Monitoring Drupal using Nagios integration

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Agenda

• Why monitoring?
• Nagios
  – What is Nagios?
  – What can it monitor?
• Nagios / Drupal Integration
  – Base features
    • Performance Integration
  – API
• Discussion
Why Monitoring?

- Murphy's Law
- Know of issues as they happen
- Act on them sooner
- Minimize downtime
• We all start with emails from cron scripts
  – Then it does not scale well ...
  – Too much noise in your inbox ...
Nagios

- GPL licensed
- Mature
- Monitoring platform
- Alerts by email, pager, and even IM (Jabber)
- Multiple alerts to different people
- Soft and hard states (makes sure it is an error)
- Escalation
- Can manage thousands of servers
- Web site at http://www.nagios.org/
Nagios states

- Each monitored “item” sends a state
- Represented by colors
  - OK
  - Warning
  - Critical
  - Unknown
How can Nagios help Drupal?

Answer: New Module

- [http://drupal.org/project/nagios](http://drupal.org/project/nagios)
- Drupal 5.x and 6.x
What is monitored?

Many things in Drupal ...
Core and Modules

- New releases, as they are available on drupal.org
- Requires the update module in Drupal 6.x
- Or update_status on Drupal 5.x
- Core releases
- Contrib
- Security releases!
• Cron is essential for normal running of a Drupal site
• Cleans logs
• Checks for releases
• Many other things
• We check that cron is running regularly
  – 60 minutes default, can be adjusted
Permissions

- “update.php” should not be accessible to other than user 1
- “settings.php” should NOT be writable by web server
- “files” directory should be writable by the web server
Database schema

- When you install new modules, they may change the database structure (schema)
- Ever installed a new module and forgot to run update.php?
Requirements

• We monitor anything that goes in:
  – /admin/{logs,reports}/status
Performance Logging

- Started as an independent project by 2bits.com
- Now part of Devel (5.x, 6.x and 7.x, latest in -dev)
- Aims at collecting info for analysis of performance
  - Which pages use most queries
  - Which pages use most time to generate
  - Average and maximums
  - Logs to database (dev/test) or APC (ok for live sites)
  - Can be combined with stress testing (ab/siege)
Performance & Nagios

- Performance Logging initially done just like other things (i.e. alerts)
  - Page execution time
  - Memory per page
- Proved to be too noisy
  - Too many emails for transient problems
  - “Crying wolf”
- Planning a new approach, with no alerts on performance, but providing the data
Configuration

- Need to get Nagios running first
  - Not trivial, but not rocket science
- Documentated (for Nagios 2.11) in README.txt
- Need to install a Nagios Plugin (included with the module)
- Need a unique ID, to keep away prying eyes
API

• Simple and powerful API
• A couple of hooks
• Documented in README.txt
• Example in devel/performance.module
• You can add alerts on whatever you want in Drupal
Demo

Let us see it in action ...
Discussion

Questions?

Comments?