

Spotting Nascent Open Source Projects

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Open Source Technology Group

- What is SourceForge.net?
- Project success criteria
- Case studies: Successful projects
- What does a successful project do?
- Case studies: Up-and-comers

What is SourceForge.net?

“The whole is more than the sum of its parts.”
Aristotle

SourceForge.net is...

...the most substantial OSS repository,
founded in 1999 and operated by OSTG.

...a provider of tools and technology.

...a marketplace for OSS development and
consumption.

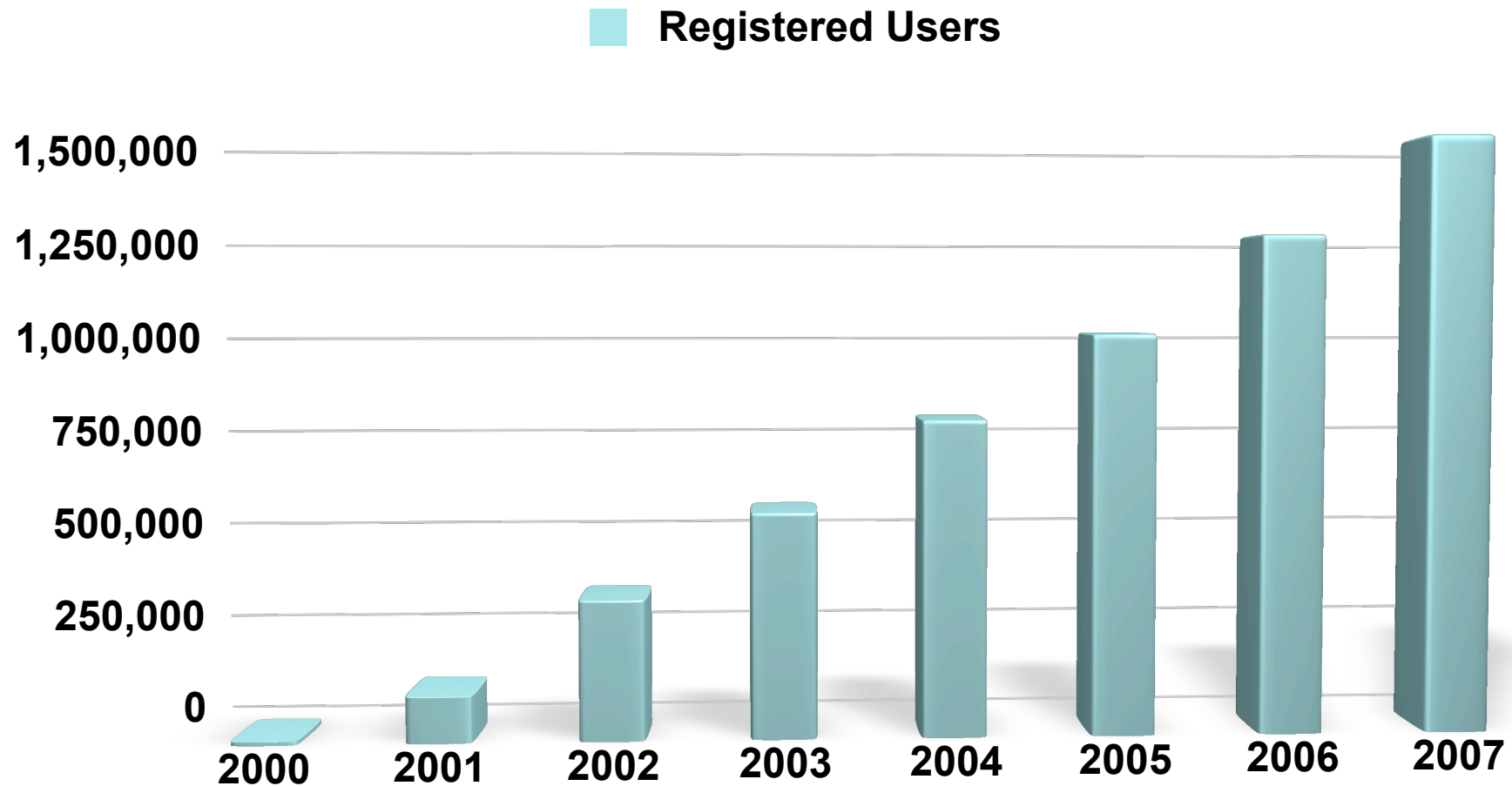
SF.net website (in 11/2006):

- 26 million unique visitors
- 140 million page views
- 250,000 searches per day
- 1.48 million registered users
- 138,000 registered projects

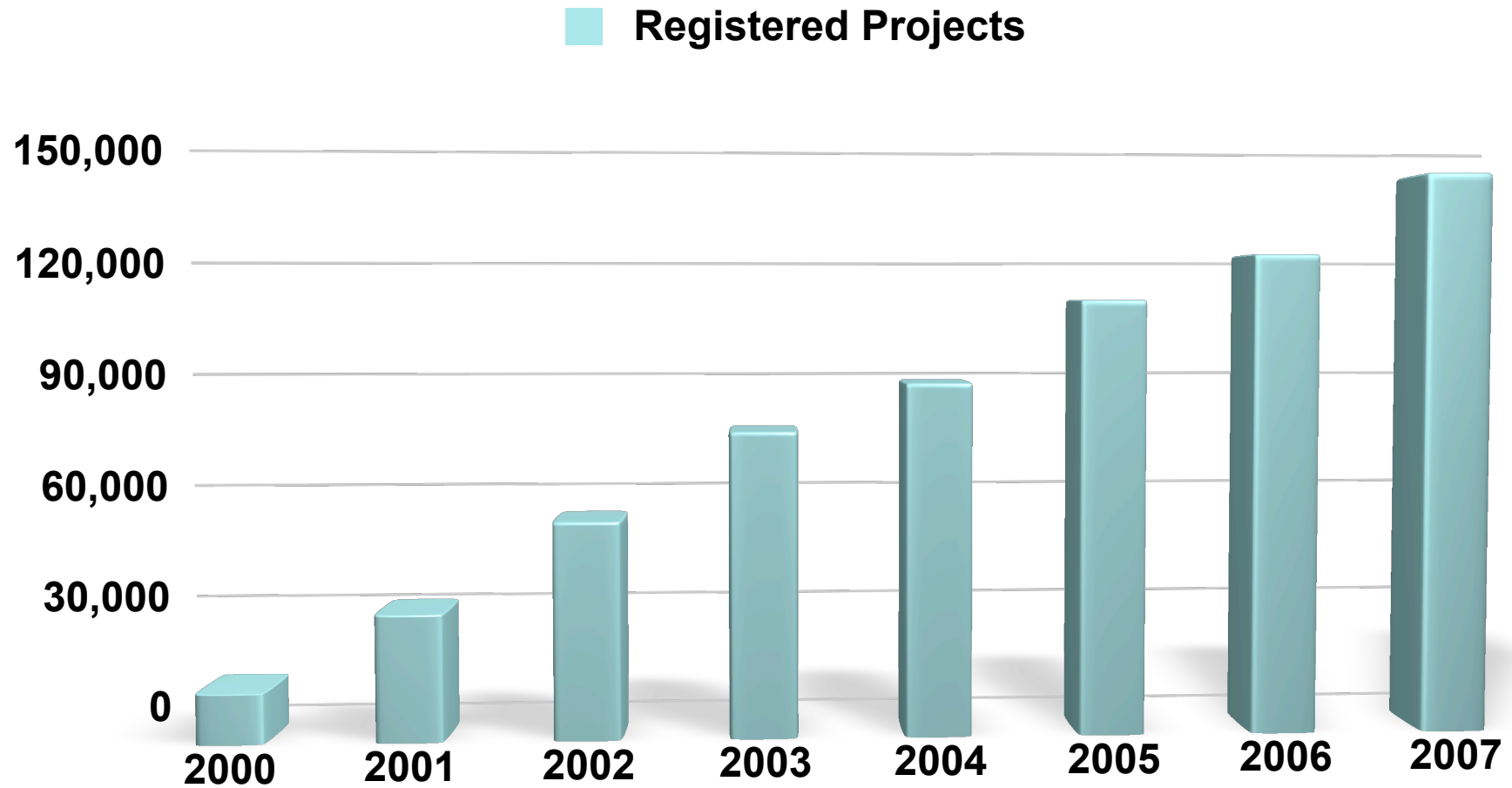
SF.net hosted projects (in 11/2006):

