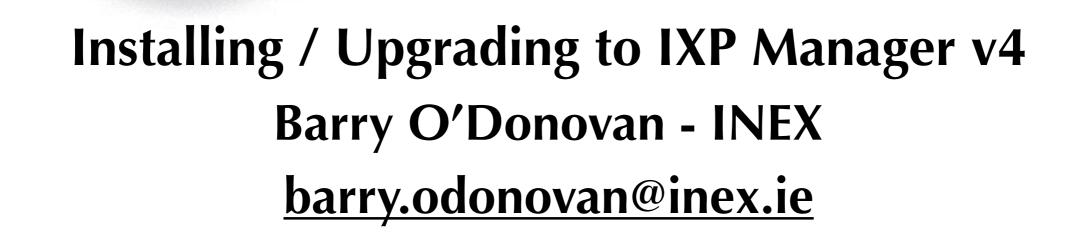
IXP Manager Workshop

28th Euro-IX Forum April 24th 2016 Luxembourg

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This slide deck was originally presented by Barry O'Donovan at the 28th Euro-IX Forum IXP Manager Workshop in Luxembourg.

These are not installation / upgrade instructions. Those will be official published in due course. The purpose of this presentation was to give attendees an idea of what's involved and how things are progressing.





• These are DRAFT!

But they do work - INEX, LONAP

Would like volunteers to polish the documentation

Not a five minute process :-(

Completely technology change!

Requires PHP7

Officially recommended platform is Ubuntu LTS 16.04

Could not find official word on Redhat/CentOS/FreeBSD support

v3 will be moved to security fix only

We'll look at Vagrant, installation & upgrade here

Vagrant



- Install Vagrant (<u>http://www.vagrantup.com/</u>)
 Install VirtualBox (<u>http://www.virtualbox.org/</u>)
- 3. Clone IXP Manager, check out v4 and install dependancies:

git clone https://github.com/inex/IXP-Manager.git ixpmanager
cd ixpmanager
git checkout v4

4. Start-up Vagrant: vagrant up
5. Goto: http://localhost:8088/

https://ixp-manager.readthedocs.org/en/latest/dev/vagrant.html

Install



- https://ixp-manager.readthedocs.org/en/latest/install.html
 or see the Vagrant bootstrap.sh file in the IXP Manager root directory
- Install dependancies (from bootstrap.sh for Ubuntu 15.10): apt-get install -y apache2 php7.0 php7.0-intl php7.0-mysql php-rrd php7.0-cgi php7.0-cli php7.0-snmp php7.0-curl php7.0-mcrypt php-memcached libapache2-mod-php7.0 mysql-server mysql-client php-mysql joe memcached snmp nodejs nodejs-legacy npm build-essential php7.0-mbstring php7.0-xml





Composer: dependancy manager for PHP (<u>packagist.org</u>)
<u>https://getcomposer.org/download/</u>

php -r "readfile('https://getcomposer.org/installer');" > composer-setup.php php -r XXX-HASH-CHECK-REMOVED-FOR-BREVITY-XXX php composer-setup.php php -r "unlink('composer-setup.php');"

Bower: A package manager for the web <u>http://bower.io/</u>

npm install -g bower



git clone https://github.com/inex/IXP-Manager.git ixp
cd ixp

git checkout v4 (v4 will become master
soon)





```
$ mysql -u root -p
```

```
CREATE DATABASE `ixp`
CHARACTER SET = 'utf8mb4' COLLATE = 'utf8mb4_unicode_ci';
```

GRANT ALL ON `ixp`.* TO `ixp`@`localhost`
 IDENTIFIED BY 'password';

FLUSH PRIVILEGES;





- v3 used application/configs/application.ini
 - Because v4 still uses Zend, this is still required
 - Prior to the official release of v4, we'll have this auto generated from the v4 configuration files
- v4 uses Laravel's configuration structure under config/
- There are two types of configuration files:
 - xxx.php these are version controlled in Git and should not be locally edited. Anything that needs to be set in these is done via phpdotenv
 - xxx.php.dist these files need to be cp'd without the .dist and updated by you





https://github.com/vlucas/phpdotenv

https://laravel.com/docs/5.2/configuration

So, to configure:

