
DUBLIN
DRUPALCON

Don’t Panic

Website disaster planning for the rest of us

Ronan Dowling – Pantheon.io

Who Am I?

- Agency Tools Lead at Pantheon
- Maintainer of Backup and Migrate
- Founder/Creator of NodeSquirrel
- ronan@pantheon.io

Who Are You?

- Drupal site owners and builders
- Small to medium sites

What is a Disaster?

Any event which prevents your website's content from reaching your end user.

What is a Disaster Recovery Plan?

“A disaster recovery plan (DRP) is a documented process or set of procedures to recover and protect a business IT infrastructure in the event of a disaster.”

- http://en.wikipedia.org/wiki/Disaster_recovery_plan

- 3 Basic Features:
  - preventive measures
  - detective measures
  - corrective measures

Typical Advice

1. Identify all the threats to your site
2. Plan to recover from each threat
3. Practice!

Risks to your site

- Natural Disasters
- Hackers
  - Intrusion
  - DDOS
- User Errors
- Imperfect Services
- Success
  - The Reddit Hug/Slashdot Effect
- ...

Who cares?

Less intimidating approach

1. Identify all the things that can fail
2. Figure out how to replace them
3. Practice!

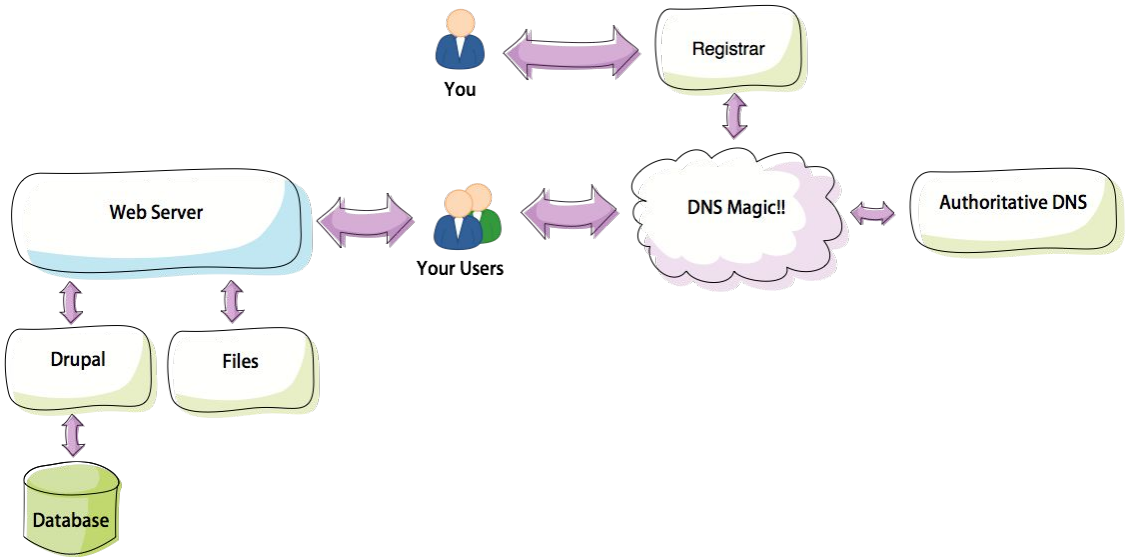
The things that can fail

The parts

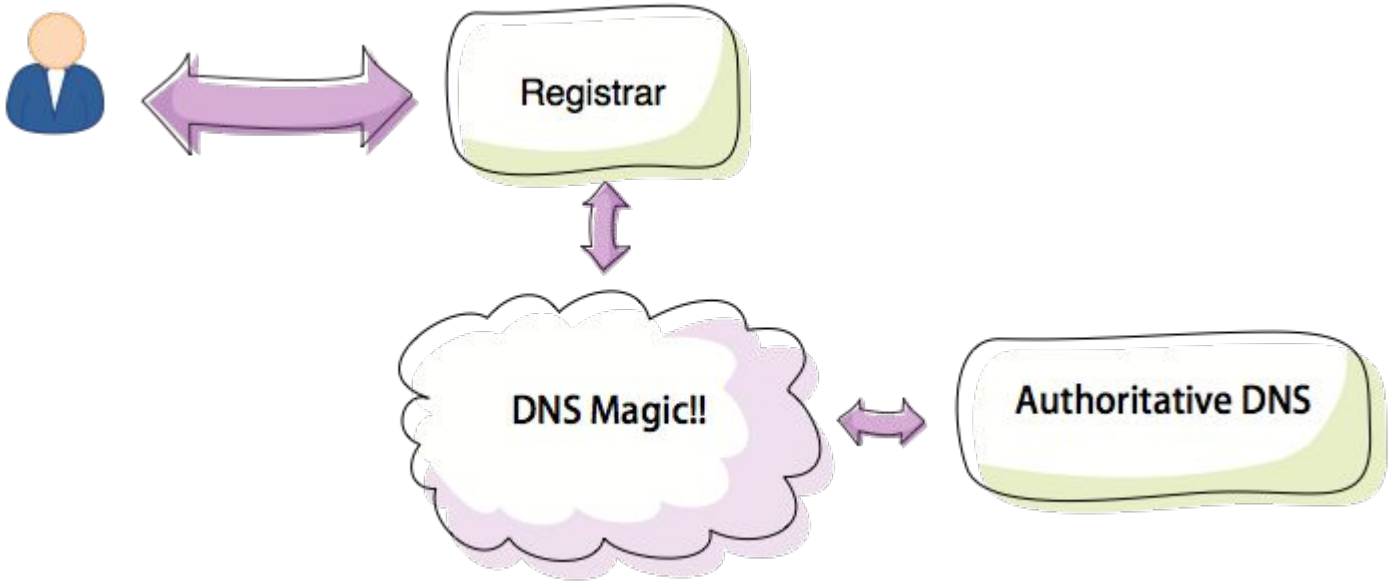
(most of them)

1. Domain Registrar
2. Authoritative Name Servers (DNS)
3. Web Server(s)
4. Drupal and Modules
5. Database(s)
6. Uploaded Files