- 347 million page views (9.09 TB)
- 64 million files downloaded (533.7 TB)

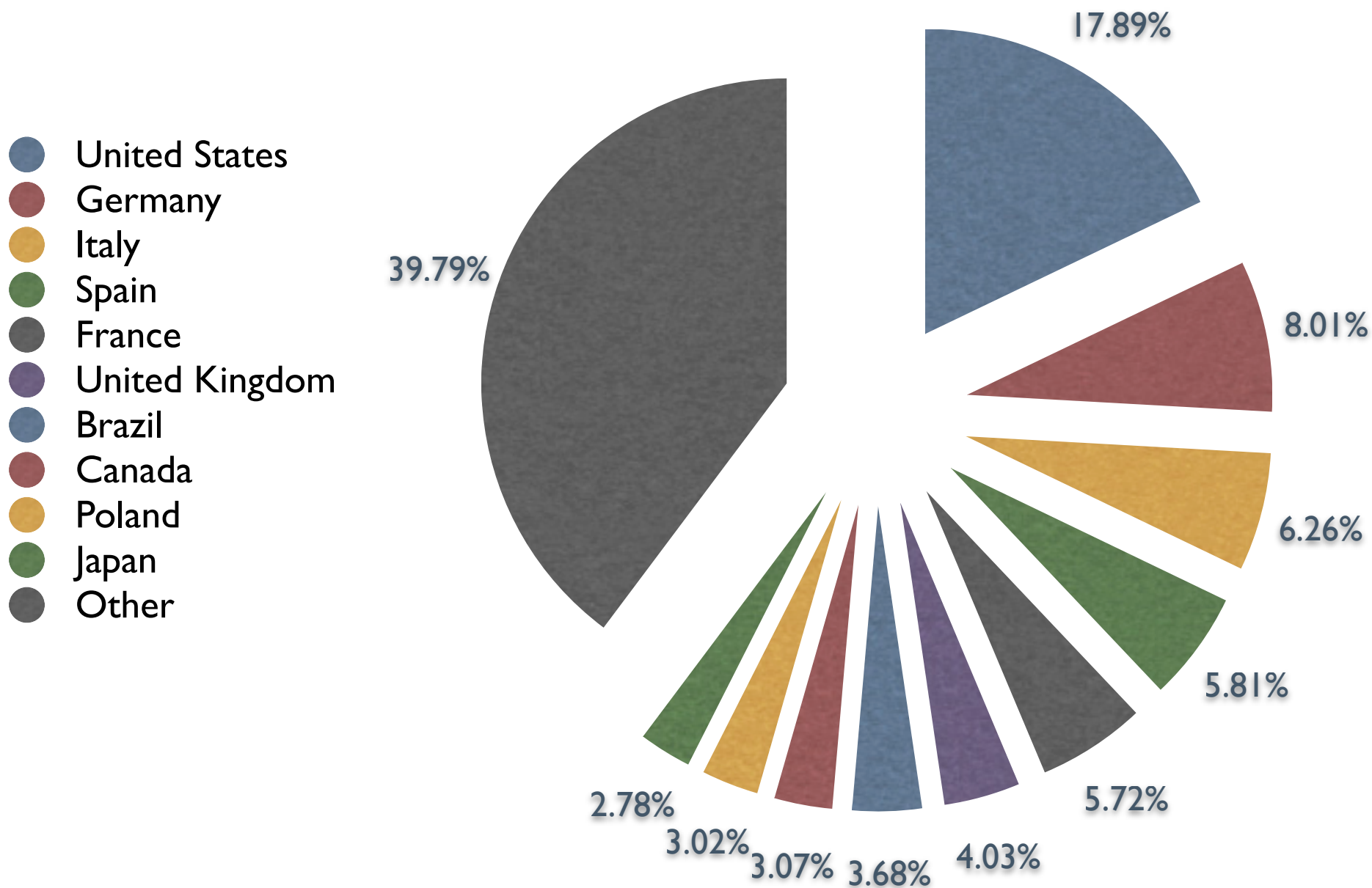
Always growing



Always growing



Geographic Breakdown



Project success criteria

“Seventy percent of success in life is showing up.”
Woody Allen

Projects have succeeded when:

- The main objective has been achieved
- Users are happy with the solution

Other signs:

- Derivatives or forks are created
- The solution has wide distribution

Case Studies: Successful Projects

“If we knew what we were doing, it wouldn't be research.”

