
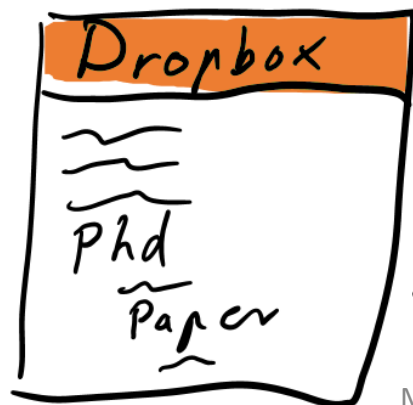


Lively4

CLOUD
SCRIPTING



If I find a nice
paper, I want it to
be added to my
bibtex file.



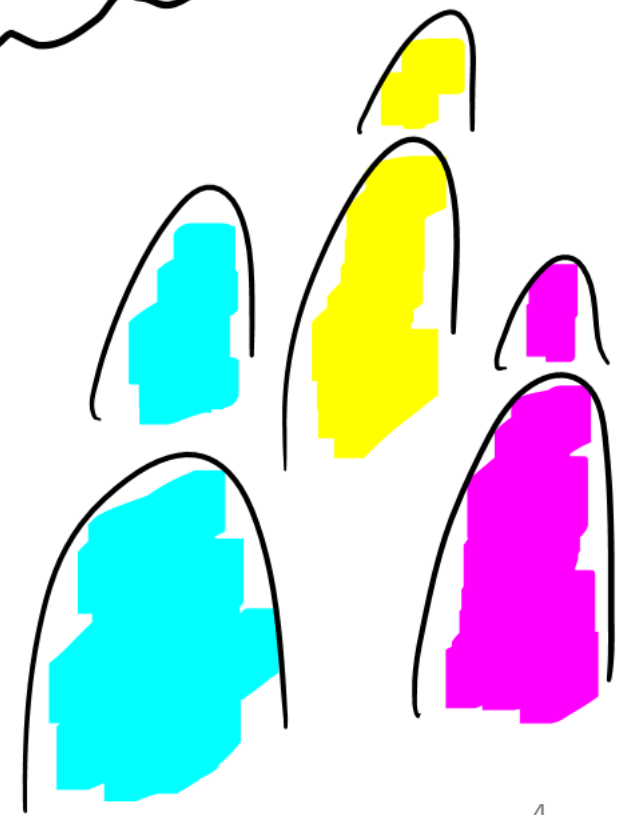
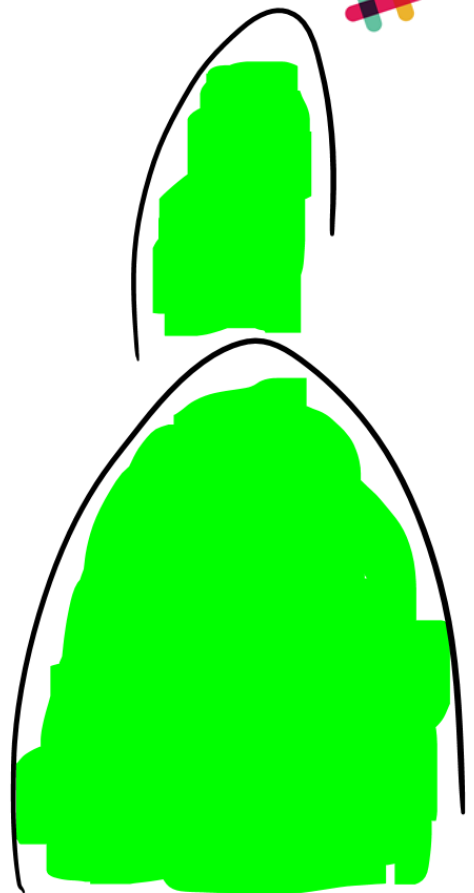
Google
Scholar



Let's share all of our
vacation photos in a nice
Dropbox folder!

But I use
Google Photos...

In case you haven't noticed:
I found an interesting paper and
put it into our **Dropbox**.



THIS



THAT



New file in your folder

This Trigger fires every time any file is saved in the folder you specify. NOTE: will process up to 15 files per polling period.

Subfolder name

PhD

Optional

Create trigger

Append to a text file

This Action will append to a text file as determined by the file name and folder path you specify. Once a file's size reaches 2MB a new file will be created.

