

Architecting a Community: How Mozdev Runs and Grows

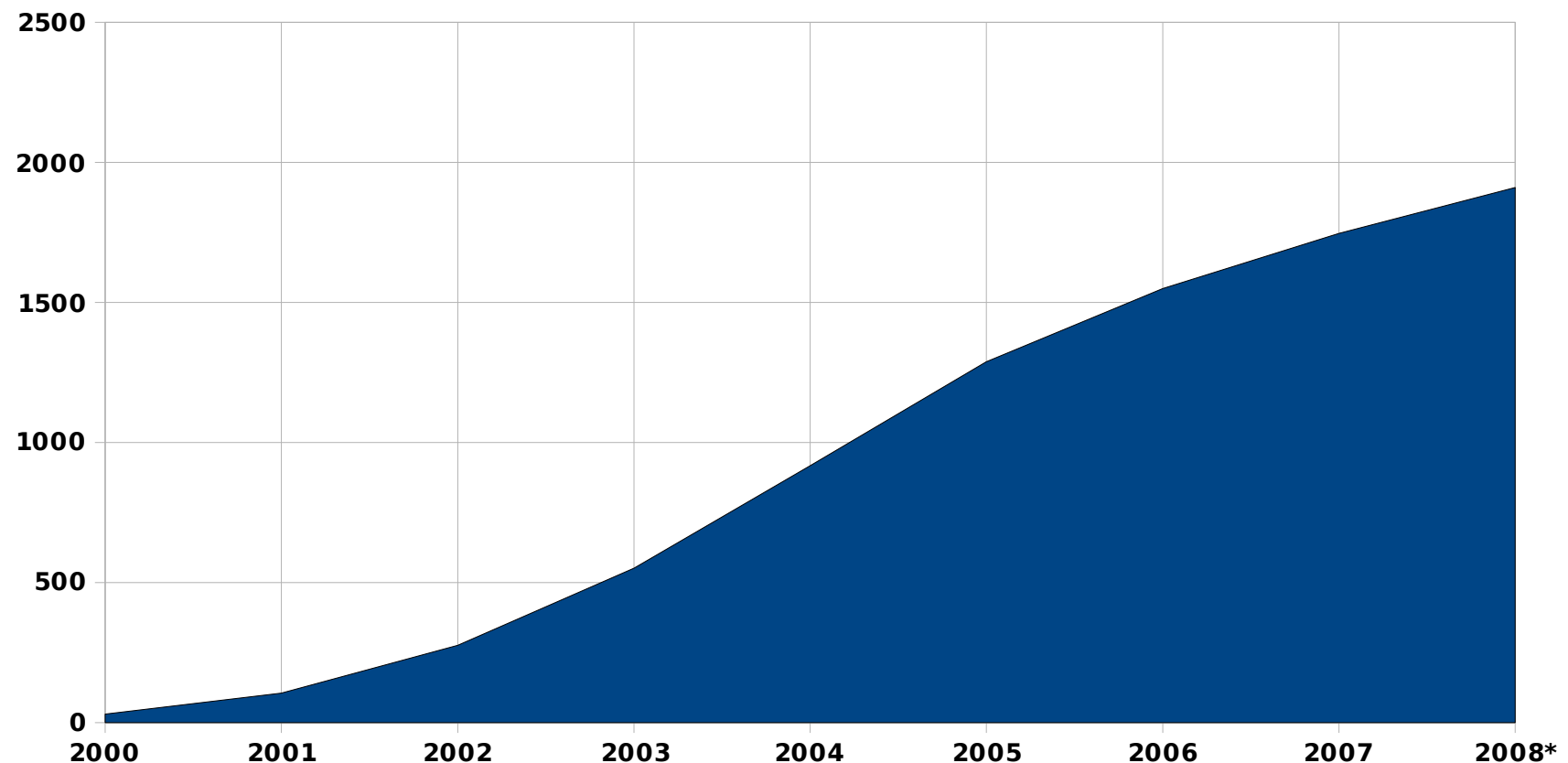
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W h a t i s M o z d e v ?

- C o m m u n i t y r u n s i t e p r o v i d i n g f r e e h o s t i n g f o r M o z i l l a a p p l i c a t i o n s a n d e x t e n s i o n s s i n c e 2 0 0 0
- E s t a b l i s h e d a s a n o n - p r o f i t o r g a n i z a t i o n i n 2 0 0 4
- L a r g e d e v e l o p e r c o m m u n i t y d i s c u s s i o n i s s u e s a n d q u e s t i o n s
- S u p p o r t e d b y i n d i v i d u a l d o n a t i o n s , F o u n d a t i o n g r a n t s a n d c o r p o r a t e s p o n s o r s h i p s
- B o a r d c o m p r i s e d o f M o C o / M o F o e m p l o y e e s , l o n g - t i m e c o m m u n i t y m e m b e r s / d e v e l o p e r s , a n d a l a w y e r

Mozdev Projects

- Over 1900 total projects in October 2008 and 290+ active projects



Stats

- M ozdev currently handles ~700G B of traffic and 56M pages (~150M hits) per month
- June 2008 (during the Firefox 3 release) M ozdev saw ~850G B traffic, 72M pages, and 187M hits
- Currently utilize 1 production server, 1 staging/dev server, and 1 stats/log analysis V M
- A pprox 20 file mirrors distributed globally

W h a t s e r v i c e s a r e p r o v i d e d ?