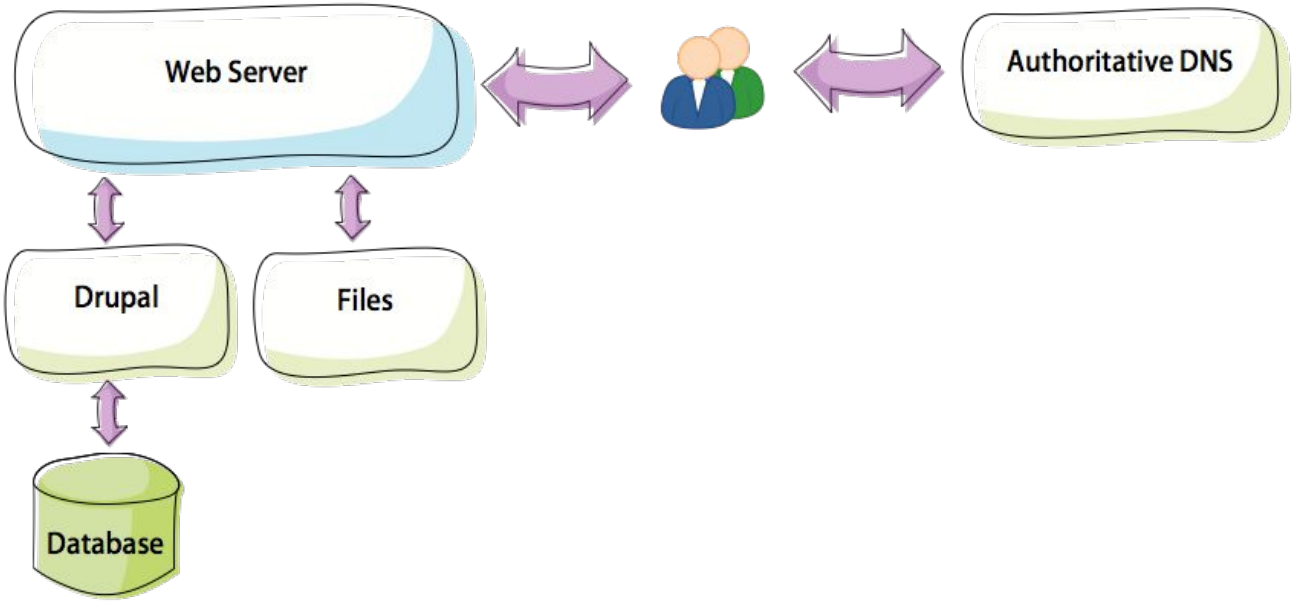
The Parts


You
Registrar
Web Server
Your Users
DNS Magic!!
Authoritative DNS
Drupal
Files
Database

Your Domain



Your Website



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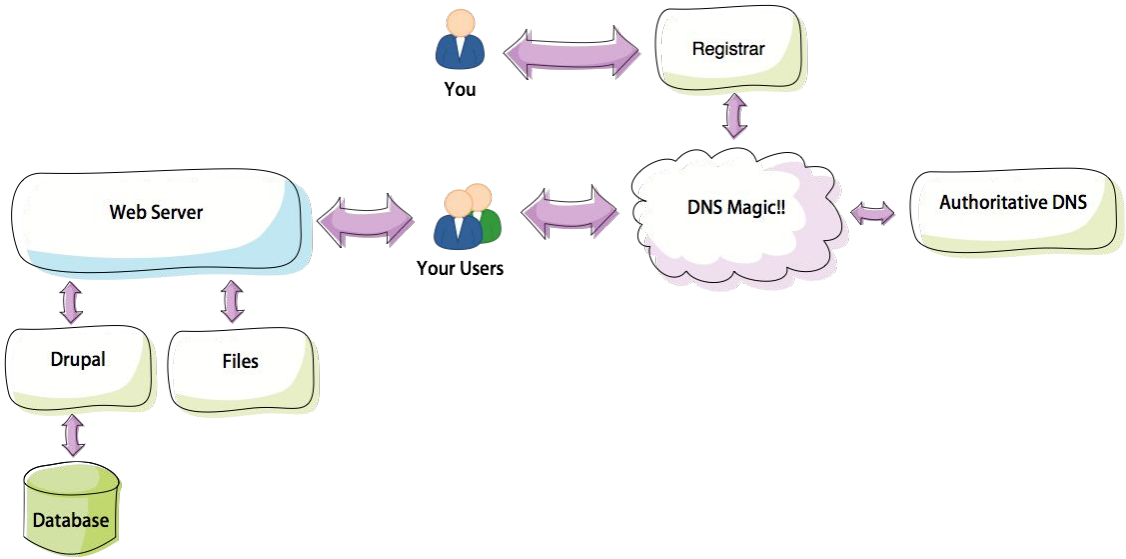
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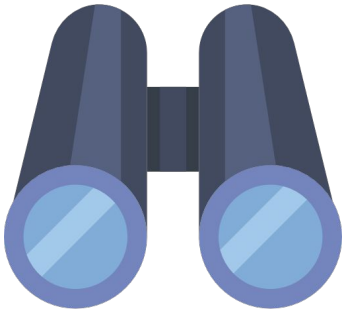