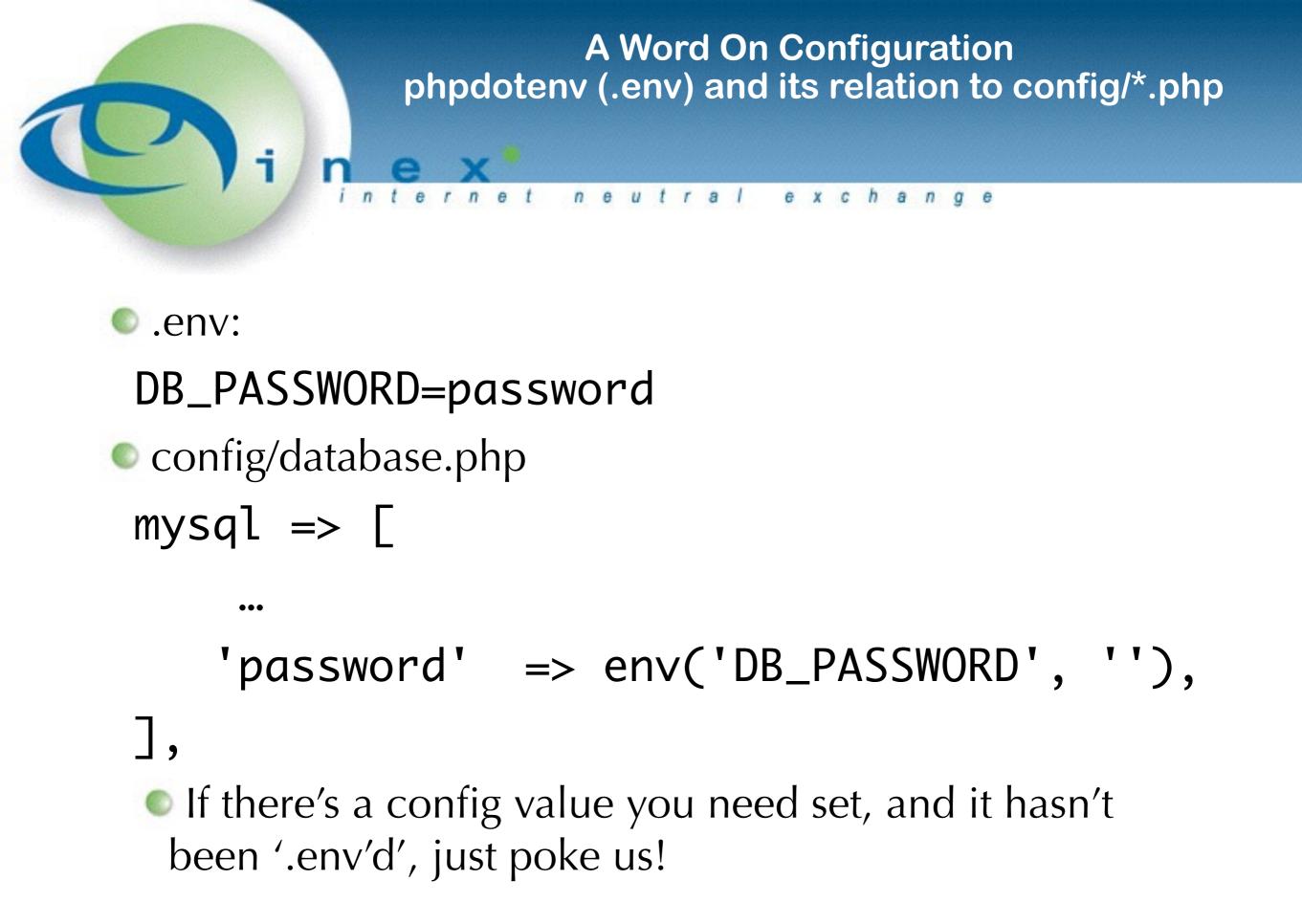
cp .env.example .env and edit

foreach config/xxx.php.dist:

ocp config/xxx.php.dist config/xxx.php and edit

Again, prior to release or sometime after, we'll try and make this easier.

