

Numenta License Guide

Date: April 25, 2016

Overview

Numenta is a leading developer of machine intelligence technology called Hierarchical Temporal Memory (HTM). Our technology is provided both through an open source community (www.numenta.org) as well through a commercial licensing program. This document describes the current licensing program and will be updated as the program evolves.

Business Model

Numenta is a technology provider, not an application provider. Although we create example applications, we do not create go-to-market solutions for specific problem domains. Instead we license our technology and application code to developers, whether they are individuals, research organizations or companies that aim to create products based on our technology.

Included Technology

Our license includes all technology in our open source repositories as well as associated intellectual property. This group of directories includes NuPIC, the core HTM Engine code, the example applications (including the mobile clients), and the Numenta Anomaly Benchmark. We are continually updating and adding code to these repositories. In our license agreements, we make no promises as to when and how often the code will be updated. We reserve the right to not put all new technologies developed into the open source repository, although we expect that the bulk of what we develop will be included.



Types of Licenses

We have six different license types, as detailed in this section.

- 1. Open source license: AGPLv3
- 2. Trial license: non-open source license for experimentation no commercial rights
- 3. Start-up license: commercial license targeted to HTM focused start-up companies
- 4. Royalty license: commercial license option for established companies
- 5. Custom license for software and IP: commercial license if the above licenses are not good fits
- 6. Custom license for IP only: commercial license to use our IP for your own HTM implementation

Open Source License - AGPLv3

Developers are encouraged to use our technology within the open source project called NuPIC (Numenta Platform for Intelligent Computing) using the AGPLv3 open source license (www.numenta.org). The AGPLv3 allows broad rights to use the technology with the requirement that any distribution or use as a service requires the developer to release code under the same license. This structure allows developers to explore our technology without any additional legal or license work, and thus to determine a fit with their problem domain. The developer then has the option to stay within the open source structure or to apply for a commercial license. Open source developers may apply for a commercial license at any point in time.

Trial License

For those companies who are interested in exploring the use of our HTM technology, but have internal prohibitions against using AGPL code, we have created a Trial License. The Trial License allows experimentation outside of the open source license, but does not confer any commercial rights. The text of the Trial License can be found here:

http://numenta.org/licenses/trial/Numenta_Trial_License_1.1.pdf



Start-up License

The Start-up License is focused on companies who are formed with the explicit idea of commercializing HTM technology in a specific problem domain. Modeled after a university or research institute technology transfer structure, the license offers a broad general license in exchange for Numenta's 5% ownership in the new entity and a 2% royalty. The royalty is based on all revenues of the company, encouraging the company to use HTM in as many ways as possible.

The Start-up License structure offers several advantages to the start-up company. First, it requires no cash up front. In fact, cash payments aren't required until the earlier of two years or company profitability. Second, it aligns Numenta's objectives with those of the start-up company – we both benefit if the new company succeeds. Third, because the license offered is broad, the start-up can evolve in a way that makes sense given what they learn from customers – the company does not have to come back to Numenta for changes, such as to the definition of field of use or to expand a restricted geography. Finally, the license appeals to start-up investors because it has very few constraints on the company, enabling them to move as quickly as they are able.

Because of the amount of overhead associated with the Start-up License, Numenta is unable to offer it to everybody. Consequently, there is an application process, described later in this document.

Royalty License

For companies who have an existing business and cash flow, the Start-up License may not make sense. Specifically, the requirement for ownership as well as the royalty across all revenues may present a concern. Consequently, we offer the Royalty License as an alternative. The Royalty License has a higher royalty than the Start-up License at 5% and requires a minimum cash royalty of \$100,000/year (payable quarterly), but does not require equity. Like the Start-up License, the Royalty License is broad, but the basis for the license is only on HTM related revenue. We also require an application to qualify for a Royalty License.

Custom License for Software and Intellectual Property

If your needs do not fit either license category, we welcome discussions about a custom license. We understand that a royalty structure may not fit all applications. Custom license inquiries may be sent to sales@numenta.com.



Custom License for Software and Intellectual Property only

The HTM theory is both a general theory of cognition as well as the basis for machine intelligence. The NuPIC open source project is one implementation of HTM. We are confident that the ideas behind HTM can be implemented in many other ways. Certain implementations of HTM, such as creating custom microprocessor architectures, will require optimized versions of HTM. In these cases, developers may wish to negotiate a license for intellectual property only without using our software. Inquiries for IP licenses may be sent to sales@numenta.com.

A note to researchers: We are excited to promote the use of HTM for research and exploration. Consequently, we want to make clear that we will not assert our intellectual property against developers who are using our technology, including our intellectual property, for research purposes. If you are working on a non-NuPIC HTM implementation, you only need to engage in an IP license if you plan to use the technology for production or commercial purposes.

A Few Key License Terms

There are a few license terms that cut across all licenses that are important to understand.

- 1. Exclusivity we generally do not offer exclusive licenses. In exchange, we do not restrict our licensees to specific domains. That being said, we do not want to create an environment of having many licensees focused on the same area. We encourage licensees to explore areas that are not yet served by other licensees. We screen for area of focus in our application process rather than restrict people to domains in a legal document.
- 2. Support we offer some limited orientation and support for our technology. However, because we are not offering fully formed products, but rather technologies, we do not provide customization, integration, or other development services. We also cannot guarantee when or what will be updated in our technology.
- 3. Marketing we would like to showcase our licensee products, and would like them to showcase our technology. Consequently, we include in our license a joint marketing expectation. Companies who want to keep their applications secret may want to discuss a custom license with us.