File name

Filename

Will create a new file if one with this title doesn't exist

Add ingredient

Content

FilenameNoExt

via Dropbox FileUrl

ModifiedDate

Use
 to add line breaks

Add ingredient

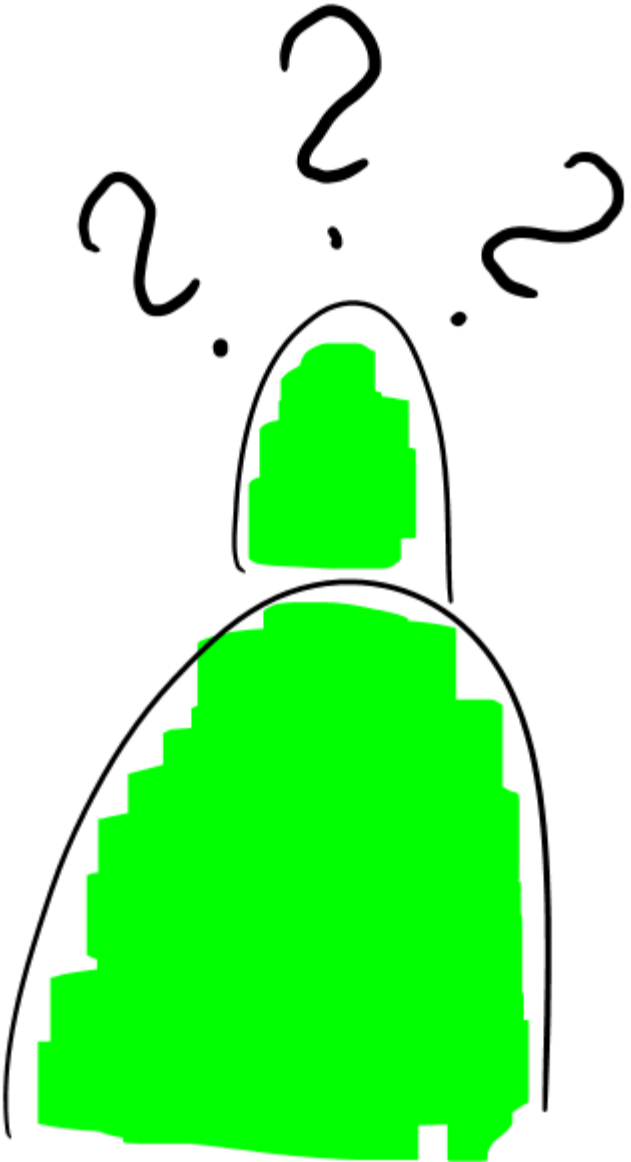
Dropbox folder path

IFTTT/Dropbox

Format: some/folder/path
(defaults to "IFTTT")

