

# (R)?ex

<http://www.rexify.org/>



What is Rex?

# Remote **execution**

# What is Rex?

D.I.Y.

Net::SSH2

Object::Remote

Rex



CHEF™



ANSIBLE

# What is Rex?

Rex is simple

- Perl + SSH
- no need to install Rex on the client
- installs on master server with one line...

```
$ cpanm Rex
```

# What is Rex?

## Rex basics

- task-based - each task is a Perl sub
- tasks live in a “Rexfile” ...
  - make => Makefile
  - rex    => Rexfile
- tasks can be run on specified server or group of servers
- authentication can be via key or password

# What is Rex?

```
user          'ens_adm';
private_key   '/homes/ens_adm/.ssh/id_rsa';
public_key    '/homes/ens_adm/.ssh/id_rsa.pub';

desc 'Bounce the Ensembl server at a given path';
task 'bounce', sub {
  my $args    = shift;
  my $dir     = $args->{dir};
  my $cmd     = 'ensembl-webcode/ctrl_scripts/restart_server';
  my $output  = run $cmd, cwd => $dir;
  say $output;
};
```

----

```
$ rex -H ves-hx-60 bounce --dir=/path/to/ensembl-server
```

# What is Rex?

```
environment test => sub {  
  group fungi    => 'ves-hx-60';  
  group bacteria => 'ves-hx-60';  
};
```

```
environment live => sub {  
  group fungi    => 'ves-oy-[60..61]', 'ves-pg-[60..61]';  
  group bacteria => 'ves-oy-[68..69]', 'ves-pg-[68..69]';  
};
```

```
$ rex -E test -G fungi bounce --dir=/path/to/eg-fungi
```

```
$ rex -E live -G bacteria bounce --dir=/path/to/eg-bacteria
```

# What is Rex?

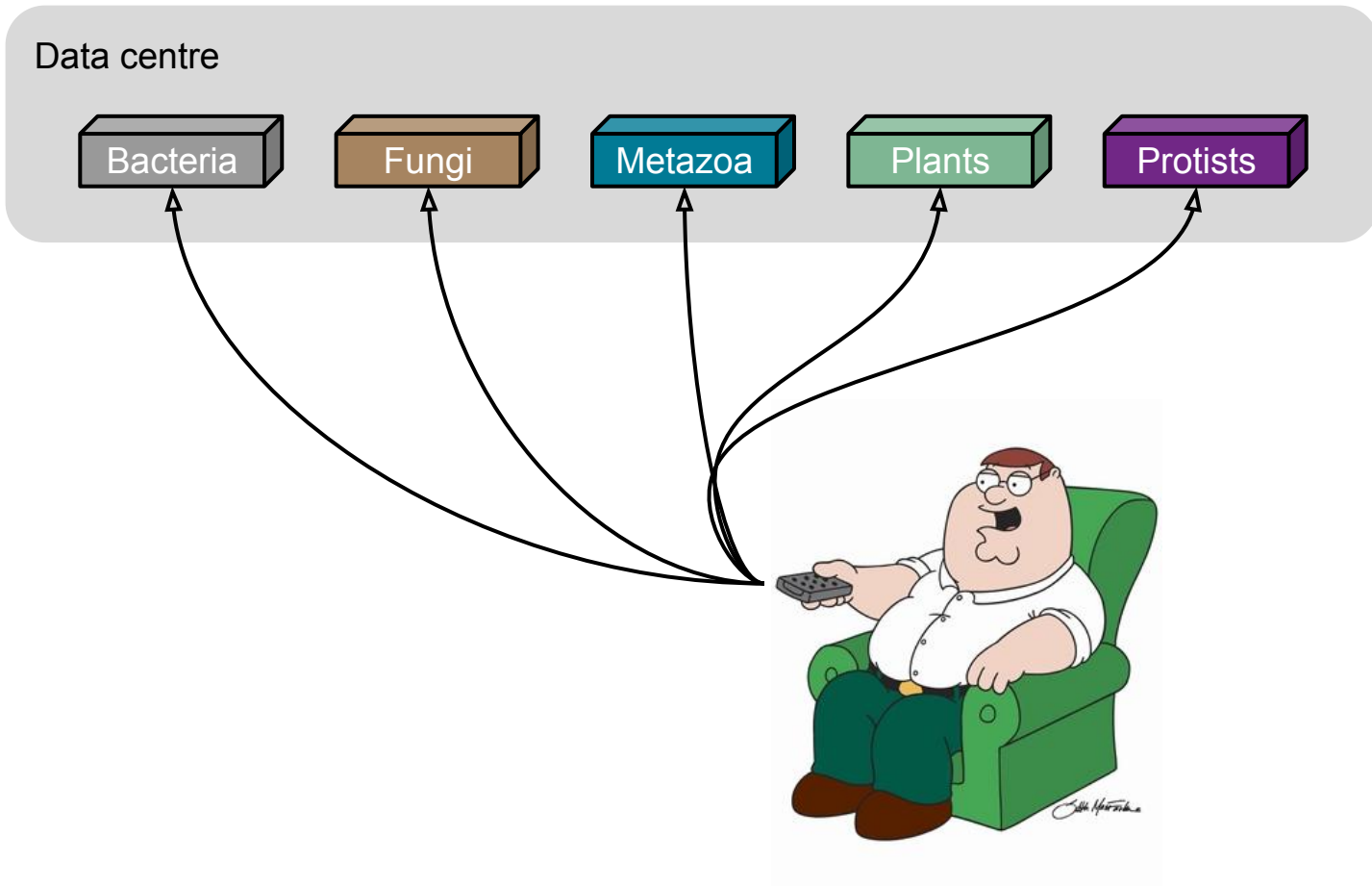
Rex has commands and modules for working with

- server configuration
- package installation
- source control
- cloud services
- lots more...

Easy to extend by with custom Perl modules.



# How are we using Rex?



# How are we using Rex?

## **eg\_update**

Update the code base for test sites

```
$ rex eg_update --on=test --site=eg_all
```

Push a bugfix live to all sites

```
$ rex eg_update --on=live --site=eg_all  
    --module=eg-web-common --restart
```

# Conclusions

## Pros

- powerful - can do a lot with a little
- easy to get started (if you know Perl)
- responsive community (IRC/google groups)

## Cons

- docs aren't great
- small community
- feels like a work in progress