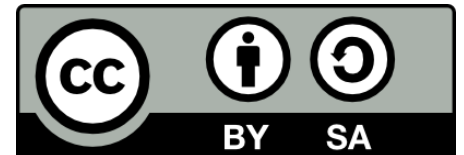




# ZERO INSTALL

**A DIFFERENT APPROACH TO PACKAGE MANAGEMENT**  
**GPN 11 PRESENTATION – BASTIAN EICHER**





# What is Zero Install?



## Install

- Without root privileges
- Without side-effects



## Distribute

- Decentralized, regular websites
- Directly upstream from developer



## Security

- GnuPG signatures
- Sha-256 hashes



# Why use Zero Install?



## Install

- Install own software on university PCs
- Retain profile when roaming



## Distribute

- Publish own software
- Updates without waiting for distribution



## Security

- Share downloads with other users
- Automatic updates



# Terms

## Interface

HTTP URI as a unique name

## Feed

HTTP URL of an XML file

`http://mozilla.org/` `http://mozilla.org/Firefox.xml` `http://mozilla.org/Firefox.xml` `http://someguy.net/FirefoxMod.xml`

1 : n



# Feed

<?xml?>



## Metadata

- Name
- Description
- Icon
- ...



## Dependencies

- References to other feeds



## Implementations

- Download URLs
- Archive type
- SHA hashes

<!-- Base64 Signature

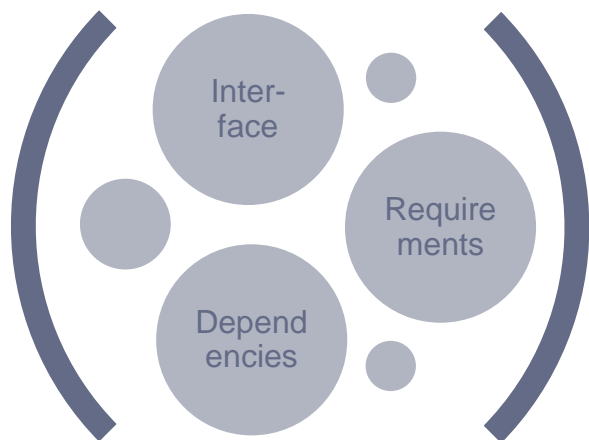
iQEcBAABAgAGBQJOBZXzAg8Nq0A... -->



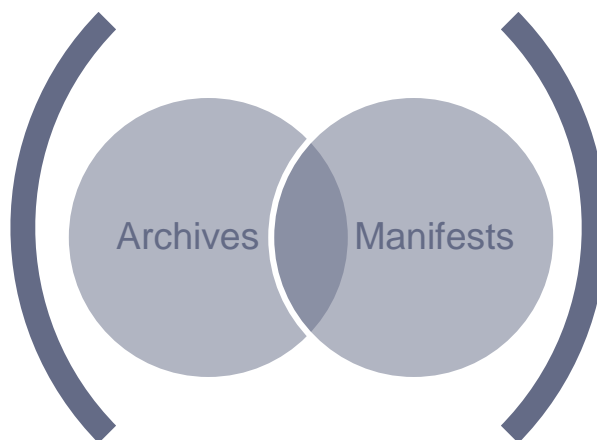
# Launch process

```
$ 0launch http://etc/pp.xml
```

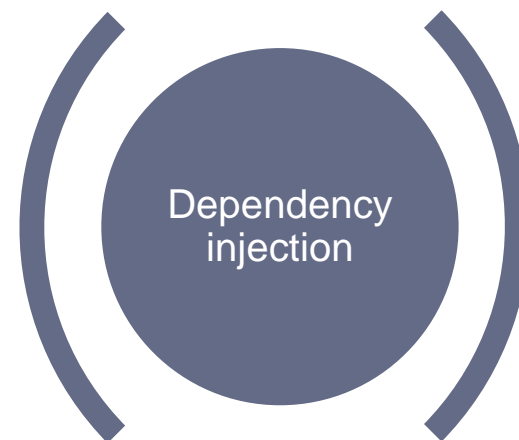
select



download



run



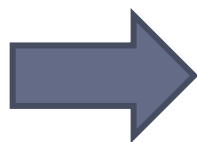
```
$ 0install (select|download|run) URI
```



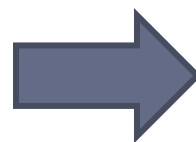
# Implementation download



Download



Archive  
(ZIP, TAR.GZ, ...)