Albert Einstein

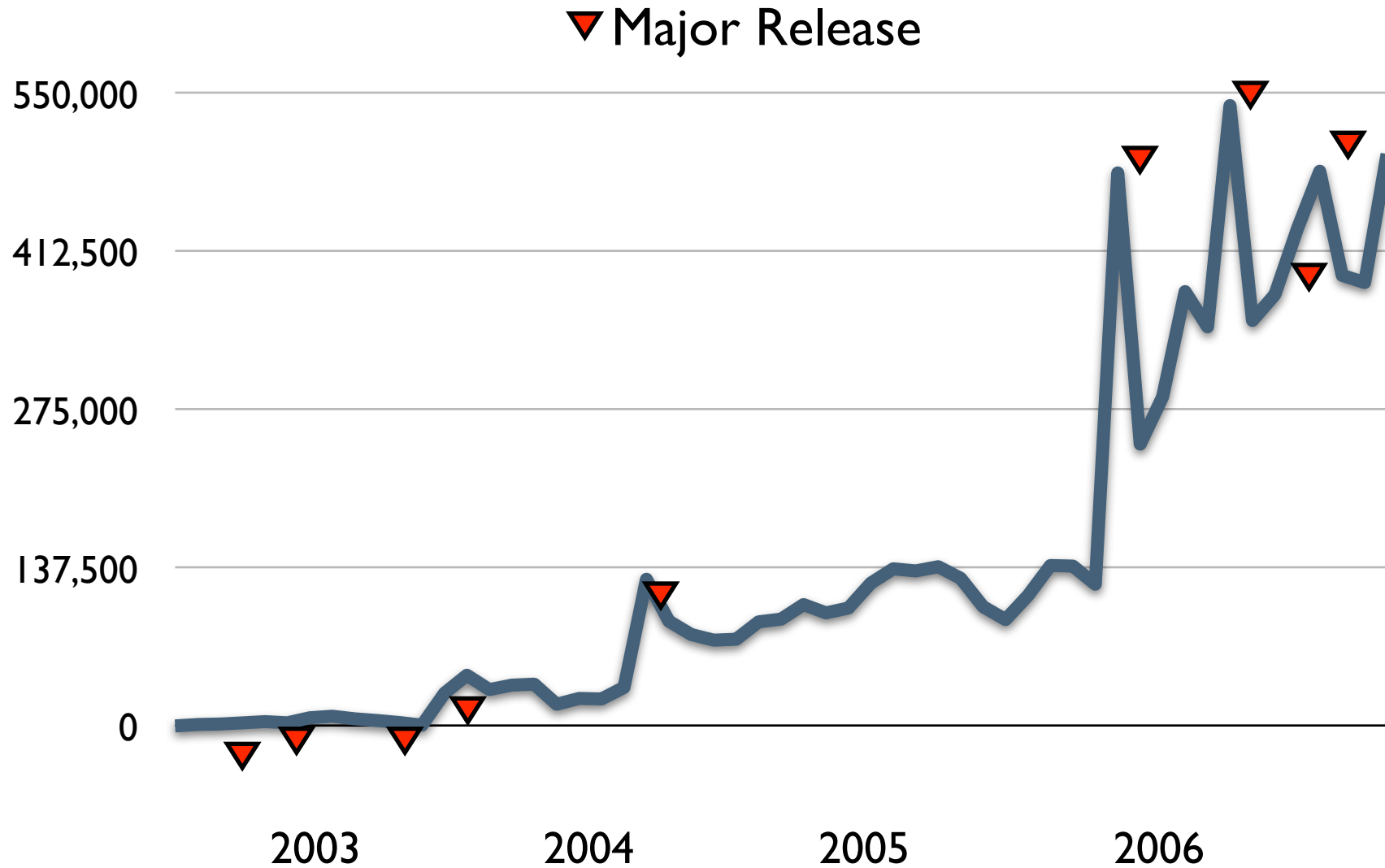
PDFCreator

- Started in July of 2002
- Purpose:
 - Allow creation of PDFs via the print mechanism in Windows
- Audience:
 - Windows users who want to create PDFs, but don't need the full features of Acrobat.
- Technology / Standards:
 - Visual Basic, GhostScript, PDF

PDFCreator:

- Developers: 2
- Commits: 146 (past 9 months)
- Releases: 9 total
- Average times...
 - to close a bug: 9 days
 - to close a patch: 15 days
 - to close a feature request: 11 days

PDFCreator: Consumption



PDFCreator:

- They picked a good problem to solve
 - Few other OSS solutions
 - Solved using a standard mechanism (printing)
- Developers seem responsive in forums and lists

Gaim

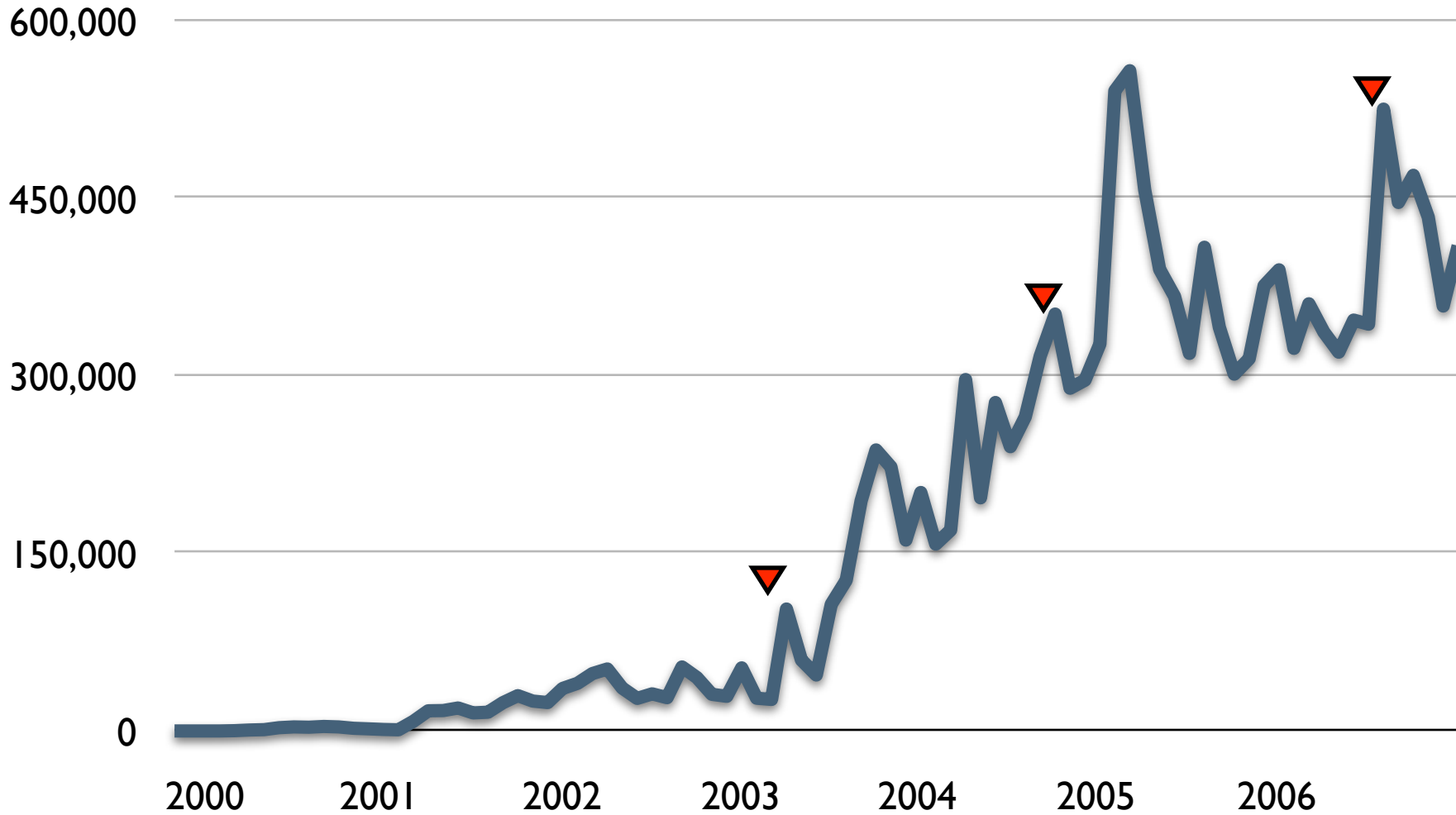
- Started in November of 1998
- Purpose:
 - To allow users to communicate using multiple instant messaging protocols
- Audience:
 - Desktop users
- Technologies / Standards
 - C, GTK