Add ingredient

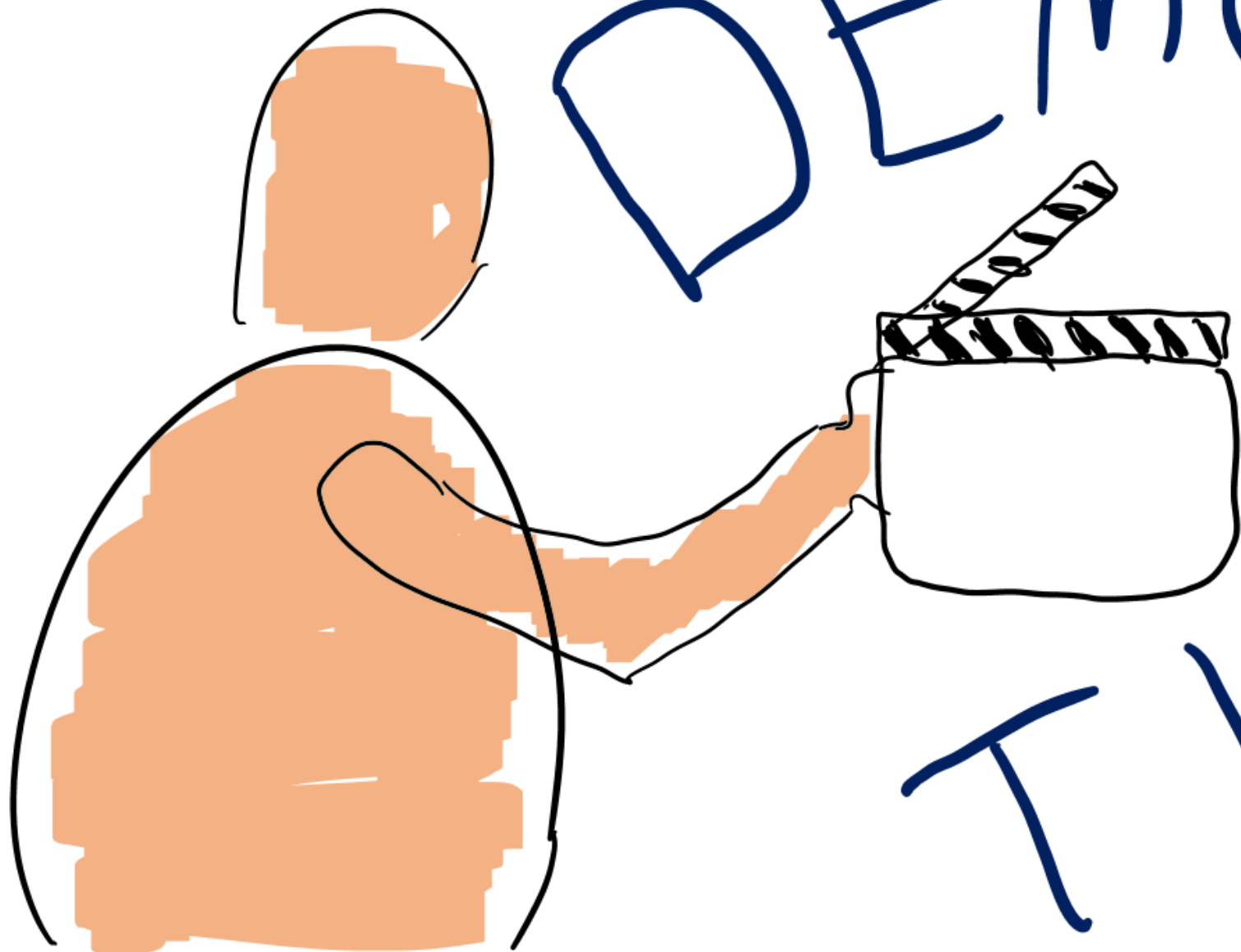
Create action



Challenges

- Connecting (Cloud-) Services in an easy way
- Complete Customizability
- Sharing of user scripts
- No public credentials

