Alignak-App Documentation

Release 1.1

Matthieu Estrada

Feb 23, 2018

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CHAPTER 1

Introduction

1.1 About Alignak

Alignak is an open source monitoring framework written in Python under the terms of the GNU Affero General Public License . It is a fork of the Shinken project.

More information about Alignak is available in the Alignak documentation.

1.2 About Alignak-App

The Alignak-App is an open source Applet in system tray, written in Python. It is available under the terms of the GNU Affero General Public License .

This application is intended to be used within the Alignak project, it connects to the Alignak backend and allows you to be notified directly on your workstation. You will be able to view the states of the hosts and the services that you have defined in your installation.

1.2.1 Features

Alignak-App has many features:

- Multi-platfom: Linux / Windows

- Receive Alignak notifications inside application

- Spy host: choose to monitor multiple hosts and receive their states

- Search Hosts and Services, acknowledge problems, schedule downtimes and more

- Many configurations

- Links to your Alignak WebUI from the menus

1.2.2 Release cycle

"App" has no strict schedule for releasing.

Other features will come in the next versions and you can propose new features through project issues. Each feature is discussed in a separate issue.

1.3 Thanks

Thanks to ddurieux, mohierf and spea1 for their help and contribution.

CHAPTER 2

Install Alignak-app

2.1 Requirements

2.1.1 Alignak Suite

You must have Alignak Suite installed before using this app :

- alignak
- alignak-backend

Alignak-app need at least a functionnal and available **alignak-backend** to connect with it !

2.2 Windows Users

An installer is available in repository of Alignak-app on releases page. It is **recommended** that you use this installer to run Alignak-app on Windows.

You have nothing else to install if you are using the installer !

IMPORTANT: To keep it free, installer is not signed, so **Windows Defender SmartScreen** will warn you about that. Just click on "More Informations" and on "Execute anyway" to run installer.

IMPORTANT: This installer is currently only compatible with **x64** architecture !

2.3 Linux Users

IMPORTANT Be sure to install this application with `--user` flags. Otherwise you may not be able to launch it !

You can install with pip:

```
pip3 install alignak_app --user
```

The required Python modules are automatically installed if not present on your system.

An installation for root will be available as soon as possible.

2.4 From Sources

2.4.1 External Libraries

You need to install Python modules that are listed in `requirements.txt` file with pip:

```
pyqt5<5.10
configparser
future
alignak_backend_client
python-gettext
```

Note: if you proceed to an end-user installation with pip, the required modules are automatically installed.

2.4.2 Installation

To install from source, clone repos and install with pip

```
git clone https://github.com/Alignak-monitoring-contrib/alignak-app
cd alignak-app
# If you're under Windows, use "pip" instead "pip3"
pip3 install . --user
```

2.4.3 Under Windows

If you've installed Alignak-app with `pip` under Windows, you must link install directory with your `Program Files` folder. Otherwise, App won't start.

Open a command Windows console as admin and type the following line:

```
mklink /J "%ProgramFiles%\Alignak-app" c:\Users\<USERNAME>
→\AppData\Roaming\Python\alignak_app
```

Replace `<USERNAME>` by your username.

Be sure also that you've install Python3 on your device.

Alignak-app Main Folder

During installation, Alignak-app creates a root folder that contains all the files application need to run.

3.1 On Linux

The ROOT folder of the application should be under:

```
/home/$USER/.local/alignak_app/
```

3.2 On Windows

1. If you install from **Pip** or with **Sources**:

The ROOT folder of the application should be under:

```
C:\Users\user\AppData\Roaming\Python\alignak_app\
```

2. If you use **Installer** (see *Install Alignak-app*):

The ROOT folder will be located under:

```
C:\Program Files\Alignak-app\
```

This is to facilitate access to the configuration and respect Windows conventions.

Alignak-app Workdir

This folder is defined by the `app_workdir.ini` file located in the main application folder cited above.

The goal of this file is to define a directory where Alignak-app can write/read without problems to get settings and create log files. So make sure that you have the right to write and read.

You must set an **absolute path** for this settings.

Then only put/copy the `settings.cfg` in the folder you have defined.

Note: If you have not set this option, application use the same directory than cited above. If you have no rights, application will crash.

CHAPTER 5

Configuration Parameters

Before running application, **you must configure it**.

You will find a file named `settings.cfg` located in the "ROOT" folder cited above. Otherwise, Alignak-app proposes to define your server Alignak and its port via the window login.

This file contains Sections who are introduced by a `[section_name]` header. Then, it contains `name = value` entries. All parameters are also explained in file. For the boolean parameters, you can use the following values: on/off, true/false or 1/0.

The most significant Section is **[Backend]**. You need set your backend url, ports and credentials.

