

---

# Phoenix Documentation

*Release 0.11*

**Birdhouse**

**Nov 19, 2020**



---

## Contents

---

<b>1</b>	<b>Installation</b>	<b>3</b>
<b>2</b>	<b>Configuration</b>	<b>5</b>
<b>3</b>	<b>User Guide</b>	<b>7</b>
3.1	Login . . . . .	7
3.2	Dashboard . . . . .	8
3.3	Processes . . . . .	8
3.4	Monitor . . . . .	11
3.5	My Account . . . . .	12
3.6	Settings (admins only) . . . . .	13
<b>4</b>	<b>Indices and tables</b>	<b>17</b>



**Phoenix (the bird)** *Phoenix is a long-lived bird that is cyclically regenerated or reborn.* ([Wikipedia](#)). [..]

Pyramid Phoenix is a web-application build with the Python web-framework [Pyramid](#). Phoenix has a user interface to interact with [Web Processing Services](#). The user interface gives you the possibility to *register Web Processing Services*. For these registered WPS services you can see which *Processes* are available. You are provided with a form page to enter the parameters to *execute a process (job)*. You can *monitor the jobs* and see the results.

Phoenix is installed using the [Conda](#) Python distribution and [Buildout](#).



# CHAPTER 1

---

## Installation

---

Start with downloading Phoenix with sources from github:

```
$ git clone https://github.com/bird-house/pyramid-phoenix.git
$ cd pyramid-phoenix
```

Create the `conda` environment and activate it:

```
$ conda env create -f environment.yml
$ conda activate pyramid-phoenix
```

Edit the configuration `custom.cfg` (see `custom.cfg.example`). For example change the admin password:

```
$ vim custom.cfg
# phoenix admin password
phoenix-password = qwerty
```

When you're finished, run `make install` to install Phoenix into the conda environment. The installation is using `buildout`:

```
$ (pyramid-phoenix) make install
```

By default phoenix will be installed into the folder `~/birdhouse`.

After successful installation you need to start the services:

```
$ (pyramid-phoenix) make start      # starts supervisor services
$ (pyramid-phoenix) make status    # shows status of supervisor services
```

Phoenix web application is available on `http://localhost:8081`.

Check the log file for errors:

```
$ tail -f ~/birdhouse/var/log/supervisor/phoenix.log
$ tail -f ~/birdhouse/var/log/supervisor/celery.log
```





## CHAPTER 2

---

### Configuration

---

You can configure Phoenix by editing `custom.cfg` in the Phoenix source folder:

```
$ cd pyramid-phoenix
$ vim custom.cfg
$ cat custom.cfg
```

```
[settings]
hostname = localhost
http-port = 8081
https-port = 8443
log-level = INFO
# phoenix admin password
phoenix-password = qwerty
```

By default Phoenix runs on localhost. The HTTP port 8081 is redirected to the HTTPS port 8443. If you want to use a different hostname/port then edit the default values in `custom.cfg`:

```
[settings]
hostname = localhost
http-port = 8081
https-port = 8443
```

To activate the GitHub login for external users you need to configure a GitHub application key for your Phoenix web application:

```
[settings]
# register at github: https://github.com/settings/applications/new
github-consumer-key = #####
github-consumer-secret = #####
```

See the [GitHub Settings](#) on how to generate the application key for Phoenix.

After any change to your `custom.cfg` you **need** to run `make install` again and restart the supervisor service:

```
$ make install  
$ make restart
```

The user guide explains how to use the Phoenix web application to interact with Web Processing Services.

- *Login*
- *Dashboard*
- *Processes*
- *Monitor*
- *My Account*
- *Settings (admins only)*
  - *Register a WPS service*

### 3.1 Login

Press the `Sign in` button in the upper right corner.

Sign In

The login page offers you several options to login to Phoenix.

## Sign In

Sign in with ESGF

Sign in with GitHub

OR

**Admin password \***

If you have not configured your password yet then it is likely to be "qwerty"

Sign In

[Register for an account](#)


You can login using your GitHub account.

If you are Phoenix admin you can also enter the admin password here.

## 3.2 Dashboard

The dashboard shows some statistics about jobs and users.