DEMO



TIME



- Cloudscripting
- Credentials
- FileDescriptionBrowser

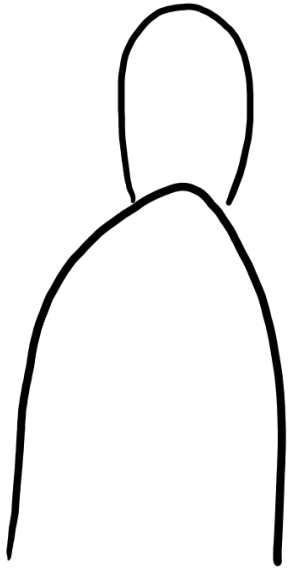


- API
- Action Files
- Watcher Files
- Config templates



- Logs
- Credentials
- Action Config
- Watcher Config

User



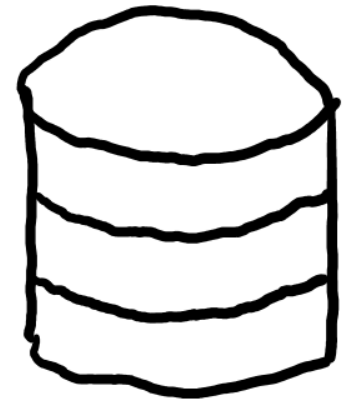
watcher

Heroku

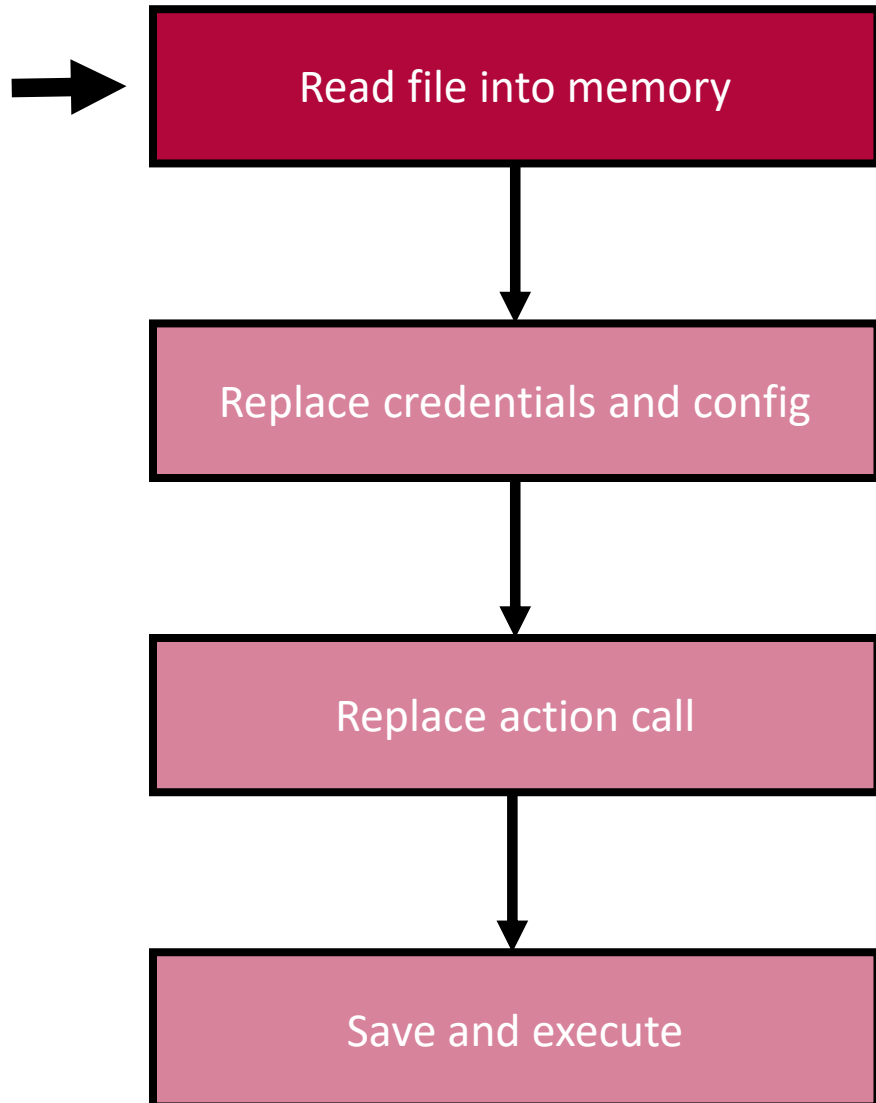


watcher.json
(template)