Gaim

- Developers: 24 (~12 core)
- Commits: 1998 (past 9 months)
- Releases: 107 total
- Average times...
 - to close a bug: 29 days
 - to close a patch: 16 days
 - to close a feature request: 21 days

Gain: Consumption

▼ Notable releases



Gaim

- They picked a good problem to solve
 - Many people use more than one IM protocol, many dislike the provided programs (or running more than one of them)
- Very regular releases
- Large community of contributors
- Plugin architecture
- Multiple supported platforms

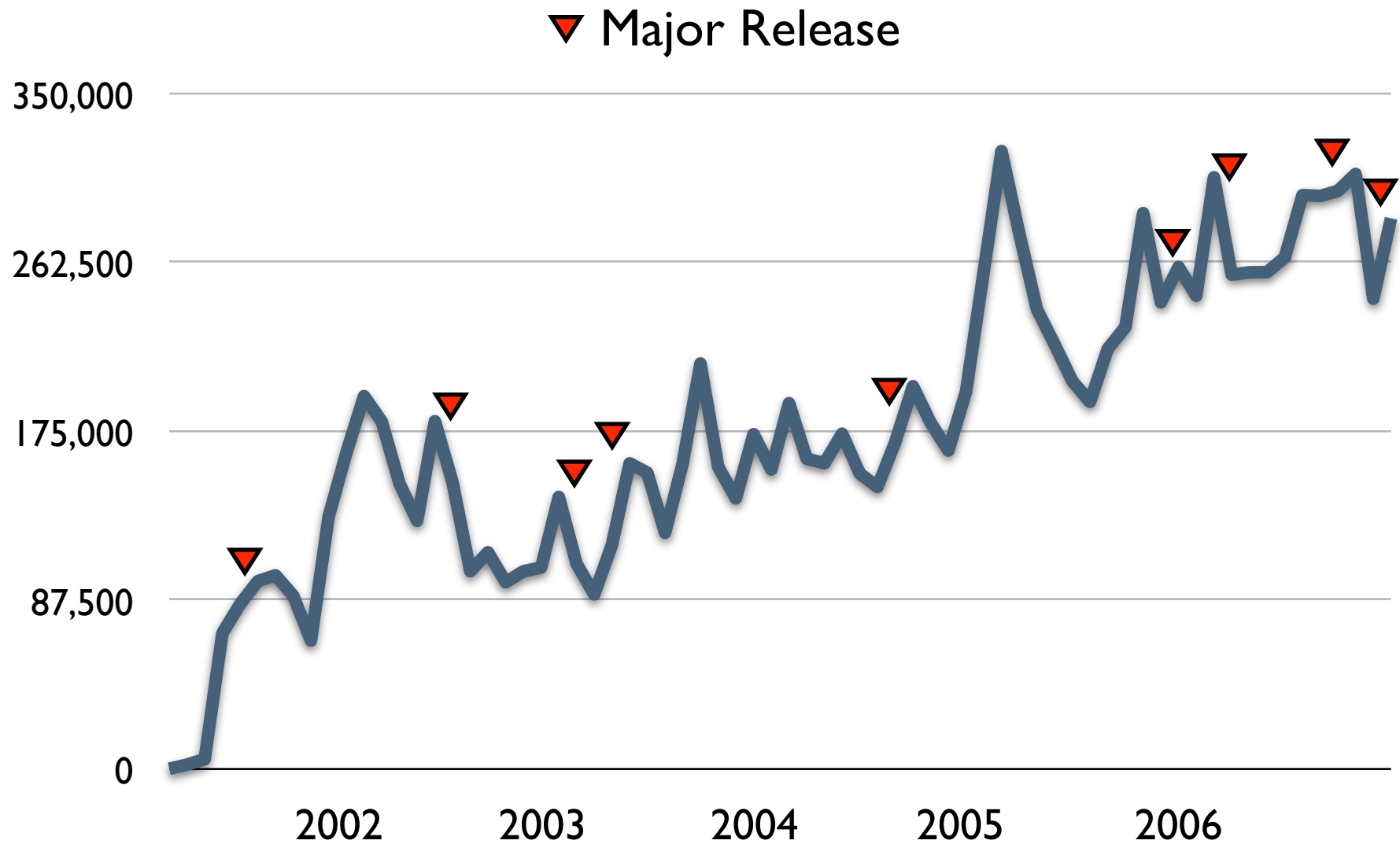
phpMyAdmin

- Started in 1998
- Purpose:
 - Web-based management of MySQL servers
- Audience:
 - Database administrators, developers using MySQL, system administrators, ISPs, education
- Technologies / Standards:
 - MySQL, PHP

phpMyAdmin

- Developers: 8
- Commits: 383 (past 9 months)
- Releases: 130
- Average times...
 - to close a bug: 47 days
 - to close a patch: 70 days
 - to close a feature request: 49 days

phpMyAdmin: Consumption



phpMyAdmin

- Easy to install
 - Minimal requirements
 - Simple process
 - Authenticates with MySQL
- Founders of current incarnation took over from the original project founder
- Has inclusion in Linux distributions