PHOENIX Processes Monitor Help


 testuser


### Dashboard


Overview

Jobs

People

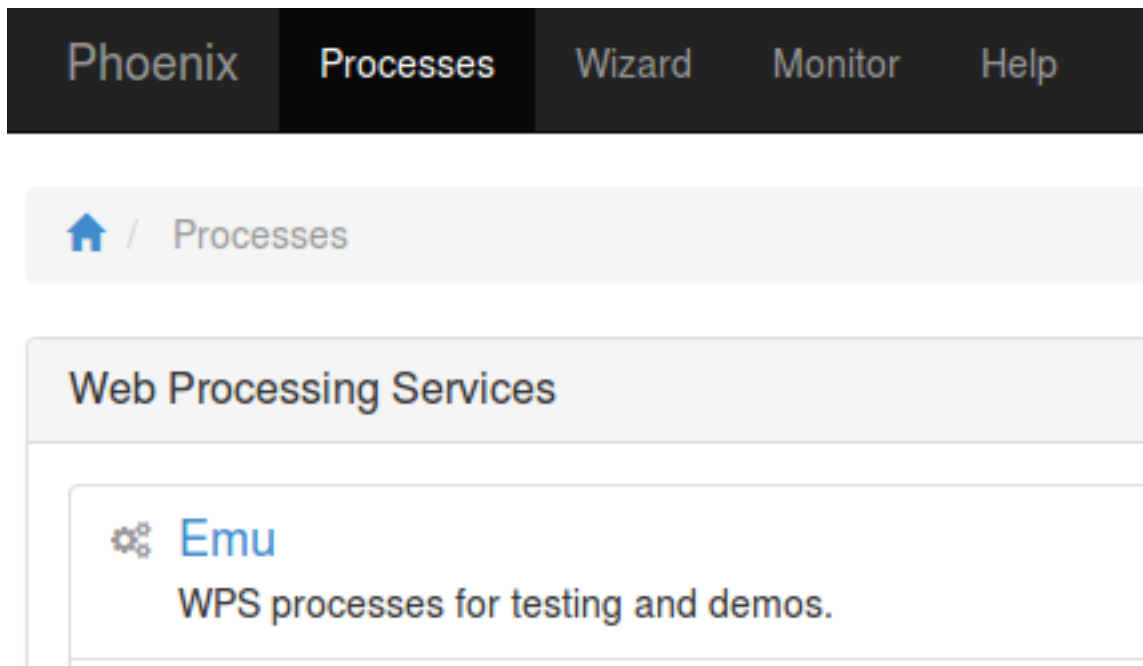
  
People  
2

  
Jobs  
5

  
Web Processing Services  
1

## 3.3 Processes

When you have registered WPS services you can run a process. Go to the `Processes` tab.



Choose one of your registered WPS services. You will get a list of available processes (WPS `GetCapabilities` request).

[Phoenix](#) [Processes](#) [Wizard](#) [Monitor](#) [Help](#)


[Home](#) / [Processes](#) / [Emu](#)


### Description

WPS processes for testing and demos.

[XML](#) [Provider: Birdhouse/Emu](#)

### Processes

 [Hello World 1.0](#)  
Welcome user and say hello ...

 [Answer to Life, the Universe and Everything 2.0](#)  
Numerical solution that is the answer to Life, Universe and Everything. T takes 7.5 milion years, but only a few seconds to give a response, with a

Choose one of these processes by using the `Execute` button.

In case of Emu you may try the `Hello World` process. You will then be prompted to enter your username:

[Phoenix](#) [Processes](#) [Wizard](#) [Monitor](#) [Help](#)

[Home](#) / [Processes](#) / [Emu](#) / Hello World

### Description

Welcome user and say hello ...

### Inputs

**Your name \***

Please enter your name

Press the `Submit` button. When the process is submitted you will be shown your job list in `Monitor`.

## 3.4 Monitor

In `Monitor` all your running or finished jobs are listed. The list shows the status and progress of your jobs.

## Job Monitor

This page shows the status of all your jobs.

My Jobs
Public
Private

All

Delete
Make Public
Make Private
Set Favorite
Unset Favorite

Process Status

Running 1
Finished 41
Matching 42
Sort C

<input type="checkbox"/>	Status	User	Process	Service	Caption	Finished	Duration	Labels	
<input type="checkbox"/>		Carsten Ehbrecht	cloud_taylor	copernicus	???	???	0:00:04	dev single async edit labels	Details Restart
<input type="checkbox"/>		Carsten Ehbrecht	cchecker	hummingbird	???	less than 1 minute ago	0:00:02	dev single async edit labels	Details Restart

When a job has finished with success you can see the results by clicking the `Details` button.

## Job Details

This page shows the job details and polls the status of a running job.

cchecker

100%

ProcessSucceeded
PyWPS Process IOOS Compliance Checker finished

Delete Job
Restart Job

☐ ???

dev single async

Ran for 0:00:02  
3 minutes ago

Runs the IOOS Compliance Checker tool to check datasets against compliance standards. Each compliance standard is executed by a Check Suite, which functions similar to a Python standard Unit Test. A Check Suite runs one or more checks against a dataset, returning a list of Results which are then aggregated into a summary. Development and maintenance for the compliance checker is done by the Integrated Ocean Observing System (IOOS).

Job Log
Inputs
Outputs
View as XML

```

1 0:00:02 0%: PyWPS Process cchecker accepted
2 0:00:02 100%: PyWPS Process IOOS Compliance Checker finished

```

If the result has a document (XML, text, NetCDF, ...) you can view or download this document with the `Download` button.

