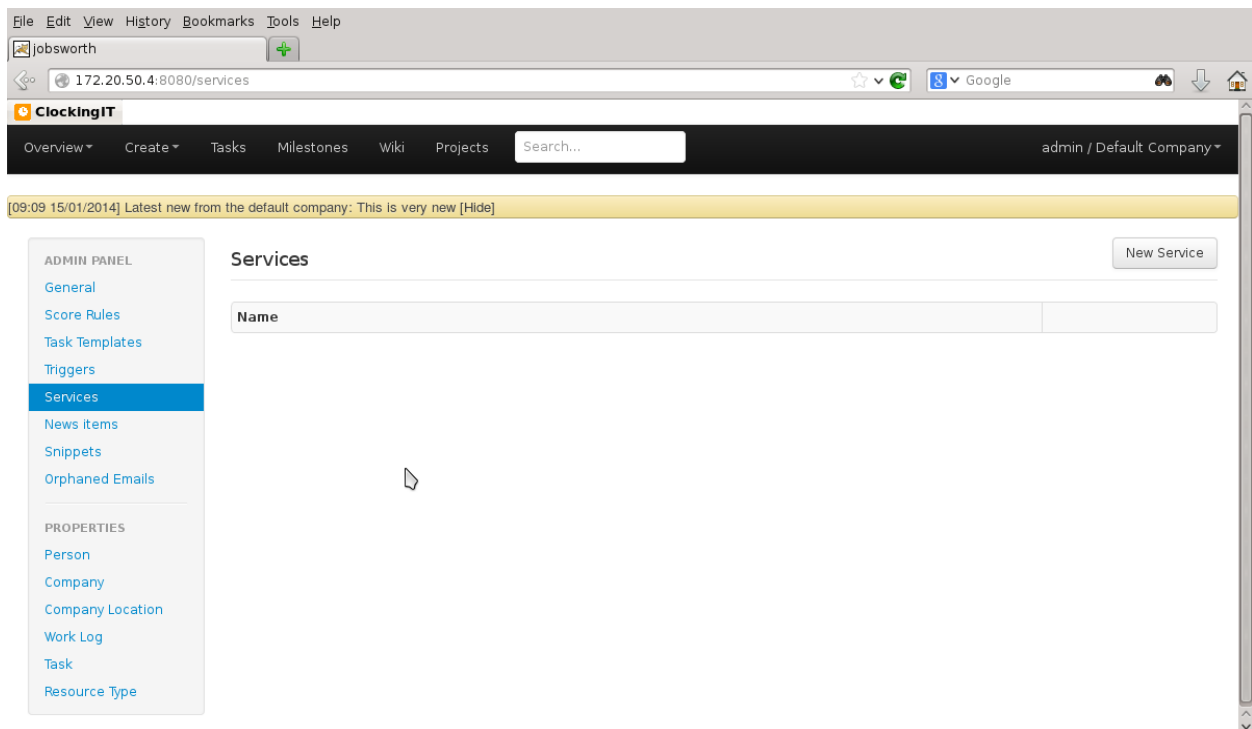
FIGURE 8.27: SERVICES
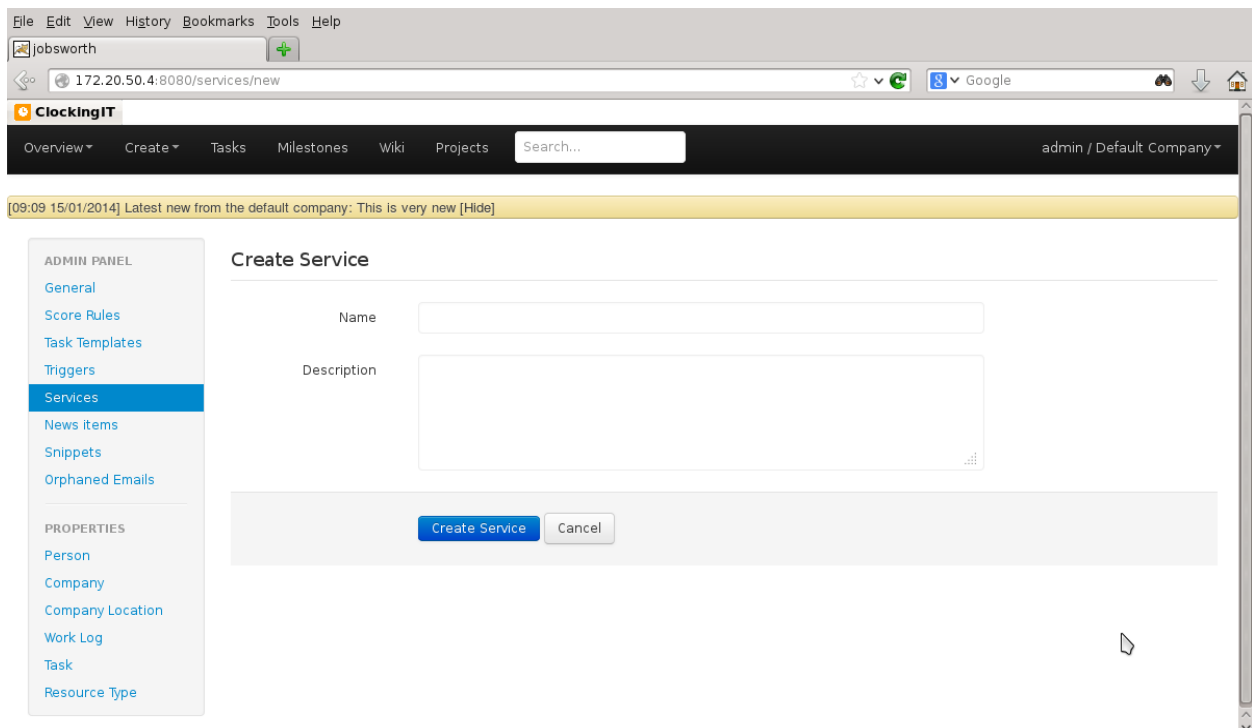
FIGURE 8.28: NEW SERVICE