- S o u r c e c o n t r o l
- G e n e r a l w e b h o s t i n g a n d t o o l s
- D o w n l o a d f i l e m i r r o r i n g n e t w o r k
- M o z i l l a - c e n t r i c t o o l s

Services – Source Control

- Source control systems are tied into MySQL tables for authentication
- CVS is patched to add MySQL support
- Mercurial auths using mod_auth_mysql in Apache
- Project web site and download files are also maintained in CVS and automatically updated when committed

Services – Template system

- Goal is to reduce a developer's need to perform much website editing
- A project is initially setup with content detailing things such as where their source can be found, project members, and links to tools (bugzilla, mailing lists, etc)
- Template system can be completely bypassed or disabled if desired by the project or heavily modified using standard CSS and an extensive option set

Services – Template system

- Site was originally written in Java and utilized a project called Tigris
- Back-end was ported to PHP over time (due to licensing changes and to make it easier to maintain)
- Web sites are driven through the template system using large set of Apache mod_rewrite rules

Services – Other

- Mirror network – distributes larger binaries globally
- Bugzilla – large Bugzilla installation with hundreds of products (unusual for a Bugzilla installation) with full control given to projects
- Mailing Lists/News Groups – Mailman mailing lists for projects integrated with a news server
- Drupal installation which allows projects to run blogs, forums, or wikis from their site

Service Integration - Discussion

- Mozdev focuses on trying to continually improve our developers' experience by reducing complexity
- Mailing lists and newsgroups are coupled together to provide multiple interfaces to the same list
- Forums will be extended in the future to also tie into mailing lists, allowing users another way to participate in discussions

Service Integration – Authentication

- Authentication information is currently stored in MySQL tables
- All source control (CVS, hg) utilize the same authentication info
- Web site administration (file management, project tags) are permitted to the project owner
- Drupal logins (forum, blog, wiki) are tied back to Mozdev users
- Bugzilla and Mailman auth needs extended to Mozdev backend still

G r o w i n g P a i n s

- H o s t i n g – s o l v e d
- D e v e l o p e r r e s o u r c e s – s o l v e d (m o r e n e e d e d)
- P u b l i c I m a g e a n d A w a r e n e s s
- F u n d i n g

B u i l d i n g a C o m m u n i t y

- M o z d e v ' s b i g g e s t (a n d l e a s t m a r k e t e d) a s s e t i s i t s c o m m u n i t y
- M a i n p r o j e c t o w n e r m a i l i n g l i s t h a s 6 0 0 + m e m b e r s a n d i s c o m m o n l y u s e d f o r g e t t i n g a n s w e r s t o q u e s t i o n s a b o u t e x t e n s i o n d e v e l o p m e n t
- F o c u s o n p r o v i d i n g t o o l s a n d t h e n “ g e t t i n g o u t o f t h e w a y ” – w e c o n t i n u a l l y w o r k t o e a s e t h e b u r d e n o f s e t t i n g u p a n d m a i n t a i n i n g a p r o j e c t

B u i l d i n g a C o m m u n i t y

- M o z d e v originally provided all services needed for M o z i l l a community developers when M o z i l l a was young – from source control through distribution
- Currently distribution is handled mostly on A M O for the main M o z i l l a products, but M o z d e v continues to add tools such as file releases and secure installs and updates for non-M o z i l l a products (SeaM onkey, Songbird, Flock, M i r o, etc)

Supporting a Community

- Coming up to major Mozilla product releases can be stressful for Mozdev's infrastructure
- Firefox point releases cause strain on Mozdev's hardware due to requests for extension updates
- Mozdev prepared for the Firefox 3 release by putting nginx reverse-proxy in front of Apache
- Nginx allowed Mozdev to serve more requests for static files than we could through Apache (due to Apache's memory usage per-thread)