5.1 Settings file

Here is the full `settings.cfg` file. This file contains comments for each setting.

```
[Alignak]
; Backend authentication
; -----------------------------------------------------------------------
↪---------------
; Credentials for your backend.
; 1/ Recommended: leave "username" and "password" empty. App will display a␣
↪login Window.
; 2/ Recommended: set your token in "username" option and leave "password"␣
↪empty.
; 3/ Not recommended: set your "username" and your "password".
; Read the alignak-app docs for more details on token and authentication,
; Or visit http://alignak-backend.readthedocs.io/en/latest/api.html#get-the-
↪token
; The default values are empty.
username =
password =

; Alignak Url
```

(continues on next page)

```
; ----------------------------------------------------------------------------
↪---------------
; Url of alignak server.
; Default is http://127.0.0.1
url = http://127.0.0.1

; Backend url
; ----------------------------------------------------------------------------
↪---------------
; The url of your Backend.
; Default is %(alignak_url)s:5000
backend = %(url)s:5000

; Webui url
; ----------------------------------------------------------------------------
↪---------------
; The url of your Webui
; Default is %(alignak_url)s:80
webui = %(url)s:80

; Backend processes
; ----------------------------------------------------------------------------
↪---------------
; The number of processes for connection to backend
; -!- Windows users must leave this parameter at 1 -!-
; Default is 1
processes = 1

[Alignak-app]
; Requests interval
; ----------------------------------------------------------------------------
↪---------------
; Define interval of App requests. App make regular requests
; Default is 5. Increase this settings can improve speed of App
; Set this settings less than 5 is not recommended !
requests_interval = 5

; Notifications elapsed
; ----------------------------------------------------------------------------
↪---------------
; Sets in minutes the time elapsed since notifications were triggered.
; Default is 30
notification_elapsed = 30

; Notifications duration
; ----------------------------------------------------------------------------
↪---------------
; Define duration of temporary notifications
; Default is 30
notification_duration = 30

; Spy checks interval
; ----------------------------------------------------------------------------
↪---------------
; Define checks interval in seconds for spied hosts. One host check by␣
↪interval.
; Default is 60
```

```
spy_interval = 60

; Locales
; ------------------------------------------------------------------------------
 ↪--------------
; Define language of App. Currently only "fr_FR", "en_US" are available.
; If empty, "en_US" will be used as default.
; Default is "en_US"
locale = en_US

; Update dock "Status"
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh of dock alignak status
; Default is 15
update_status = 15

; Update dock "Buttons"
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh time of dock buttons
; Default is 15
update_buttons = 15

; Update dock "Livestate"
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh time of Dock livestate
; Default is 15
update_livestate = 15

; Update panel Dashboard
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh time of panel Dashboard
; Default is 15
update_dashboard = 15

; Update panel Host
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh time of panel Host view
; Default is 15
update_host = 15

; Update panel Service
; ------------------------------------------------------------------------------
 ↪--------------
; Define in seconds the refresh time of panel Service view
; Default is 15
update_service = 15

[Log]
; Log filename
; ------------------------------------------------------------------------------
 ↪--------------
; Define name of file where logs will be stored.
```

```
filename = alignakapp

; Log location
; ------------------------------------------------------------------------------
↪---------------
; Set this value to define another directory. Path must be absolute !
; Default is empty. Default values are:
; Linux:   ~/.local/alignak_app
; Windows: C:\ProgramData\Alignak-app
location =

; Application Debug Mode
; ------------------------------------------------------------------------------
↪---------------
; Activate Debug mode for Alignak-App to get more logs
; Set to 'yes' or 'true' to activate "debug" mode
; Set to 'no' or 'false' to deactivate "debug" mode
; Default is "no"
debug = no

[Folders]
; Root Application Path
; ------------------------------------------------------------------------------
↪---------------
; This is the config path of the application. Change this setting is not␣
↪recommended !
path = /alignak_app

; Images Path
; ------------------------------------------------------------------------------
↪---------------
; Path of images. Must have a 'slash' before. This path is relative of the␣
↪[path] value.
img = /images
```

5.2 Connection to Backend

Alignak-app have a login form by default, who let you to connect with the username and password define in backend.

You can also set connection information in settings file:

- **Recommended:** leave empty "username" and "password". Alignak-app will display a login Window.

- **Recommended:** set your token in "username" field and leave "password" empty (See below).

- **Not recommended:** set your "username" and your "password". This method is less secure.

To obtain a token, open a python terminal and type the following commands:

```python
import requests
backend_url = 'http://alignak.com:5000'
r = requests.post(
    backend_url + '/login',
     data={
        'username': 'admin',
        'password': 'admin'
```

```
        }
    )
print(r.text)
```

Launch Alignak-App

6.1 On Linux

Once you have configured your application, just type the following in a terminal:

```
$HOME/.local/alignak_app/alignak-app start
```

Alignak-app will start, but will also create a command for later. Thereafter, you will only have to type the following command to launch your application:

```
alignak-app start
```

Here is the available commands:

```
alignak-app {start|stop|status|restart}
```

6.2 On Windows

6.2.1 With Installer

Just launch `Alignak-app vX.x` shorcut on your desktop or run the `alignak-app.exe` located in `C:\Program Files\Alignak-app\`.

6.2.2 From command line

If you install from sources or with pip, you just have to launch the `alignak-app.py` in `bin` folder:

```
python c:\Users\user\AppData\Roaming\Python\alignak_app\bin\alignak-app.py
```

Obviously, it requires to keep an open command prompt on Windows.