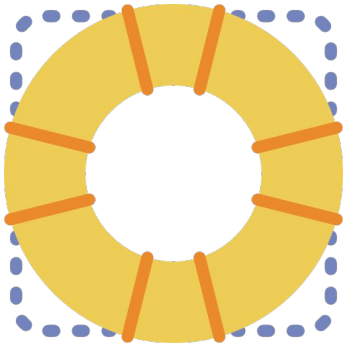
Disaster Recovery

Preventative Measures



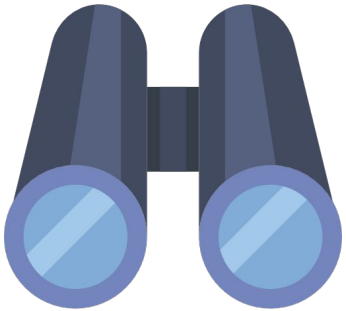
Detective Measures



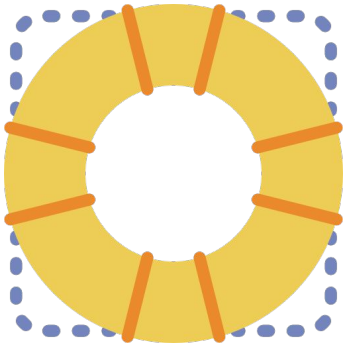
Corrective Measures

Disaster Recovery

Preventative Measures



Detective Measures



Corrective Measures

“Figure out how to replace them”