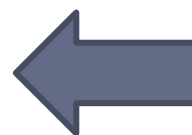


Extracted files



Manifest

sha256=a0566751...  
Manifest Digest





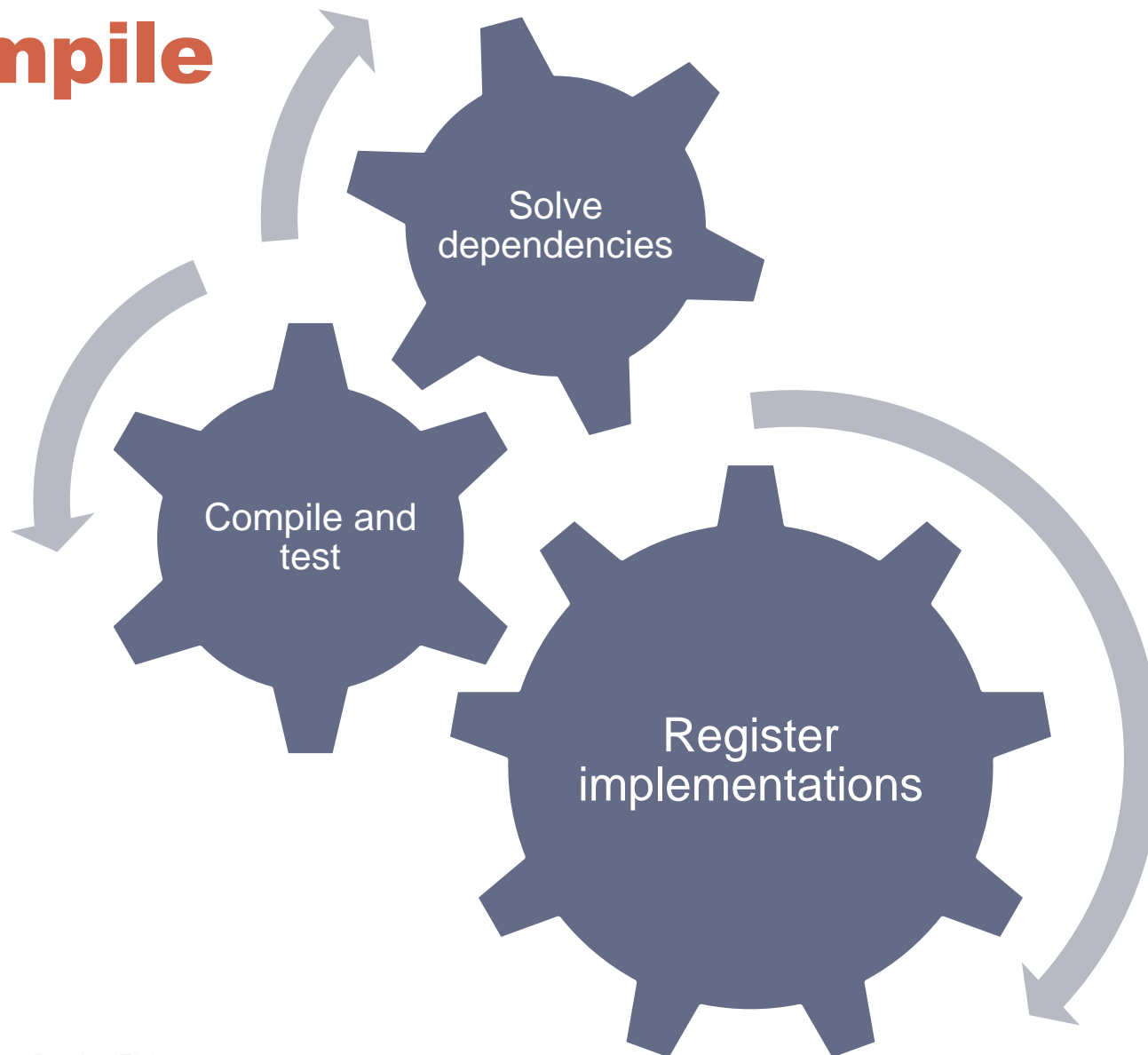
# Live demo

Finally...



