Compiling Numeric Indicators for Xen Project Wellness

Summary of The Problem:

(1) It's Open Source

- No authoritative count of users or downloads are available
- Many mirrors in many forms with unlimited license to replicate means that an accurate count is simply impossible
- This is the classic Linux problem

(2) And now the Cloud

- Within a Cloud, one apparent "user" may represent hundreds or thousands of VMs
- This is the classic Amazon problem

The Solution Proposal:

Rather than counting items in order to have a definitive grasp on the size of the community, watch and interpret a variety of available metrics in order to determine the relative vector of the community over a period of time (e.g., developer participation appears to have increased in Q2 over Q1).

The metrics will need to be analyzed to create a conclusion, so there is some risk that the analysis may not appropriately reflect reality. For example, a drop in user participation in mailing lists could reflect users exiting the platform, or it could reflect the successful conclusion of multiple prolonged rollouts resulting in the relative quiet of satisfied users. So it is likely that we will need to compare multiple statistics from multiple sources and look for trends over time to assess the health of the project. So we suggest gathering the data monthly and reporting on it quarterly to the Board.

The Metrics:

- General Community:
 - Popularity Contest (aka "popcon") data from Debian and Ubuntu (kit downloads)
 - nothing similar available from any other distribution
 - Mailing list activity on xen-user (user interactions)
 - XenProject.org registrations (user website activity)
 - XenProject.org Newsletter subscribers (user website activity)
 - XenProject.org Q&A participation (user website interactions)
 - XenProject.org events (user-facing activities)
- Media (social and traditional) contacts:
 - Slideshare counts (people reviewing our presentation slide decks)
 - YouTube counts (people reviewing our recorded presentations)
 - Google+, Facebook, Twitter postings, responses, repostings (people responding to social media)
 - News clips (mainstream media talking about the project)

- Development activity:
 - Wiki page statistics (documentation development)
 - Mailing list activity on xen-devel (developer interactions)
 - Github metrics (code development activities)
 - Xenbits usage (code development)
- Ecosystem:
 - Statistics regarding vendors listed on XenProject.org (business interest around the project)
 - Number of official Project Members of the project (business partners of the project)