Preventative Measures

Preventative Measures

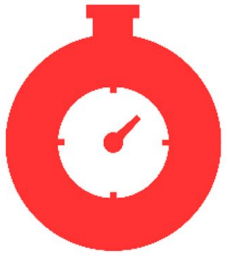
- Use Drupal security best practices
- Use good vendors
  - Host, registrars etc.
- Build in redundancy
- Train your users

Preventative Tools

CloudFlare/Fastly

CDN/DNS/Front-end Cache

- Protects from hackers
- Prevent DDOS
  - intentional or unintentional
- Free or $20+/mo



Hosted DNS

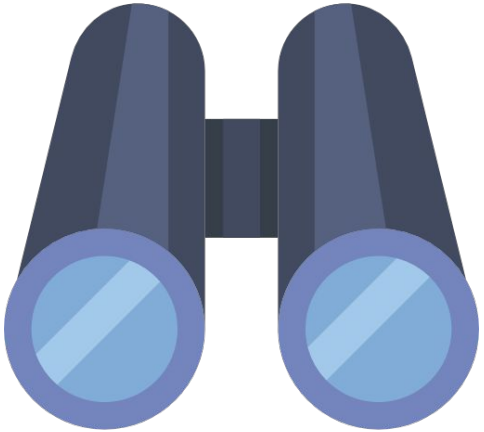
Neither your registrar nor your host

- Some protection from DDOS
- Better uptime (than cheap hosts/registrars)
- Actual redundancy
- Con: One more point of failure

Dyn.com, Amazon Route 53, Easy DNS

Detective Measures

Detective Measures



- Subscribe to security advisories
- Set up Twitter alerts
  - For clients too
- Audit site users and content
- Set up automatic monitoring

Detective Tools

Pingdom/Uptime Robot

Uptime Monitoring

- Visits your website periodically
- Emails you if the site is down
- Free plans available

UptimeRobot

New Relic/Naigos/Appneta

Application Monitoring

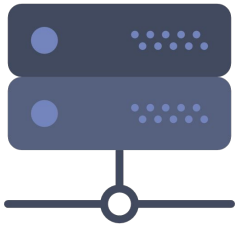
- Checks the health of the server
  - Resource usage etc.
- Detect problems before they're critical
- Installed on your server
- Talk to your host
  - New Relic Lite free with Acquia
  - New Relic Pro free with Pantheon

Corrective Measures

BACKUP!!!

Seriously

What to back up



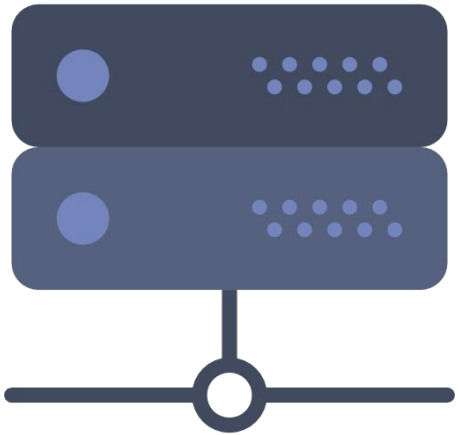
Server Config

Code

Files

Database

Server Config

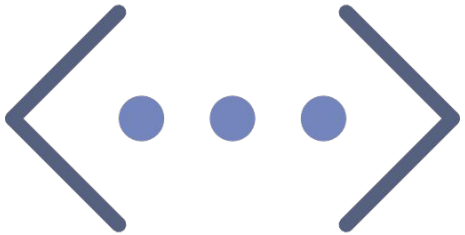


php.ini, nginx.conf, DNS zone files

- Changes almost never
- Not too hard to recover without backup
- Difficult to back up
- Ask your host
- Keep a record of custom configuration
- Adopt devops best practices