mLab

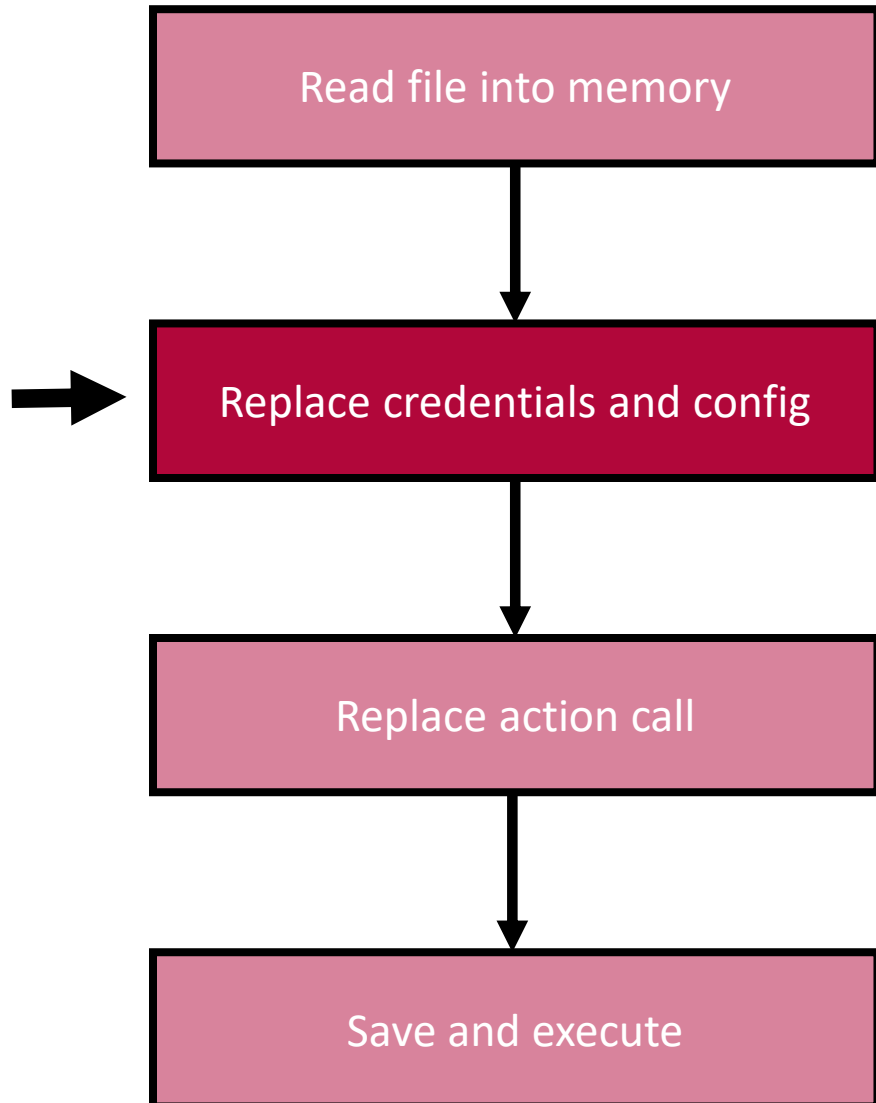


user-specific
data



```
const PATH = config[path];
const ENDING = config[type];
var dbx = new Dropbox({ accessToken: credentials[dropbox] });
var Dropbox = require('dropbox');

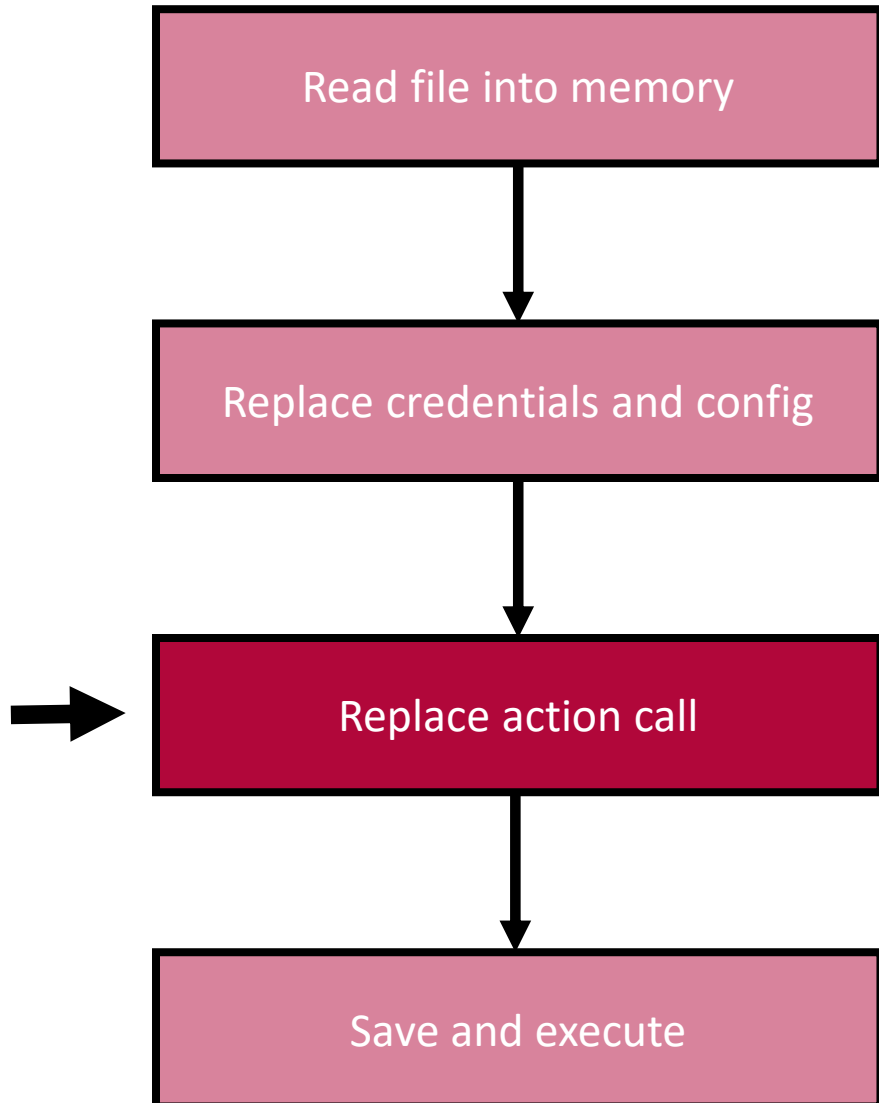
// Poll Dropbox ...
// Check for conditions specified in configErr
...
runActions(entry.name.substring(0, entry.name.length - 4))
...
```



```
const PATH = 'PhD/papers';
const ENDING = 'pdf';
var dbx = new Dropbox({ accessToken: 'RoA23VAA[...]'});
var Dropbox = require('dropbox');

// Poll Dropbox ...
// Check for conditions specified in configErr
...
runActions(entry.name.substring(0, entry.name.length - 4))
...
```