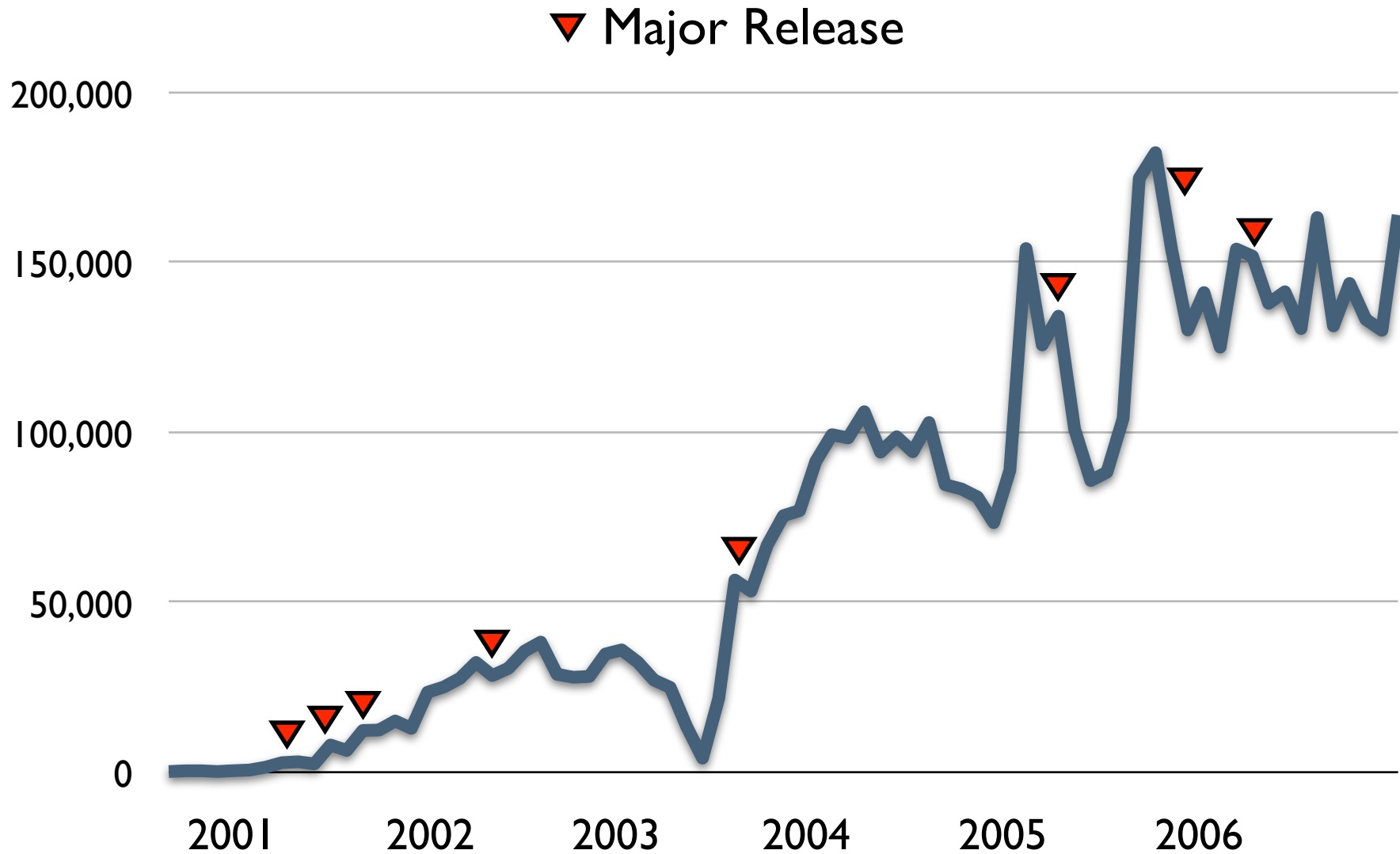
Gallery

- Started in July of 2002
- Purpose:
 - Web-based photo management
- Audience:
 - People who want to share pictures
- Technologies / Standards:
 - PHP, MySQL/PostgreSQL, Smarty, DAV
 - NetPBM, ImageMagick, GD

Gallery

- Developers: 22
- Commits: 2163 (past 9 months)
- Releases: 101 total
- Average times...
 - to close a bug: 30 days
 - to close a patch: 11 days
 - to close a feature request: 51 days

Gallery: Consumption



Gallery

- Lots of integration plugins
 - Mediawiki / Serendipity
 - Joomla / Nuke
 - iPhoto / Windows XP
- Developed using unit tests
 - People can run from SCM
- Pluggable modules and themes
 - Lots of ways to participate

What does a successful project do?

“Success is simply a matter of luck. Ask any failure.”
Earl Nightingale

Serves a good purpose

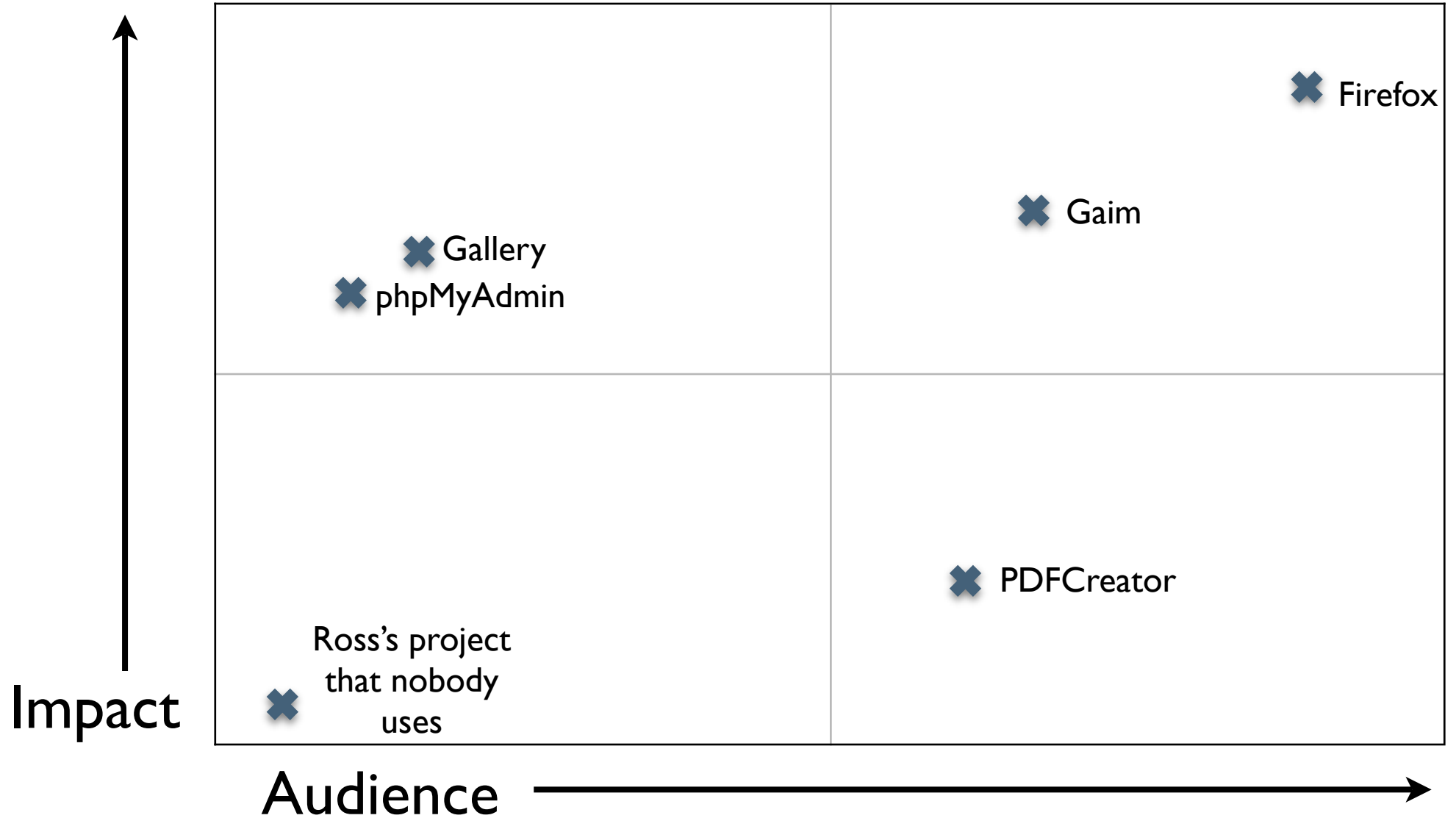
- Solves a new problem
- Solves an existing problem better

