OpenStack Foundation
Legal Affairs Committee

Update to Foundation Board on Patent Cooperation Initiative

June 27, 2013
Three Options

1. No change
2. Patent Pledge (Google)
3. OIN-style cross license
Option 1: Change Nothing
Rely on Apache 2.0 Patent License Termination Provision

- **Patent License**: Contributors grant patent license to the Contributors’ claims that are necessarily infringed by their Contribution alone or in combination with the Work to which such Contribution was submitted.

- **Termination**: If a licensee of Apache-licensed code institutes patent litigation against any entity (including a cross-claim or counterclaim) alleging that the Work or Contribution incorporated in the Work constitutes direct or contributory patent infringement, any patent licenses granted to licensee by Apache 2.0 license for that Work shall terminate as of the date the litigation is filed.
Option 2: Google Open Patent Non-Assertion Pledge

- **Non-Assert**: Google has published a promise not to assert specific patents against users, developers or distributors of open source software (as defined by OSI or FSF); published March 2012 at [http://www.google.com/patents/opnpledge/pledge/](http://www.google.com/patents/opnpledge/pledge/)

- **Enumerated Patents**: Google has pledged 10 patents, all related to Map Reduce technology

- **Promise to Encumber Patents in Hands of Assignees**: Google promises to require any person to whom it assigns the patents to take the patents subject to the Pledge

- **Termination**: Google retains a Defensive Termination right as to any person who asserts any patent claim against Google or its affiliates
Option 2 Cont’d: Google Open Patent Non-Assertion Pledge

<table>
<thead>
<tr>
<th>Pledged Patents</th>
<th>Patent no. or publication no.</th>
<th>Title</th>
<th>Related technology</th>
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<tbody>
<tr>
<td></td>
<td>US 8,126,909</td>
<td>System and method for analyzing data records</td>
<td>MapReduce</td>
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<tr>
<td></td>
<td>US 7,755,919</td>
<td>Large-scale data processing in a distributed and parallel processing environment</td>
<td>MapReduce</td>
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<td>US 7,650,331</td>
<td>System and method for efficient large-scale data processing</td>
<td>MapReduce</td>
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<tr>
<td></td>
<td>US 7,590,620</td>
<td>System and method for analyzing data records</td>
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<td></td>
<td>US 2012/0278323</td>
<td>Joining tables in a MapReduce procedure</td>
<td>MapReduce</td>
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<tr>
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<td>US 2012/0254193</td>
<td>Processing data in a MapReduce framework</td>
<td>MapReduce</td>
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<tr>
<td></td>
<td>US 2012/0215787</td>
<td>System and method for analyzing data records</td>
<td>MapReduce</td>
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<tr>
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<td>US 2012/0320615</td>
<td>System and method for large-scale data processing using an application-independent framework</td>
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<td>PCT/US2012/030697</td>
<td>Processing data in a MapReduce environment</td>
<td>MapReduce</td>
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</tbody>
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Option 2 Cont’d: Google Open Patent Non-Assertion Pledge

Pros
- Ease of adoption
- Broad Defensive Termination (any patent attack, not just attack in areas covered by pledge)

Cons
- Small number of patents- no obligation to add more, and not clear if other significant patents are held back
- Industry adoption question - similar initiatives in past have not been widely adopted (2005 promise by IBM, Sun, CA)
- Pledge does not directly encumber the patents in the hands of the transferee; pledge recipients have recourse against Google if it fails to keep this promise, but no defense against subsequent patent holder
Option 3: OIN Style Cross License

- **Patent License and Release**: Each Licensee is granted a patent license and release under the patents of the other Licensees that are infringed by OpenStack code.

- **Licensee/Licensors**: The license may be used to cover not only Apache code contributors/licensors, but may also be used to cover other OpenStack members, participants and their patents.

- **Scope**: The license may be limited to only some or expanded to include all elements of the OpenStack code.

- **Patent Encumbrance**: The license directly encumbers the patents and survives transference to a subsequent third party owner of the patents.

- **Termination**: The license may be terminated for any Licensee that institutes (1) a patent litigation against another Licensee (including a cross-claim or counterclaim) that is (2) based on OpenStack code or a distributed product that performs substantially the same function as OpenStack code.
Language Models

- Google Open Patent Non-Assertion Pledge

- Open Invention Network Patent License
  [http://www.openinventionnetwork.com/pat_license_agreement.php](http://www.openinventionnetwork.com/pat_license_agreement.php)