8.9.6   News Items
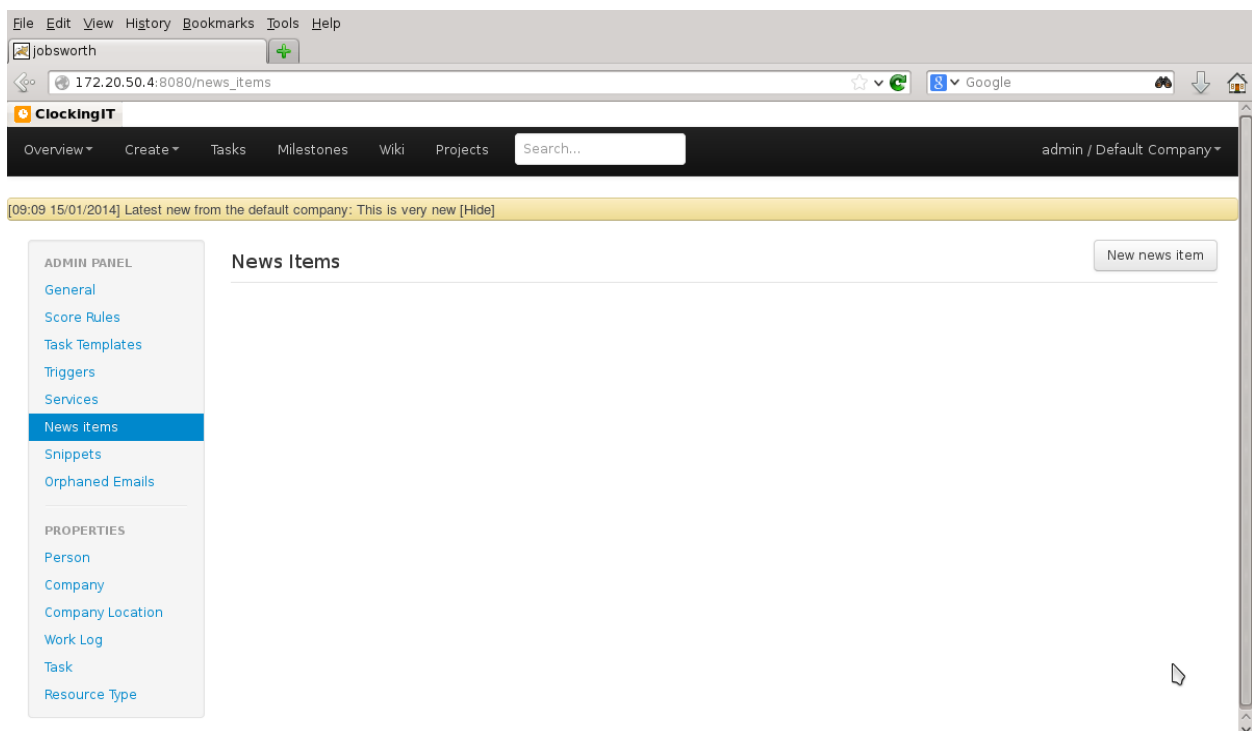
FIGURE 8.29: NEWS ITEMS