Is motivated by self-interest

- ...”got skin in the game”

Has a clear, basic objective

“Problem” matrix



Leverages:

- Existing standards
- Common technology

Is extensible by design

- There is a “jagged binding surface” for contributors

Follows up with outside contributors

- Closes out bugs, accepts patches, and implements features quickly

Uses good, easily accessible tools

- SCM, bug tracking, wiki, mailing list

Involves at least two developers

- Can cope with defect/patch workload

Releases early and often

Attracts outsiders to contribute

- Are the leaders willing to cede control?
- Are there plenty of things to work on?

Establishes groupies to monitor lists

Gets enough evaluators to ensure meaningful feedback

Accepts criticism graciously

Case Studies: Up-and-Comers

“A sobering thought: what if, at this very moment, I am living up to my full potential?”

Jane Wagner

Quantitative filters:

- Registered on SourceForge.net between 03/2006 and 11/2006 (19108)
- Achieved an 80-100% activity level (5611)
- Made more than one file release (2469)
- Consists of more than two members (291)

Qualitative analysis:

- The purpose must be clearly defined and audience size and impact must be sufficient
- The design should leverages currently accepted technologies
- Administrators must be responsive and helpful
- There should be ample opportunity to participate

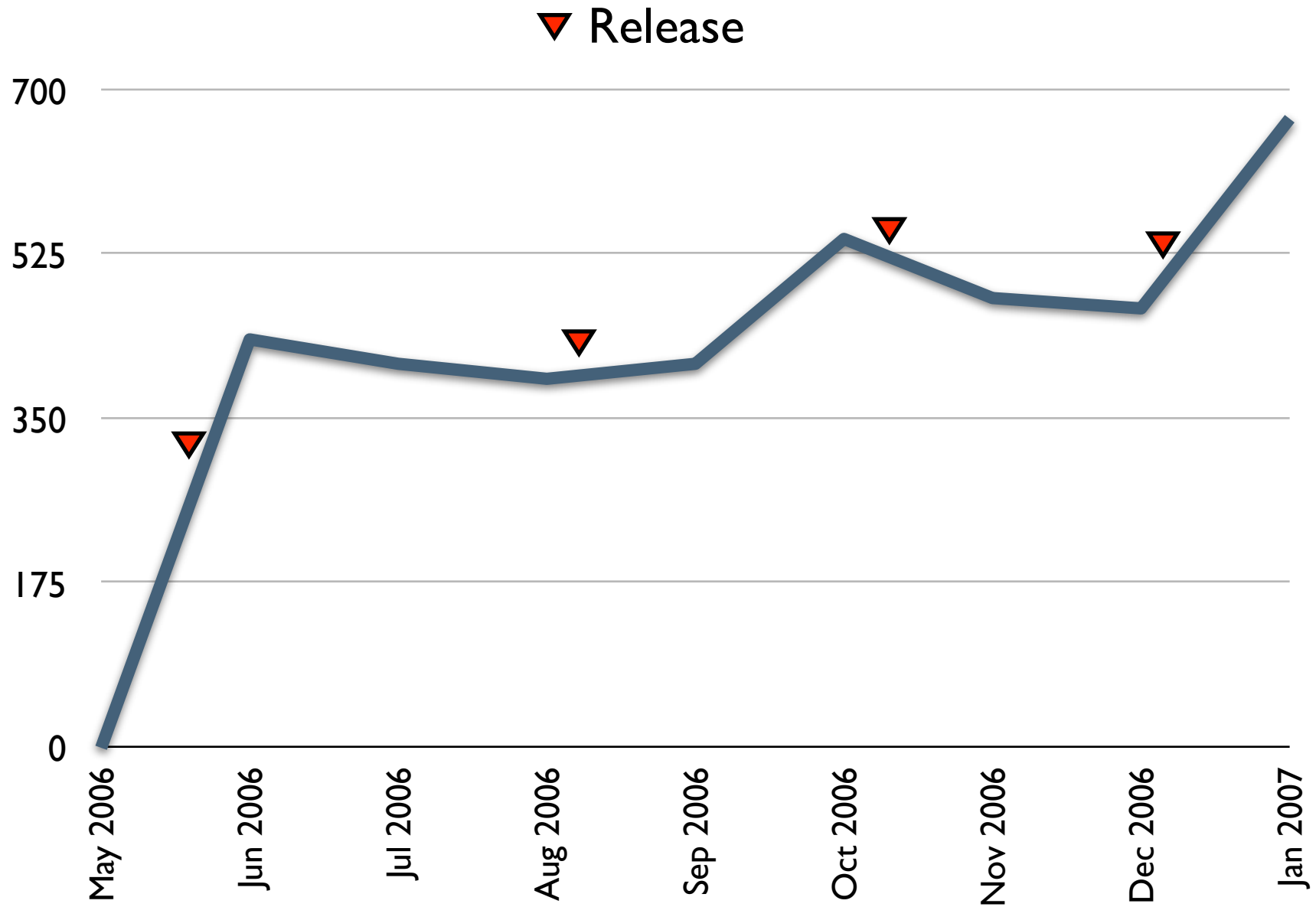
Seagull

- Started in March of 2006
- Purpose:
 - Command-line multiprotocol traffic generator
- Audience:
 - Quality assurance, network, and software engineers wanting to load-test
- Technologies / Standards
 - Diameter, TCAP, XCAP, HTTP, Radius

Seagull

- Developers: 7
- Commits: 200 (past 9 months)
- Releases: 4 total

Seagull: Consumption



Seagull

- Built primarily for telecommunications, but can be easily adapted for new purposes.
- Developers can contribute new protocols or scenarios
- Supported by HP