## 3.5 My Account

In `My Account` you can change your user settings (user name, organisation, openid, ...).



PHOENIX
Processes
Monitor
Help
testuser

testuser

Profile
Personal access token
Group Permission

Profile

Your Name

E-Mail

Organisation

Notes

Update Profile

You can also see your current access token which you can use to access a protected WPS service directly.

PHOENIX
Processes
Monitor
Help
testuser

testuser

Profile
Personal access token
Group Permission

Personal access token
Refresh Token

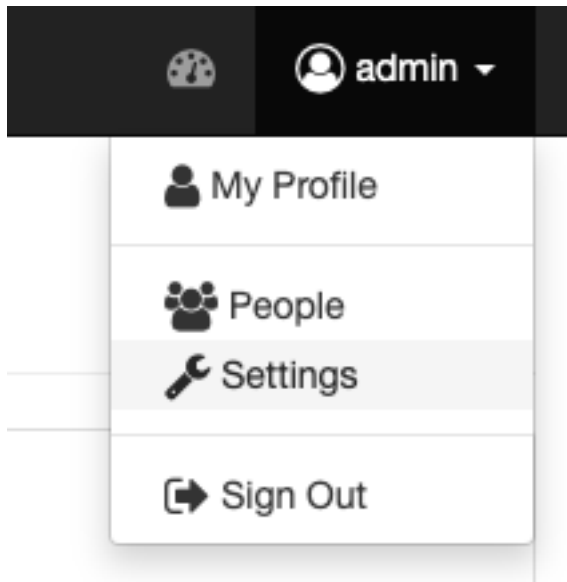
Access Token

```
eyJhbGciOiJSUzI1NiIsInR5cCIgOiAiSldUIiwia2lkIAI6IChJUGNOcW9ScSdW9wVWU0UE1md29CRHBzdU5lUVFaTlplFVVRBX3M2S0Fja293In0.eyJqd
_s-TSfpv_dIJTPPJNu_UOO0G6KO1R-Wt6kmsp1juj-sHrrysruuQpU8HRdj1y-Hs2HNHkZpZCetZRnniwaBDgcWau9cjwV7J833RhZ3QrK-
fESLATNrU_ducce-2WvdZVGp86j7JyT-TuP5V0khKxUEcSaufzamboDBeaVPXSd7GNcCTAV-
YdWFO9CYNBKYkhztt8Nd3qzPKWnnu6LvEvuHlc_2fWqpNsTElqkml25Qff9pNKTZa5NCPdA7gviKP3W2Dkvq979_o1JhvRGydWQZLl6DKNI8XGR
```

Expires at
2019-12-05 14:31:06 UTC

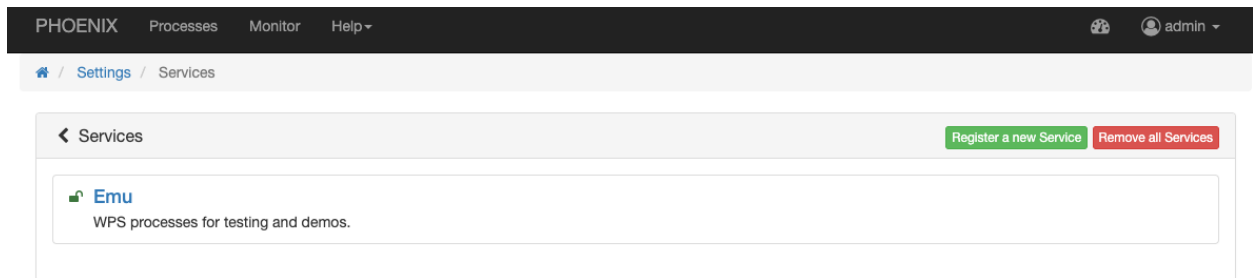
## 3.6 Settings (admins only)

When you are logged-in as admin user you have the `Settings` page. Here you can make administrative changes and monitor services.



### 3.6.1 Register a WPS service

Open the `Settings/Services` page. Here you can see which services are registered in the catalog. All these services are known and usable by Phoenix.



To add a new WPS service, press the `Register a new Service` button and enter the WPS URL in the field `Service URL`.

For example, to register Emu WPS:



`http://localhost:5000/wps`

PHOENIX

Processes

Monitor

Help ▾

  admin ▾

[Home](#) / [Settings](#) / [Services](#) / Register New Service

Register New Service

Service URL

http://localhost:5000/wps

Add URL of service (WPS). Example: http://localhost:5000/wps

Service Title

Emu

An optional service title. The title is used as a display name for the service. If a title is not provided it will be taken for the service metadata.

Public access?

☐

Check this option if your service has no access restrictions.

Register



## CHAPTER 4

---

### Indices and tables

---

- `genindex`
- `modindex`
- `search`