- Loads user-specific credentials and configuration from DB

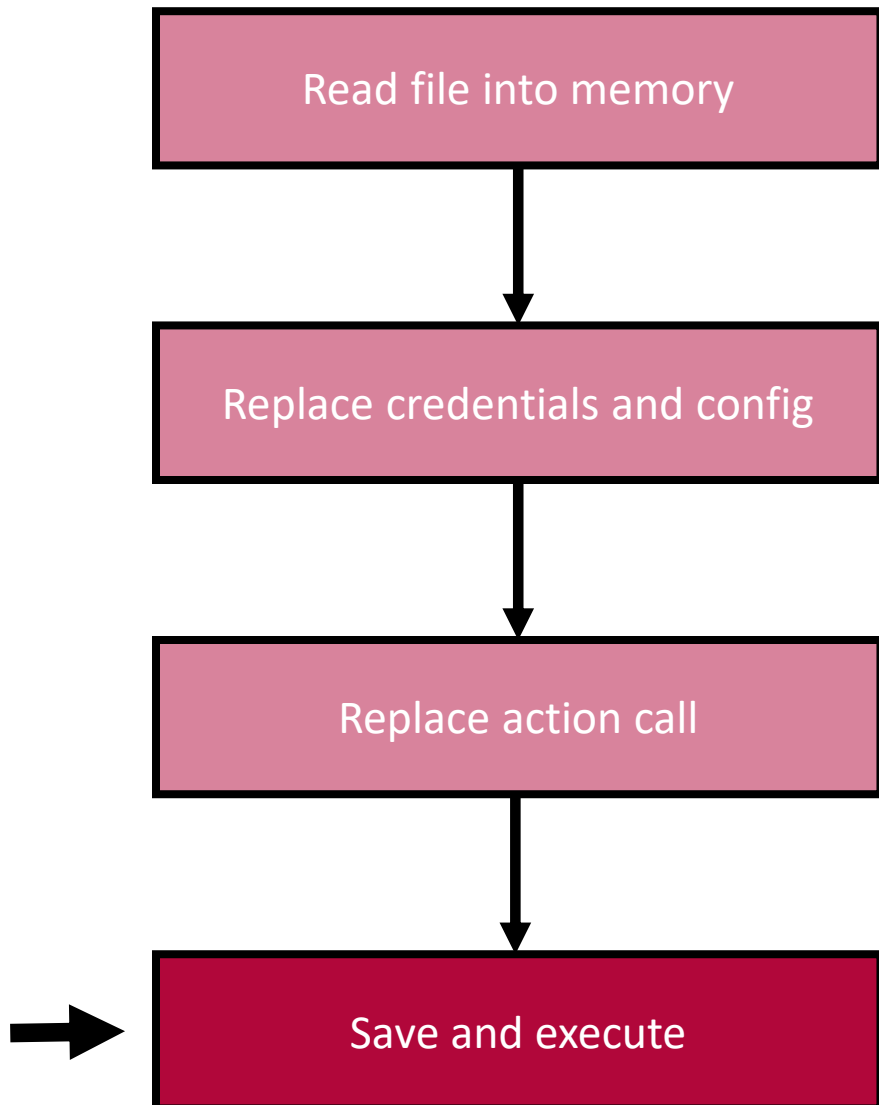


```
const PATH = 'PhD/papers';
const ENDING = 'pdf';
var dbx = new Dropbox({ accessToken: 'RoA23VAA[...]'});
var Dropbox = require('dropbox');

// Poll Dropbox ...
// Check for conditions specified in configErr
...
utils.runActions(entry.name.substring(0, entry.name.length - 4)
...