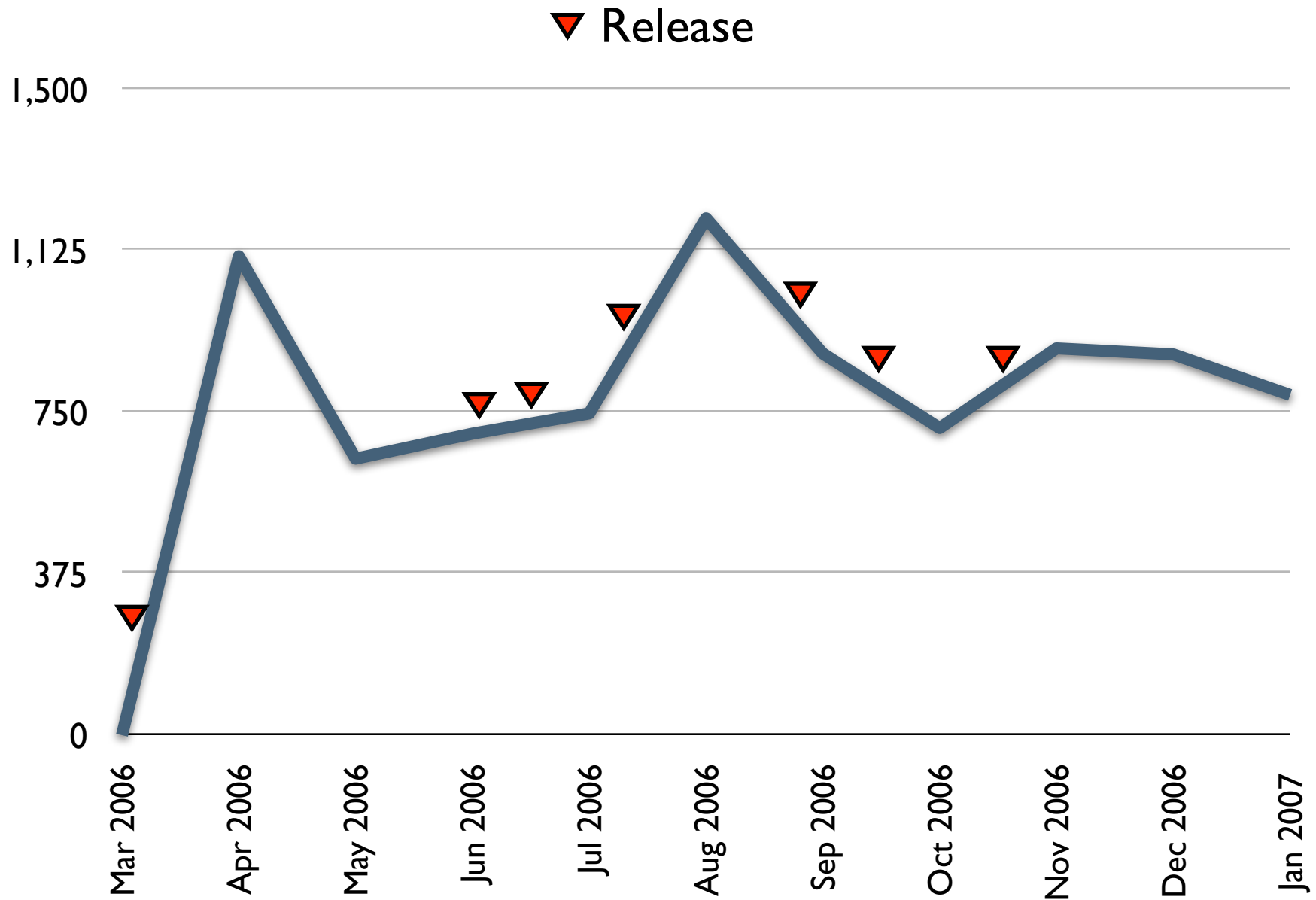
NetDirector

- Started in March of 2006
- Purpose:
 - Web-based systems management tool
- Audience:
 - System administrators needing to manage large numbers of systems or virtual machines
- Technologies / Standards
 - Java, Tomcat, PostgreSQL

NetDirector

- Developers: 5
- Releases: 4 total
- Average times...
 - to close a bug: 34 days
 - to close a feature request: 27 days

NetDirector: Consumption



NetDirector

- They've picked a good problem:
 - Virtualization is a trend, causing a potential increase in the number of systems that have to be maintained
 - Remote maintenance is more efficient
- Contributors can make plugins to manage services