Solve Problems

If you're having trouble getting started and running the app, here are some things to check:

1. Be sure you have correctly set your configuration file (see above) and that you can join your backend.

2. The application generates a log file in its root folder (see *Alignak-app Main Folder*). Search for `ERROR` messages.

3. If you have installed Alignak-app with pip, be sure to add the flag *–user* (see *Install Alignak-app*).

Alignak-app Interface

8.1 System Tray

Once Alignak-app is started, you'll have an icon in your task bar (in bottow right under Windows, top right under Ubuntu for example). When you click on this icon, you'll have access to multiple menu like "dock", "about" or configurations.

8.2 App Dock

When App is launched, a "dock" will also appear right of your screen. This "dock" will contains different buttons and some container who will receive different notifications.

8.2.1 Alignak part

This part of dock contains informations about your connection to backend and the states of Alignak daemons. If you've some connection problems or if backend is restart, you'll see icons change.

You can also see each daemon state by clicking on button with Alignak icon.

8.2.2 Livestate part

In the livestate part, you'll have many buttons who let you see: hosts, user configuration, problems view (available soon) and a button to reach your WebUI if available.

You'll also see a resume of number of problems for hosts and services monitored in your backend.

8.2.3 Events part

This is one of the most interesting features of the application. You'll receive many informations in this part like alignak notifications, acknowledge or modifications you do in App.

Events:

- If you want to remove an event, simply double click on it.

- Full events text can be see in tooltip when you keep mouse over.

- Some events are temporary and remove themselves.

- Some events can be drag and drop (see below)

Drag & Drop:

- Events from a host or a service can be drag to in "Spy Hosts". Then App will send you regular notifications about that host.

- Events can also be move to host synthesis view (Panel), to display host instantly.

8.2.4 Spy part

This is where you can find the list of hosts that you spy on.

- You can spy on as many hosts as you want.

- To stop spying on a host, just double click on it, host will be removed from list.

8.3 App Panel

When you click on **host** button in dock, a new window will appear, called **Hosts Synthesis View**. This where you can see your monitored hosts and services.

At the top of this window, you will find a summary of the number of items for each state (OK, CRITICAL, DOWN...).

Start typing the name of a host in the search bar and App will propose to you different corresponding names. When you select a host, its information and the list of its services will be displayed.

You will then be able to perform various actions such as seeing the details of each of its services, acknowledging a problem or planning a downtime for an item (service or host).

You will also have access to the host's history. It may take a while to be available. It depends on the number of hosts monitored in backend.

8.4 WebUI

App also have lot of buttons which bring you to WebUI. You've to set WebUI url in configuration file to make this buttons available.

CHAPTER 9

Windows Setup

For releases, a setup is generated for Windows and is available for download. For the version under development, you have to do it yourself.

9.1 Requirements

Obviously, you must clone the Alignak-app repository, on the develop branch before. Like that you'll have the last fixes. Normally, we try to have a branch `develop` as stable as possible.

9.1.1 Python and requirements

You have to install Python 3.5 in any case.

Then the requirements of Alignak-app . Otherwize, *pyinstaller* will not have the required *.dll* for compilation. All is available on **Pypi**:

```
# In repository folder
pip install -r requirements.txt --user
```

Once done, you'll normally have your python modules installed in:

```
"%APPDATA%\Python\Python35\"
```

Then install *pyinstaller*.

9.1.2 Pyinstaller

The module `pyinstaller` is also available on **Pypi**. So just run the following command:

```
pip install pyinstaller --user
```

Normally, *pyinstaller.exe* command will be available under:

```
"%APPDATA%\Python\Python35\Scripts\"
```

And will be added to your *PATH* variable. If it is not the case, you can add this folder to your *PATH* without problem, you will definitely need it for other python libraries.

9.1.3 Inno Setup

Inno Setup is a free installer for Windows. It is very powerful and allows to create and customize installers quite easily.

To install Inno Setup, just download the last **unicode** version on Official download page.

Be sure to choose unicode version !

And simply run it with values as default.

9.2 Create Setup

To create your own setup, you'll find scripts in `bin\win` folder of repository. There is also images, a redistribuable for Windows (needed for old versions of Windows) and 2 script files.

The first one is `pyinstaller_app.bat`.

Before running it, check the `--paths` arguments. Normally, you'll have just to change the repository folder (line 13).

Be sure to put absolute paths !

The others are normally the sames on your device. If pyinstaller does not find the PyQt dll, check these paths.

Then run the *.bat*. This script will generate an `alignak-app.exe` in **dist** folder. Don't move it !

After, simply open the Inno Setup file `alignak-app-win-setup.iss`. You can change *ShortVersion* if you want, but normally these digits are same as current develop. And then, compile the file with `CTRL+F9` or from menu `Build->Compile`.

This will generate an installer inside the `dist\setup` folder.

Your installer is ready !

You can then uninstall the python libraries if necessary, your Setup will no longer use them. All the libraries you need are compressed into the executable.

CHAPTER 10

Indices and tables

- genindex
- modindex
- search

Bibliography

[ToKnow] ” Without connection on Backend of Alignak, App won't start ! “