Discovering our Community

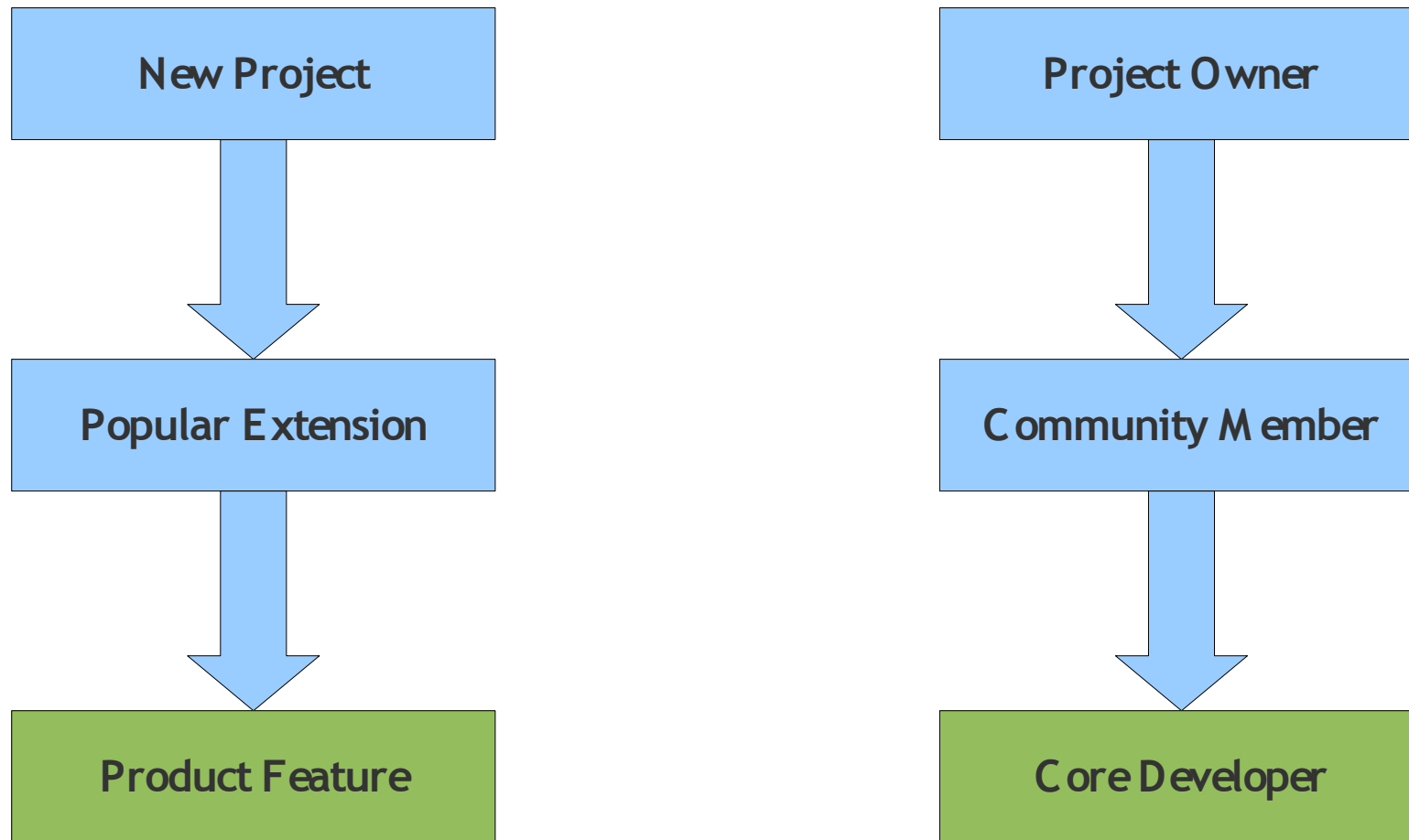
- Mozdev tries to help new people find projects by providing multiple ways to discover projects
- Projects owners can tag their projects to aid discovery and tags show up on front page
- Projects can be broken up into active, inactive, new, and unstarted project lists and a Top 50 projects list
- Each project is given an overview page that lists home page, released files, and links to tools

Participating in the Community

- Mozdev's current role in the Mozilla community is as an incubator
- Mozdev provides resources needed for new projects to get off the ground quickly and focus on solving their problem

Participating in the Community

(A K A The Myk Melez Model of Mozdev As A Community Gateway)



M o v i n g F o r w a r d

- M a k e i t e a s i e r f o r l e s s t e c h n i c a l f o l k s t o h o s t a n d c r e a t e e x t e n s i o n s
- D e e p e r r e l a t i o n s h i p w i t h t h e M o z i l l a c o m m u n i t y
- C o n t i n u e w i t h o u r g o a l o f s u p p o r t i n g d e v e l o p e r s i n o r d e r t o p r o l i f e r a t e M o z i l l a t e c h n o l o g i e s , s u p p o r t e x i s t i n g p r o d u c t s , a n d f o s t e r i n n o v a t i o n f o r n e w s o f t w a r e .