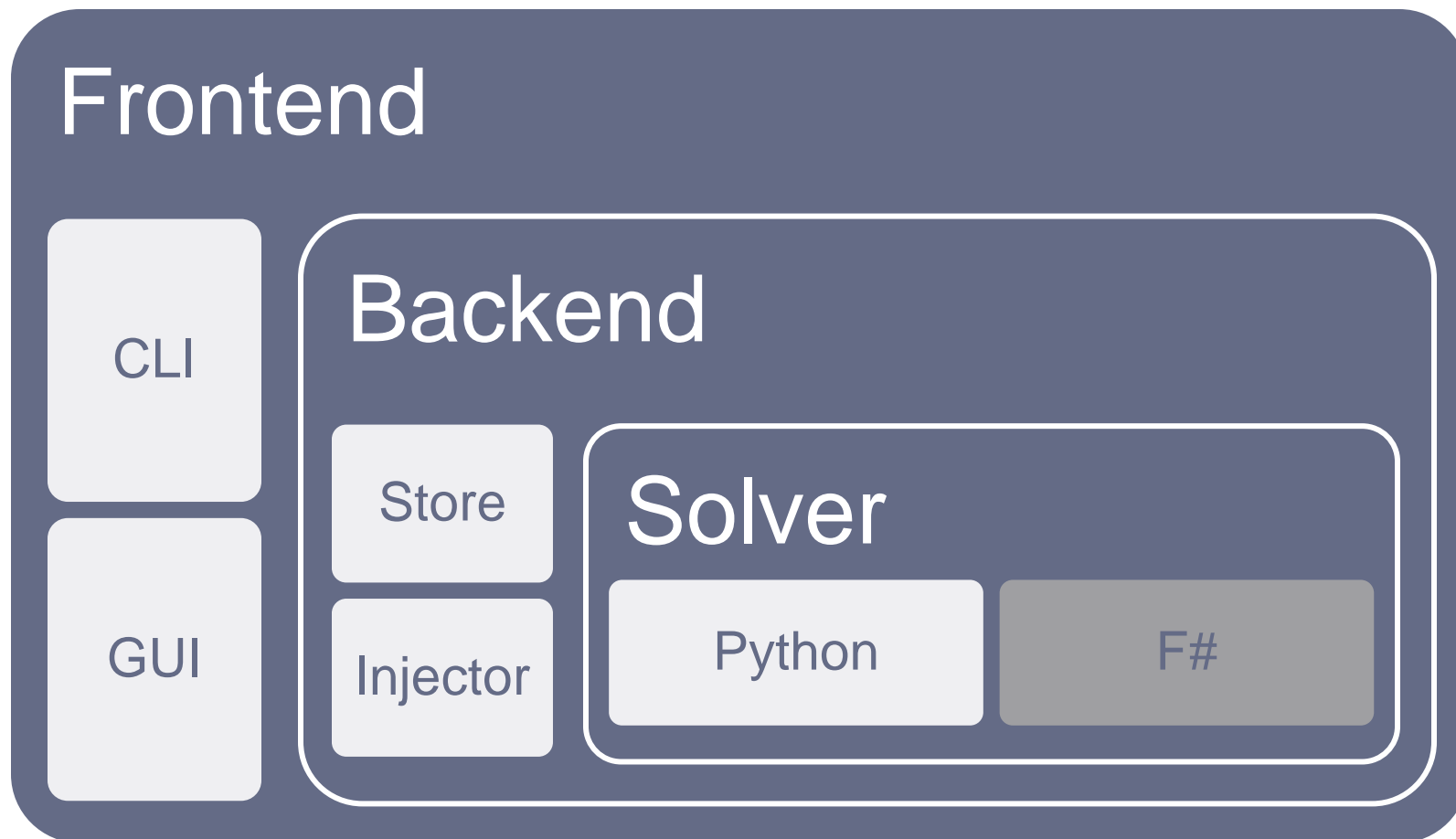


# Ocompile





# Windows port





# Experimental new features

**Beyond this place  
there be dragons**



# Desktop Integration

## Handler

- File endings
- Burn CDs, etc.