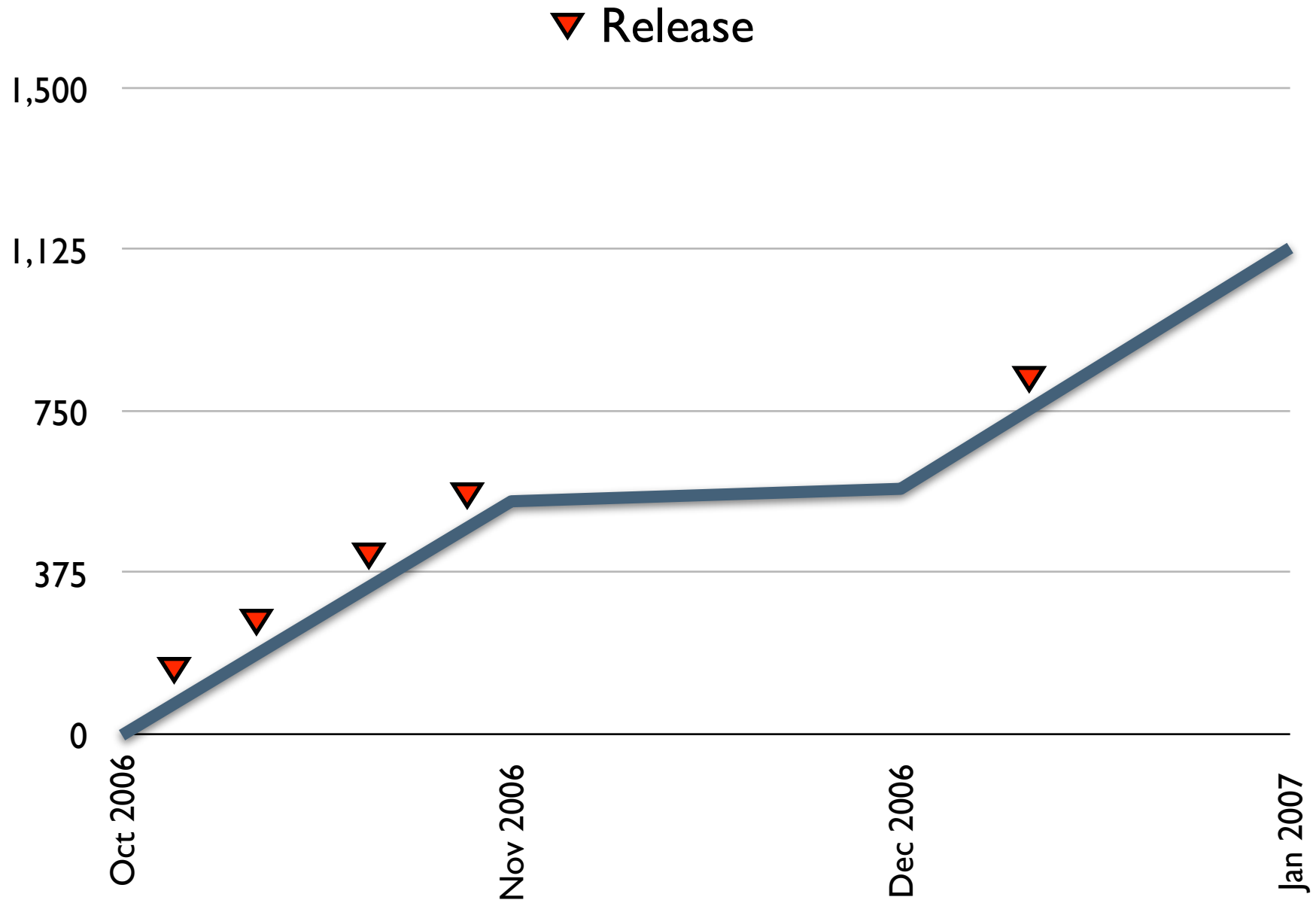
StatSVN

- Started in March of 2006
- Purpose:
 - Subversion activity analyzer
- Audience:
 - Developers and leaders who want to understand what's happening with their code
- Technologies / Standards:
 - StatCVS, Java, Maven, Subversion

StatSVN

- Developers: 3
- Commits: 127 (past 4 months)
- Releases: 5 total
- Average times...
 - to close a bug: 29 days
 - to close a feature request: 11 days
 - to close a patch: 2 days

StatSVN: Consumption



StatSVN

- They have chosen a good problem:
 - Subversion is gaining acceptance
 - Everybody wants to know how much work is being done!
- The implementation is good
 - Maintains local cache so it can be re-run
 - Reports are attractive and useful

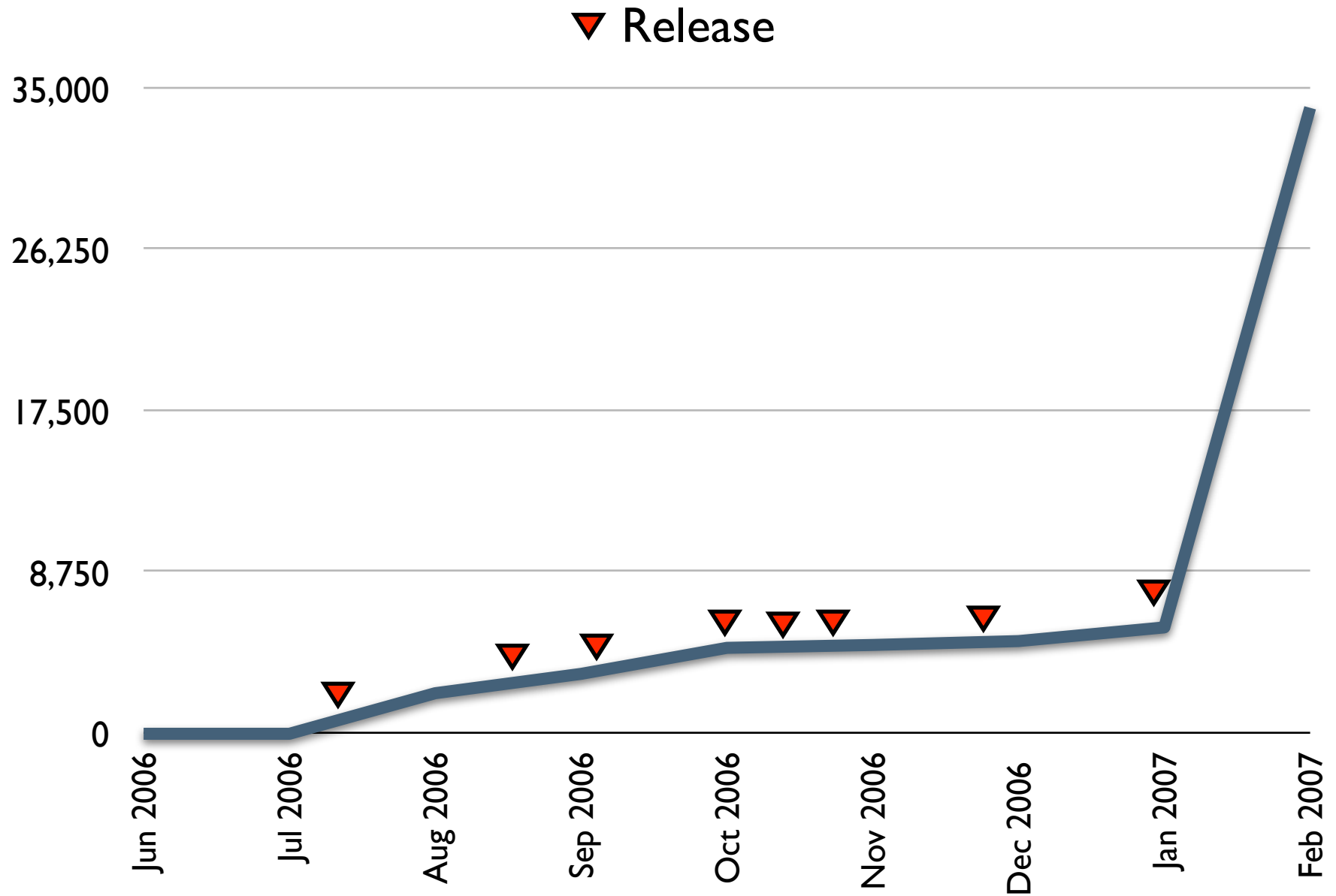
ODF Converter

- Started in June of 2006
- Purpose:
 - Allow Microsoft Word users to collaborate using the OpenDocument format
- Audience:
 - Word users who work with non-Word users.
- Technologies / Standards:
 - C#, ODF, XSL

ODF Converter

- Developers: 22
- Commits: 1610 (past 8 months)
- Releases: 8 total
- Average times...
 - to close a bug: 16 days
 - to close a feature request: 6 days

ODF Converter: Consumption



ODF Converter

- Problem is good:
 - OpenDocument is gaining acceptance
 - Other word processing packages are becoming more mature
 - Document sharing across different software packages is painful
- Some industry support - contributors include Microsoft and Novell

Talk to us!

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