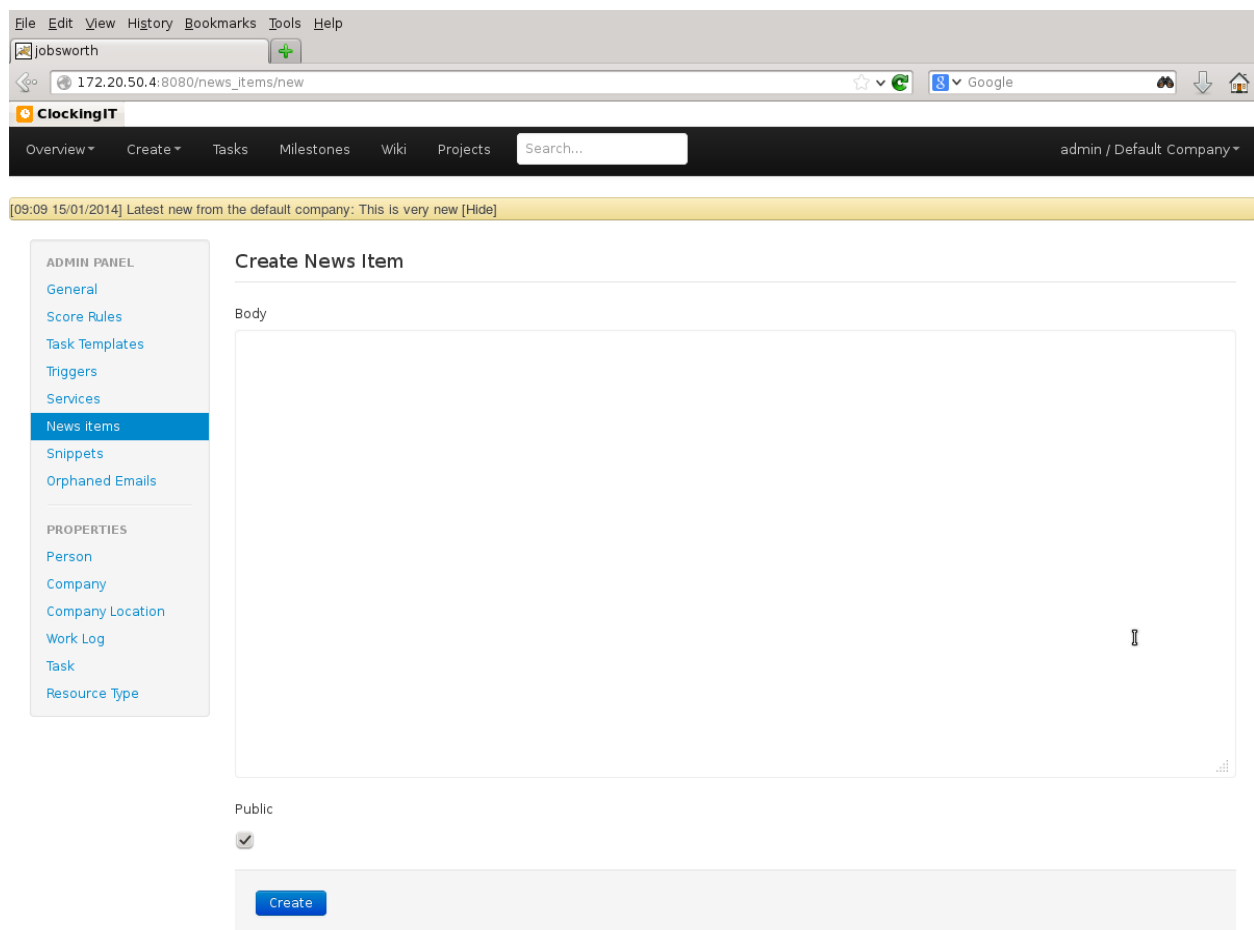
FIGURE 8.30: CREATE NEWS ITEM