## Icons

- Start menu
- Desktop

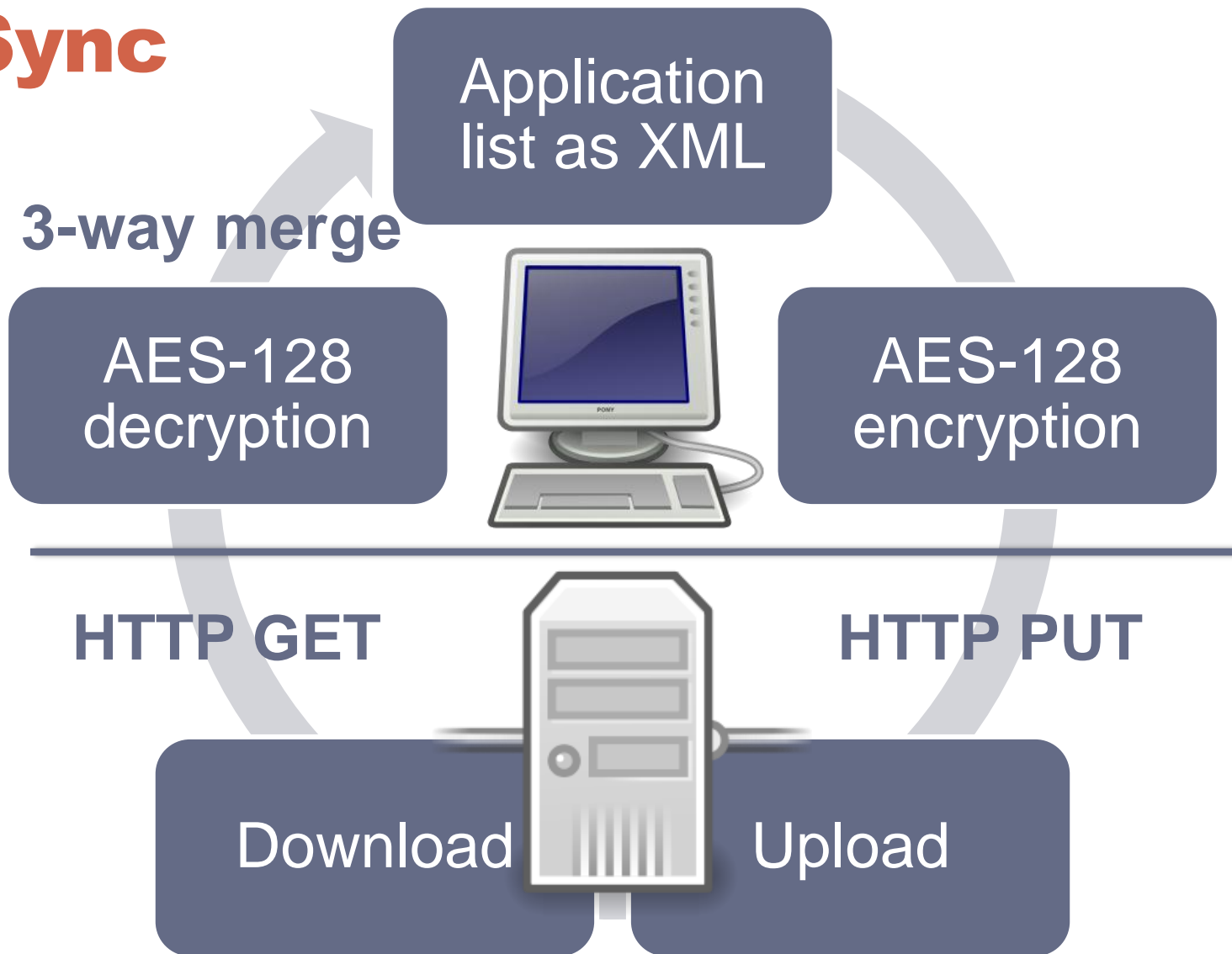


## Services

- Browser
- Mail client



# Sync





# Roadmap

## Configuration management

- Separate instances of installed applications
- Default configurations (e.g., XAMPP)

## More intelligent downloads

- Mirrors (Metalink), P2P, delta patches, ...

## Improved Sandboxing

- e.g., with E, Plash



# Links

Original project website:

<http://0install.net/>

Windows port und  
and German project website:

<http://0install.de/>