Code

Drupal, modules, themes, custom code



- Changes rarely
- Sometimes possible to recover without backup
- Most of it is on drupal.org/github etc.
- Should be in a VCS
  - git, svn
- Automate Deployment (deploybot.com)

Uploaded Files

Images, videos, documents

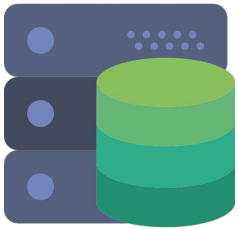
- Change infrequently
- Difficult-ish to recover without backup
- Relatively difficult to back up
- Hundreds of MB+
- Restoring is slow
- Tools:
  - Backup and Migrate
  - Rsync
  - Custom scripts

Database

All of your client's hard work

- Changes frequently
- Impossible to recover without backup
- Easy to backup
- A few MB to a few GB
- Tools:
  - Backup and Migrate
  - phpMyAdmin
  - MySQLDump

Levels of Backup



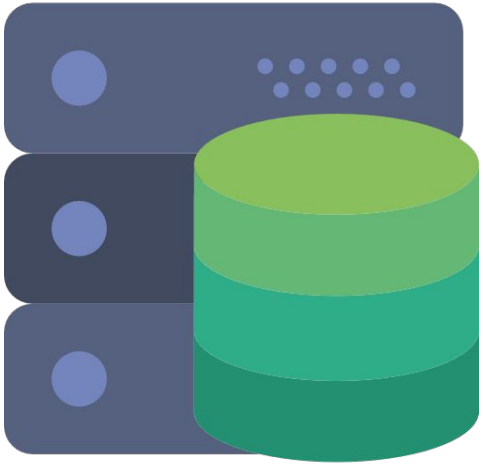
Server Level

Application Level

Content Level

Server Level Backup

- Provided by hosts
- Backs up config/db/code/files
- Slow to recover
- Dependant on host/sysop
- Best for total system failure

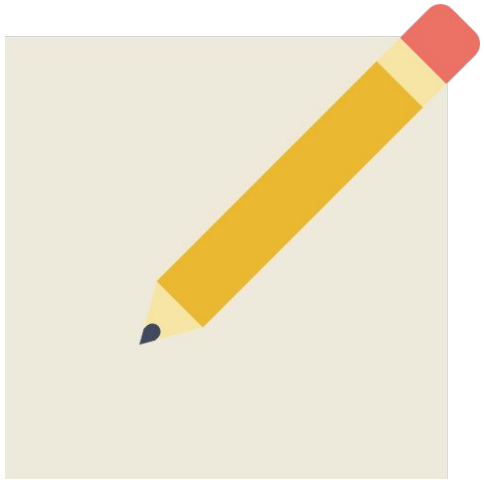


Application Level Backup

- Backup Drupal DB and Files
- Controlled by site owner/admin
- Recover in seconds
- No support tickets needed
- Best for user error and partial failure

Content Level Backup

- Per-node versioning
- Recover specific nodes/entities
- Built in to Drupal core
- Best for: localized user error
- Not good for: Things that aren't entities. Deletes.