8.9.7   Snippets
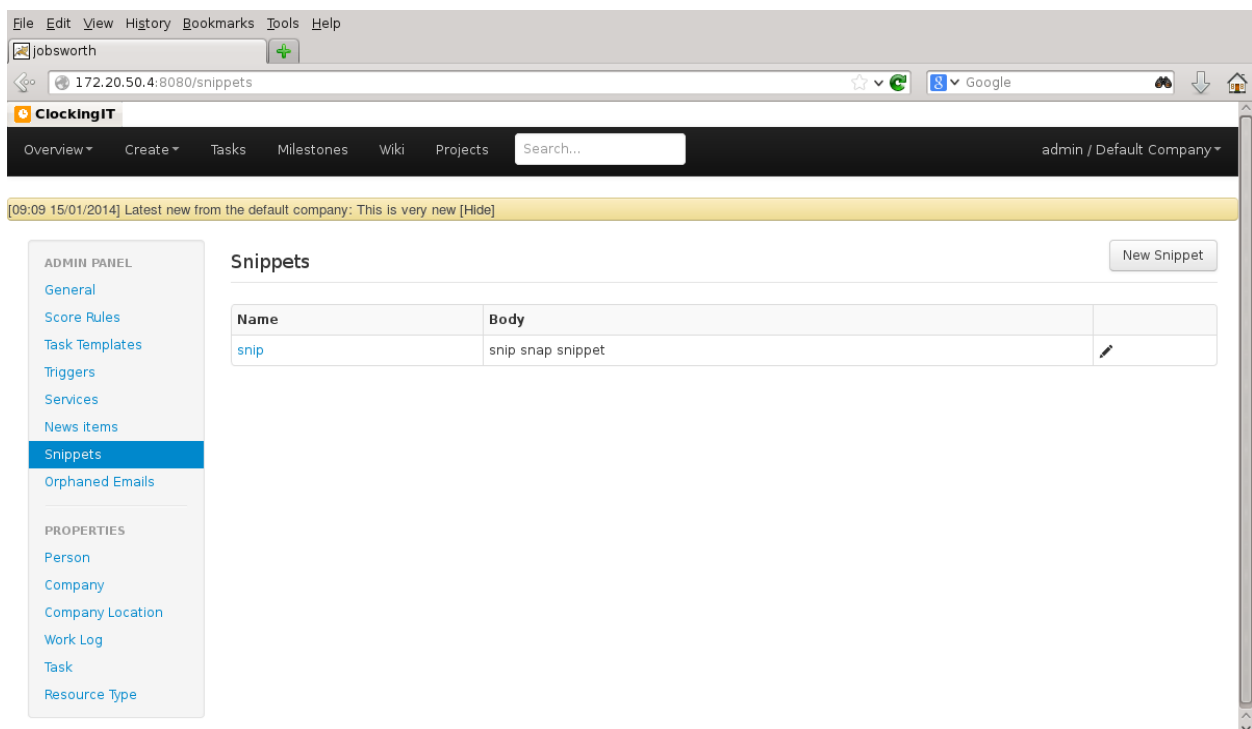
FIGURE 8.31: SNIPPETS

ClockingIT

Overview▾   Create▾   Tasks   Milestones   Wiki   Projects   Search...   admin / Default Company▾

[09:09 15/01/2014] Latest new from the default company: This is very new [Hide]

ADMIN PANEL
General
Score Rules
Task Templates
Triggers
Services
News items
Snippets
Orphaned Emails

