

# Building communities using Userpoints

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<http://2bits.com>

The logo for '2bits' features the number '2' in a bright green color, followed by the word 'bits' in a dark grey, stylized font. The 'i' in 'bits' has a small green square above it. The entire logo is reflected below it on a light grey surface.



# Agenda



- Introduction
- Userpoints Module
  - Features
  - Usage
- Userpoints API
- Hands on
- Conclusion
  - Questions, discussion





# About 2bits



- Based in Waterloo, Ontario
- Active member of the Drupal community since 2003
- Member of security and infrastructure teams
- 24+ modules on drupal.org
- Listed on Drupal.org's service providers section
- Maintain modules that run on drupal.org (donations, feature, lists)
- Google Summer of Code mentoring (2005, 2006, 2007)





# 2bits Services



- Clients mainly in USA and Canada
- Subcontracting development projects
- Customization of existing modules
- Development of new modules
- Installation, upgrades
- Automated backups
- Performance tuning and optimization





# About Khalid



- Developing for computers for way too long (22 years), Drupal since 2003
- Core contributions
  - Site maintenance feature
  - Logging and alerts in Drupal 6
  - Several patches
- Member of
  - Drupal security team
  - webmasters team
  - infrastructure team
- Co-founder of 2bits
- Blog at <http://baheyeldin.com>
- Contributed modules
  - Adsense
  - Userpoints
  - Nodevote
  - Job search
  - Favorite nodes
  - Flag content
  - Stock API and module
  - Custom Error
  - Currency
  - Image watermark
  - Site menu
  - Email logging and alerts
  - Second Life
  - Technorati
  - Click thru
  - Referral





# History



- Commissioned by a photography and art site
- As an incentive for promoting participation
- Released to the community







# Features and Benefits



- Psychological factor
- Mimics “gaming”
- Provides instant gratification
- Users often strive for more recognition, as well as competition.
- Users can be sort of tiered within the site





# Functionality



- Basic package has two modules
- userpoints
  - Just an API, and management module.
- userpoints\_basic
  - Basic core Drupal functionality (posting nodes, comments, ...etc.), as well as invite module







# Configuration



- Point moderation
  - Whether points are to be added/subtracted in real time, or delayed until approval.
  - Prevents abuse on sites that use points as a means for getting gifts and such.
  - Under Administer -> User management -> Points
- Allows adding of points manually by the admin





# Configuration (cont'd)



- Branding of points
  - Allows calling them something else, for example “brownies”, or some site specific jargon.





# Configuration (cont'd)



- Basic events
  - Posting a node
  - Each type (blog, page, story, ...etc.) can have a different value.
  - Posting a comment
  - Moderating a comment
  - No fractional points please!





# Contributions



- Mini ecosystem, like views
- Written by various people for various things
- Reset
  - Resets all points for all users
  - Destructive
  - One time operation
- Retroactive
  - Only for node types and comments





# Contributions (cont'd)



- Ecommerce
  - Users earn points for purchasing from the ecommerce store.
  - Points can also be used as a payment form
- Node limit
  - Allows limiting of node creation depending on how many points a user has.
  - Can be used for subscriptions





# Contributions (cont'd)



- Referral
  - Users earn points for referring a user.
  - Users earn points for actions performed by users they referred.
  - A multiplier is used for the calculation.
- Invite
  - Interface for invite module
  - Points for inviting, and registering







# Unreleased



- Role
  - Users join/leave roles as they gain/lose points
  - Can be used to allow access to other areas of the site, or more privileges
- Role exempt
  - Certain roles are exempted from points, e.g. admins or moderators, so they do not “compete” with regular users.





# Unreleased (cont'd)



- Email notify
  - Users are notified by email when they reach a certain level of points
- Inactive expiry
  - Inactive users lose a certain number of points every preset period (can you think of banks?)





# Unreleased (cont'd)



- Period expire
  - All points for all users are expired every certain period.
  - Good for contests and the like.





# Userpoints API



- Simple API for modules to use
- Documented in the README.txt
- Module decides to award points at certain events.
- Modules can act on other modules awarding points
- Examples abound in the contrib directory





# Userpoints hook



- **hook\_userpoints**(\$op, \$points, \$uid, \$event)
  - \$op is operation type
  - \$points is number of points to add (or subtract, if negative)
  - \$uid is the Drupal user id of the user
  - \$event is an event identifier





# \$op



- 'setting'
  - Build your configuration form, and return it, and they will automatically appear in userpoints settings.
- 'points before'
  - Calls your modules (and other modules) before the points are awarded. Returning FALSE prevents points from being awarded.







# \$op (cont'd)



- 'points after'
  - Points have been awarded, your module can take actions on that event





# API function call



- `userpoints_userpointsapi('points', $points, $uid, $event, $description)`
  - Modules call this function explicitly to add/subtract points to a user.
  - Points are added (if positive) or subtracted (if negative)





# API call (cont'd)



- \$event
  - An identifier of the event the points is being awarded for, this
  - Gets recorded in the transaction table (allows auditing, recalculating, ...etc).
  - May require events to be registered in the future.





# How many?



- `userpoints_get_current_points($uid)`
  - You can call this function to know how much points a use has.
  - Returns the current number of points for that user.
- Use in themes or other modules for displaying points (e.g. below the avatar).
- Some examples on <http://2bits.com>





# Real Life Example



- 7 am Thursday someone send me an email asking for an unreleased module, and two other custom ones to be developed.
- Replied around noon.
- Got this reply by 2pm:

*Thanks to your API, it turned out much easier than expected. I was able to code all 3 by the time you responded to this email and will post them on drupal.org for you to review. Great module! :)*





# The future?



- Maximum ever points earned
  - field in the database already, but not presented
- Points from one user to another
  - Barter or site currency
- More than one point “pools”.
- Time dimension
  - How many points for a user in the last month







# The future (cont'd)



- Integration with votingAPI
  - fivestar, ...etc.
- Event registry
  - More structure and discipline for the data
- Better UI for managing points (AJAX?)





# Sites



- Performancing – Tools for bloggers

<http://performancing.com>

- Altiris users site – Community for Altiris users

<http://juice.altiris.com/points>

- MEPIS Linux distro, Debian derived

<http://www.mepis.org/userpoints>

- Poop Report – an intellectual scatology site

<http://www.poopreport.com>

- Ruby Baboon

<http://www.rubybaboon.com/>





# Hands On



Let us see it all in action ...





# Conclusion



- Questions?
- Comments?
- Discussions?