```

- Loads action config from DB
- Spawns child process
- Pipes stdout to parent process



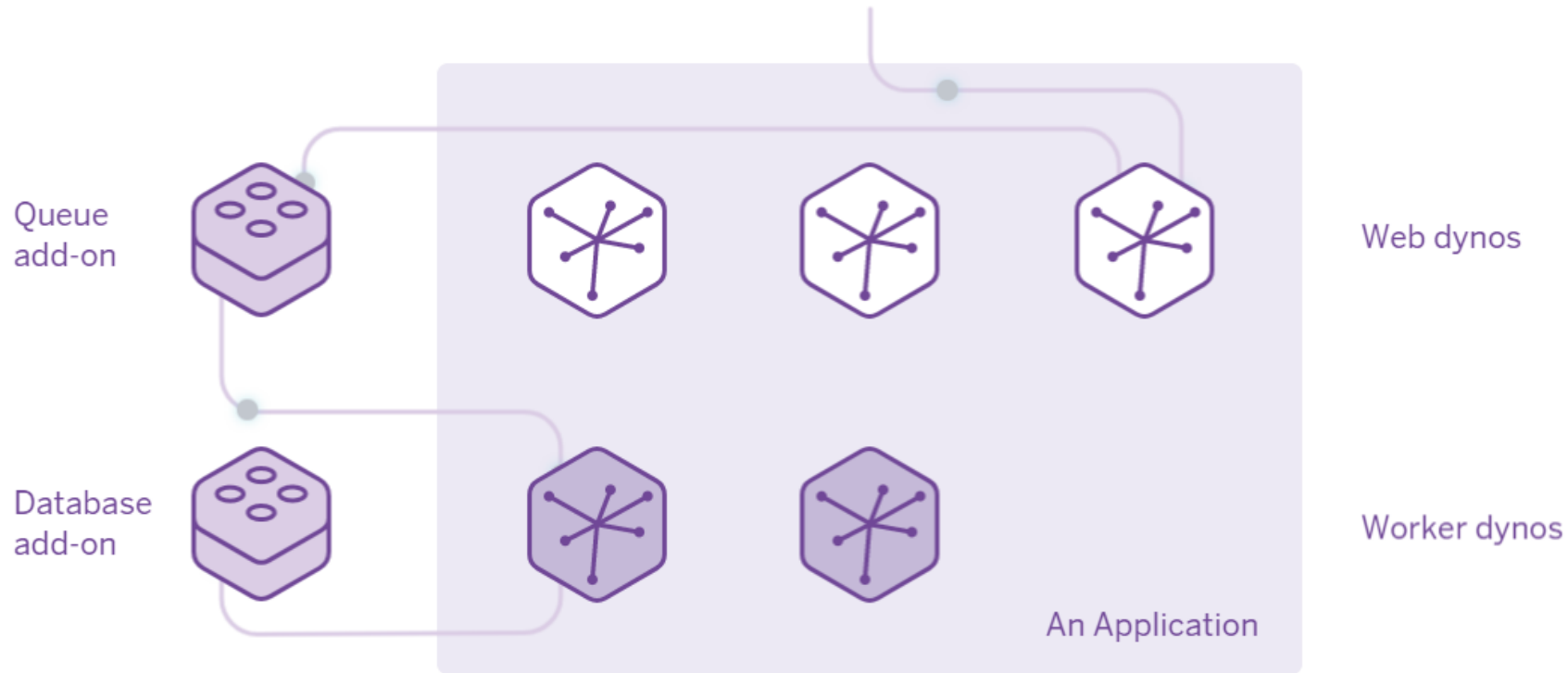
```
const PATH = 'PhD/papers';
const ENDING = 'pdf';
var dbx = new Dropbox({ accessToken: 'RoA23VAA[...]'});
var Dropbox = require('dropbox');

// Poll Dropbox ...
// Check for conditions specified in configErr
...
utils.runActions(entry.name.substring(0, entry.name.length - 4)
...

```

- Gets saved in temporary file
- Execution with user-specific configuration

Heroku: Not the best long-term choice



- A saved file is only persisted while the dyno is active (which might sleep from time to time)



Future Work



- Graphical Representation
- Outside Lively
- Support different script versions
- Install Packages