
metarepo Documentation

Release 0.1.0

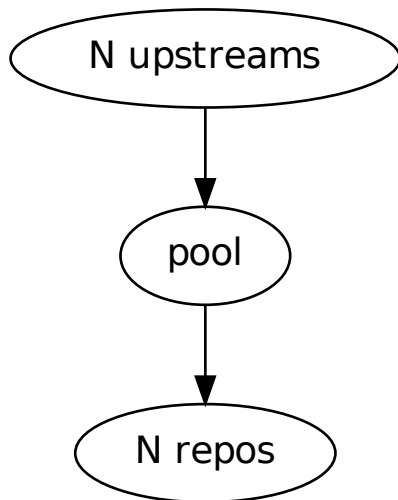
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March 22, 2012

CONTENTS

Metarepo is a “meta-repository” management system. It:

- Tracks “upstream” sources of packages, such as a local CentOS/Ubuntu mirror, or simply directories full of package files.
- Imports packages from the upstreams into a single managed “pool”.
- Allows you to create arbitrary numbers of “repos”, which can then be used by regular downstream package management tools.



Warning: Metarepo is **alpha** software. It works, but it’s got lots of rough edges. If you aren’t feeling like rolling up your sleeves and going code diving when things get wierd, probably not quite ready for you yet. If you **are** ready to do that, and it sounds cool, now is a good time to dive in.

- We track “upstreams”
- Files appear in the upstream
- Get added to the pool
- Repos get created from packages in the pool * Can be synced to an upstream * Can be synced to another repo * Can have a specific policy

Contents:

INSTALLATION

1.1 Install required packages

- PostgreSQL (if you want to run tests, you need to have working ident auth)
- Redis

1.2 Clone the source

```
git clone http://github.com/adamhjk/metarepo
```

1.3 Bundle Dance

```
cd ./metarepo  
bundle install
```

1.4 Create the database

```
bundle exec sequel -m ./migrations postgresql://localhost/metarepo
```

1.5 Start the REST API

```
bundle exec ./bin/metarepo-rest -F
```

1.6 Start the Resque worker

```
bundle exec rake resque:work
```


API

2.1 /upstream

2.1.1 GET

Returns a list of all the upstreams

```
{  
  "centos-6.0-os-x86_64": "http://localhost/upstream/centos-6.0-os-x86_64"  
}
```

2.1.2 POST

Creates a new upstream

Request Body

```
{  
  "name": "centos-6.0-os-x86_64",  
  "path": "poop",  
  "type": "yum",  
}
```

Response

- 201 Created

```
{  
  "uri": "http://localhost/upstream/NAME"  
}
```

Responds with the URI of where the upstream can be fetched.

Acceptable types are:

- yum
- apt
- dir

2.2 /upstream/NAME

2.2.1 GET

Returns the upstream

Request

```
{
  "name": "centos-6.0-os-x86_64",
  "path": "poop",
  "type": "yum",
  "created_at": "2012-03-15T17:45Z"
  "updated_at": "2012-03-15T17:45Z"
}
```

2.2.2 PUT

Updates or creates the upstream. If the upstream already exists, it will trigger a re-sync.

Request

```
{
  "name": "centos-6.0-os-x86_64",
  "path": "poop",
  "type": "yum"
}
```

Response

- 201 Created on creation.
- 202 Accepted if we are just re-syncing.

```
{
  "name": "centos-6.0-os-x86_64",
  "path": "poop",
  "type": "yum",
  "updated_at": "2012-03-15T17:45Z"
}
```

2.2.3 DELETE

Removes the upstream. Request has no body.

Response

- 200 OK

2.3 /upstream/NAME/packages

2.3.1 GET

Returns a list of all the packages in this upstream.

Response

- 200 OK

```
{
  "08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5": {
    "name": "at",
    "filename": "at-3.1.10-42.el6.i686.rpm",
    "shasum": "...",
    "version": "3.1.0"
  }
}
```

2.4 /repo

2.4.1 GET

Returns a list of all the repos.

```
{
  "centos-6.0-os-x86_64-dev": "http://localhost/repo/centos-6.0-os-x86_64-dev"
}
```

2.4.2 POST

Creates a new repo

Request Body

```
{
  "name": "centos-6.0-os-x86_64-dev",
  "type": "yum"
}
```

Response

- 201 Created

```
{
  "uri": "http://localhost/repo/NAME"
}
```

Responds with the URI of where the repo can be fetched.

Acceptable types are:

- yum
- apt
- dir

2.5 /repo/NAME

2.5.1 GET

Returns the repo

Request

```
{
  "name": "centos-6.0-os-x86_64-dev",
  "type": "yum",
  "updated_at": "2012-03-15T17:45Z"
}
```

2.5.2 PUT

Updates or creates the repo.

Request

```
{
  "name": "centos-6.0-os-x86_64-dev",
  "path": "poop",
  "type": "yum"
}
```

Response

- 201 OK on creation.

```
{
  "name": "centos-6.0-os-x86_64-dev",
  "type": "yum",
  "updated_at": "2012-03-15T17:45Z"
}
```

2.5.3 DELETE

Removes the repo. Request has no body.

Response

- 200 OK

2.6 /repo/NAME/packages

2.6.1 GET

Get the list of packages in this repo

Response

- 200 OK

```
{
  "08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5": {
    "name": "at",
    "filename": "at-3.1.10-42.el6.i686.rpm",
    "shasum": "...",
    "version": "3.1.0"
  }
}
```

2.6.2 PUT

Set the list of packages in this repo. We take two kinds of request bodies:

Request

Set the list manually

```
{
  "08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5": true
}
```

Sync with an upstream or other repo

```
{
  "sync": {
    "name": "centos-6.0-os-x86_64",
    "type": "upstream"
  }
}
```

Response

- 200 OK

2.7 /package

2.7.1 GET

A list of all the packages.

Response

- 200 OK

```
{
  "08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5": "http://localhost/package/08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5",
  "09cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5": "http://localhost/package/09cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5"
}
```

2.8 /package/SHASUM

2.8.1 GET

The information we have about the package

Response

- 200 OK

```
{
  "name": "at",
  "filename": "at-3.1.10-42.el6.i686.rpm",
  "shasum": "08cb7b6e5af66461f7c7c3c66e6a7b75cb152c567d8560eda9f8f2b68bcee1e5",
  "version": "3.1.0",
  "upstreams": {
    "centos-6.0-os-x86_64": "http://localhost/upstream/centos-6.0-os-x86_64"
  },
  "repos": {
    "centos-6.0-os-x86_64-dev": "http://localhost/repo/centos-6.0-os-x86_64-dev"
  }
}
```

INDICES AND TABLES

- *genindex*
- *search*