Remember bootstrap.sh has working versions that you can look at!





Add the following to .env:
 DB_HOST=localhost
 DB_DATABASE=ixp
 DB_USERNAME=ixp
 DB_PASSWORD=password





git clone https://github.com/inex/IXP-Manager.git ixp
cd ixp

git checkout v4 (v4 will become master soon)

composer update
bower update
php artisan key:generate





Add the following to .env:
 DB_HOST=localhost
 DB_DATABASE=ixp
 DB_USERNAME=ixp
 DB_PASSWORD=password

And create the schema:
php artisan doctrine:schema:create







php -S localhost:9000 -t public => http://localhost:9000

VAGRANT IXP Manager	Support	About	Login
Login to IXP Manager			
Username Password			
Login Lost Password Lost Username			
For help, please contact VAGRANT Operations.			
IXP Manager V4.1.0 Copyright © 2010 - 2016 Internet Neutral Exchange Association Ltd http://www.inex.ie/ Cont Licensed under GPL v2.0. This Program is provided AS IS, without warranty. Generated in 0.124 seconds	act Us		

Upgrade



https://ixp-manager.readthedocs.org/en/latest/upgrade-from-v3.html

Target will be v4.2 when tagged
 No in place upgrade - install in parallel and switch over

Backup first!





mysql -u root -pXXX -e 'CREATE DATABASE ixp4;'

mysql -u root -pXXX -e
'GRANT ALL ON ixp4.* T0 `ixp`@`localhost`
IDENTIFIED BY "ixp";'





git clone https://github.com/inex/IXP-Manager.git ixp4
cd ixp4
git checkout v4 (v4 will become master soon)

Add the following to .env:
 DB_HOST=localhost
 DB_DATABASE=ixp4
 DB_USERNAME=ixp
 DB_PASSWORD=ixp



- composer update
- bower update
- php artisan key:generate
- cp config/identity.php.dist config/identity.php
- vim config/identity.php
- cp \$OLDIXP3/application/configs/application.ini
 \$NEWIXP4/application/configs

And edit as per:

https://ixp-manager.readthedocs.org/en/latest/upgrade-from-v3.html



Octrine2 can analyse the current schema against the expected schema:

php artisan doctrine:schema:update --sql

And then update with:

php artisan doctrine:schema:update -commit

We'll publish the expected output of —sql with the documentation



File system permissions need to be:

chown -R www-data: var/ storage/ bootstrap/cache

- You can point a new Apache alias / virtual host at IXP4 for testing and then you can switchover from IXP3 from Apache.
- All IXP3 functionality (bar graphing) will work as expected.
- There are graphing migration steps available.

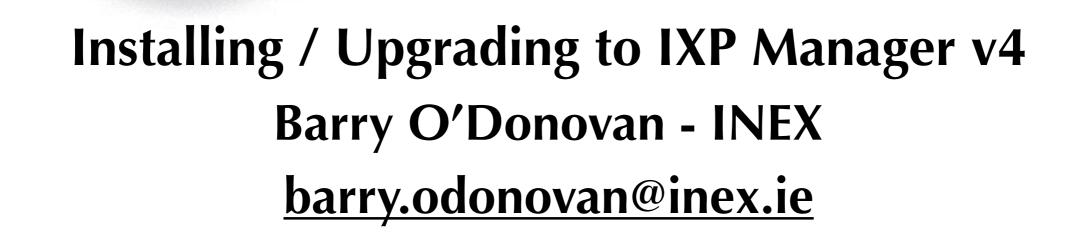
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