Backup Location

Onsite Backup

Offsite Backup

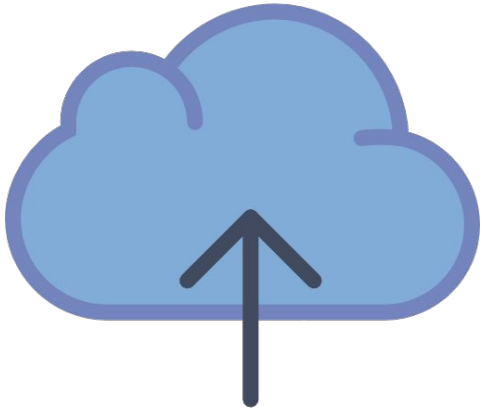
Onsite Backup

Backing up to the same server

- Quickest Backup
- Quickest Recovery
- Not good for system failure

Offsite Backup

Backing up to a different server



- Slower to backup
- More effort to set up
- Available when your server is down

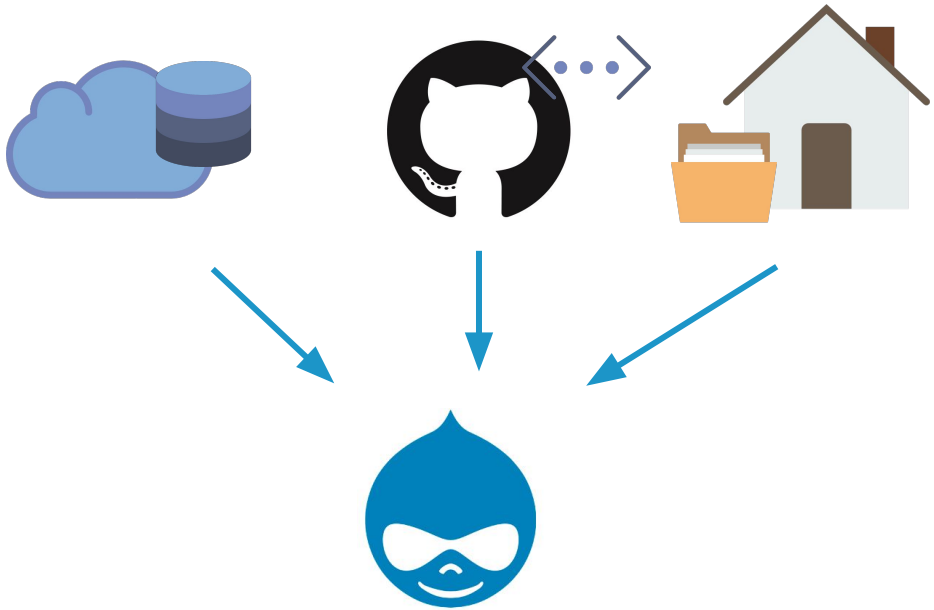
- Offsite backup options
  - NodeSquirrel
  - Amazon S3
  - FTP to another host

“Offsite backup from your host is NOT offsite”

Restoring

Restoring Your Site

- Depends on your backup solutions
- Depends on how ‘down’ your site is
- Layer your levels
- Practice
- Time your practice



Accessing Services

Know how to log-in in an emergency

Keep all logins together

- Web host, Registrar, DNS, CDN, etc.
- Store online and offline

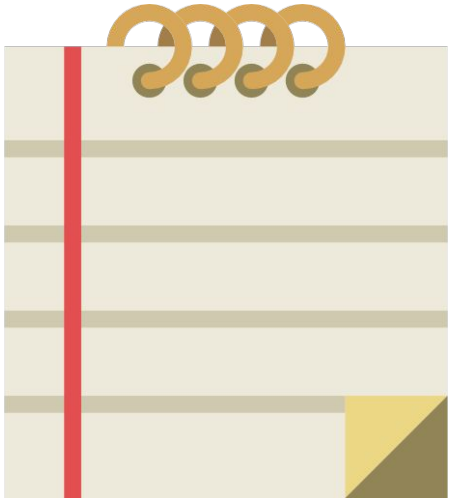
Store tech support contacts

- Web host, Registrar, DNS, CDN, etc.
- Don’t rely on the company’s ticketing system
  - Also store email, phone, Twitter

Email password reset

- Have all account password reset to same email
  - Don’t use a real user’s email
  - Don’t use your website’s domain/server
  - Forward to anybody who might need to recover
  - Consider 2-factor auth
- Test resetting passwords

Your written plan



- A list of 3rd party services with:
  - Login credentials
  - Support contacts
- A list of internal people responsible for recovery
- The location, type and frequency of every backup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WHAT DID YOU THINK?
Evaluate This Session
events.drupal.org/dublin2016/schedule
THANK YOU!

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JOIN US FOR CONTRIBUTION SPRINTS

First Time Sprinter Workshop - 9:00-12:00 - Room Wicklow 2A

Mentored Core Sprint - 9:00-18:00 - Wicklow Hall 2B

General Sprints - 9:00 - 18:00 - Wicklow Hall 2A