PROPERTIES
Person
Company
Company Location
Work Log
Task
Resource Type

Create Snippet

Name

Body

Create Snippet

FIGURE 8.32: CREATE SNIPPET

8.9.8   Orphaned E-Mails
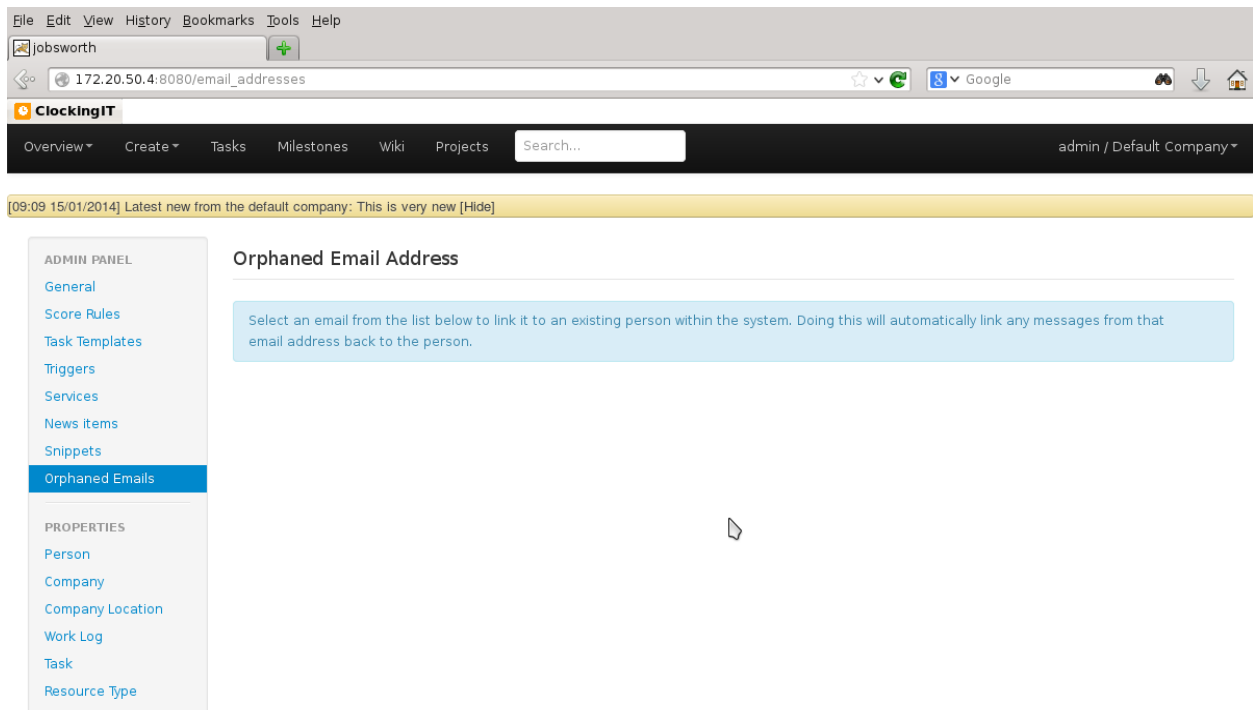
FIGURE 8.33: ORPHANED E-MAILS

8.10   Company Properties

8.10.1   Person

FIGURE 8.34: PERSON

8.10.2   Company
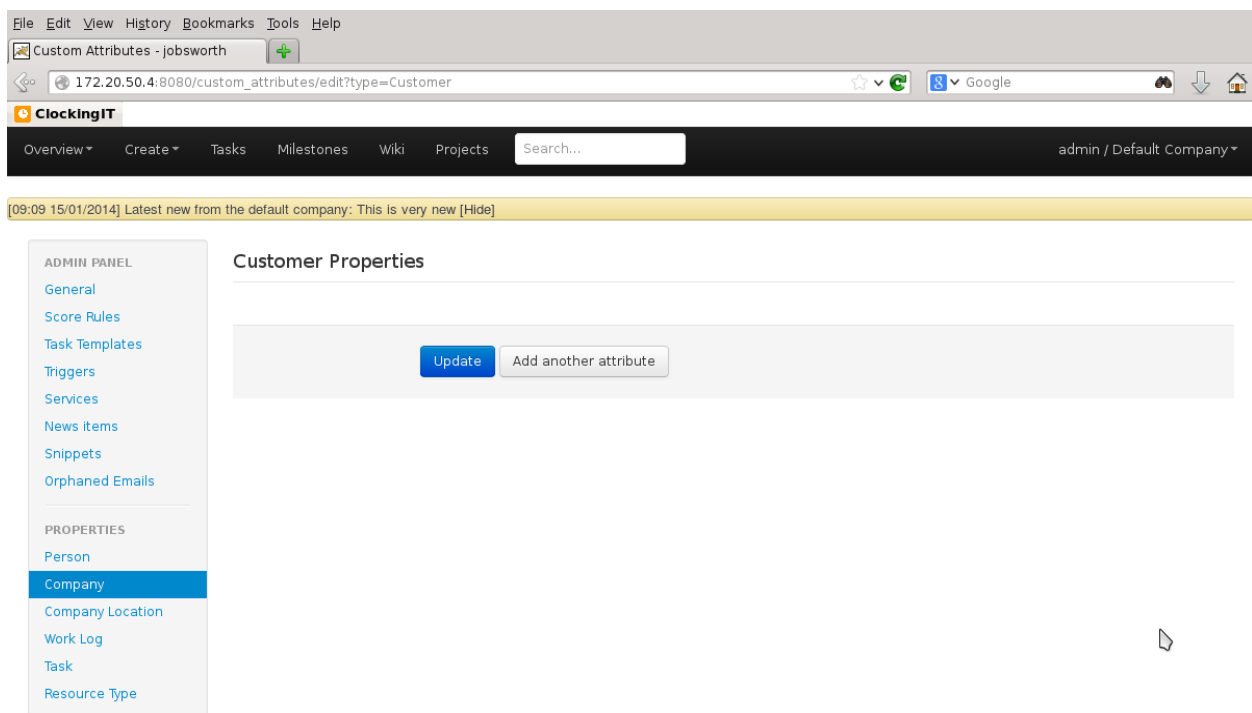
FIGURE 8.35: COMPANY

8.10.3   Company Location


FIGURE 8.36: COMPANY LOCATION

8.10.4   Work Log

FIGURE 8.37: WORKLOG

8.10.5 Task Properties

FIGURE 8.38: TASK PROPERTIES

8.10.6 Resource Type

FIGURE 8.39: RESOURCE TYPE

FIGURE 8.40: CREATE RESOURCE TYPE

9 Widgets

9.1 Filters

9.2 Newest Tasks

9.3 Next Tasks

9.4 Tags

9.5 Top Tasks - Mine

10 Workflow