License Application

As stated earlier, because of the legal, support and marketing relationship we have with our licensees, we have instituted an application process to qualify for the license. The following information is required:

- Name of company and names/contact info of principals
- Focus of expected HTM product
- Overview of company
- Resumes or LinkedIn pages of the principals
- Additional information for companies interested in the Start-up License (not required for the other licenses)
 - Two to four page business plan indicating capital structure, capitalization, investment levels, initial application development, distribution/marketing plans, planned spending
 - At least two business references of people who have interacted with you on a professional basis in the last few years – preferably one who has been a customer

This information can be sent to sales@numenta.com. Numenta commits to reviewing applications and responding with initial thoughts within 7 working days. Numenta reserves the right to determine whether to accept an applicant.

Following are the key criteria that will be considered to decide whether the application will be accepted:

- Is HTM technology a good fit for the problem being addressed?
- Does the company have a plan as to how to reach the intended market?
- What is the data source, and does the company have access to it?
- Is the business focus complimentary to other licensees?
- Are the principals proven entrepreneurs?
- What is the history and capitalization of the company?



FAQ

Why should I take a commercial license rather than use the open source license?

You are welcome to use the open source license as long as you follow the requirements of that license, which requires you to release your own code under the same open source license if you distribute (or host) for customers. For many developers, this license is all you will need.

Why do you require that the Start-up License is on all revenues, not just HTM related revenues? This license is tuned specifically for companies who are formed with the idea of commercializing HTM technology. We want to create an incentive to use HTM in any way that you can. We've lowered the percentage royalty deliberately with the idea that a very low royalty on all revenues would provide substantial incentive to use HTM as broadly as possible. We offer the Royalty License as an alternative for those companies who are not focused on HTM applications.

If I'm interested, what should I do first?

We encourage potential licensees to first spend time with our technology and the proposed problem domain in order to ascertain whether there is a fit. Developers can try their data on our technology either through using Grok for AWS custom metrics (soon to be offered by grokstream.com) or using our open source software either under the AGPLv3 or the Trial License. If you need help with your evaluation, we would be happy to post a query to our open source group to see if there are consultants available. Once you have some results, and are confident that you want to proceed, at that point it makes sense to apply. If you want to check with us as to area of focus, to understand whether there are other potential licensees focused on the same application, feel free to send a short inquiry to sales@numenta.com

Do you have any geographical restrictions as to who can qualify for licenses?

Other than compliance with US Export regulations, we do not restrict which geographies can apply, and our current licensee pipeline is from all over the world. Having equity ownership in non-U.S. companies can cause complexity, however, so depending on the Company's jurisdiction, you may want to apply for the Royalty License instead of the Start-up License. We also should note that we have no geographic territories in our license. You may market your application anywhere in the world.

I am a researcher in a corporate research lab. Do I need a commercial license to use NuPIC or HTMs in my research?

No. Researchers from academic institutions, research organizations and corporations may use NuPIC under either the AGPLv3 license or the Trial License. Researchers may publish results with an appropriate citation.



Numenta, Inc.

Example term sheet - Start-up License

Last updated: August 10, 2015

This document describes typical terms in a license agreement (Agreement) between Numenta and a startup company (Company) that is designing products around Hierarchical Temporal Memory (HTM). This document does not guarantee that a license will be granted to any particular company or person. Only a completed contract reflects a final agreement.

License to Company

Numenta will grant Company an unrestricted, global, non-exclusive, commercial source code license to all software in http://github.com/numenta and its associated intellectual property. This includes, but is not limited to:

- http://github.com/numenta/nupic
- http://github.com/numenta/nupic.core
- http://github.com/numenta/numenta-apps

The Agreement includes a right to sublicense as long as the technology licensed is bundled with Company technology, and Company technology is required in order to use the product (in other words, Company cannot just be a pass-through license of HTM). The Agreement allows Company to build derivative products and offer NuPIC and any derivative products to customers. The Agreement is not restricted as to field of use except that the license does not allow creation of or use with custom semiconductor applications. Company acknowledges that Numenta source code is available under the AGPLv3 license currently and that Numenta cannot restrict uses that are consistent with that license.

License to Numenta

Company will grant Numenta the right to use its product, at no charge, for Numenta internal operations, if applicable. In addition, Company will grant Numenta the right to demonstrate the Company product. Company does not grant any commercial or resale rights to Numenta.

Equity

As a condition of finalizing the Agreement, Company will grant Numenta interest in Company, equal to 5% of the outstanding equity on a fully diluted basis taking into account stock options, employee stock option pool, and convertible loans. The form of this equity interest (stock vs. warrants vs. options) will be mutually agreed. Numenta will not have representation on Company's board of directors, but will have full voting rates as to their shares. Company will not implement a multi-class voting structure without consultation with Numenta. Any termination of this Agreement will not



affect Numenta's ownership rights. If Company is an LLC, Numenta has the right to request conversion to a C-corp.

Royalty

Numenta will receive a royalty from Company as follows:

Amount: 2% of gross company revenues from all sources (consulting, services, products) and any technology (HTM or otherwise)

Term: starts on the earlier of two years from date of the Agreement or Company profitability on a GAAP basis.

Payable: quarterly within 30 days of end of quarter - standard reporting and audit rights

Support

Numenta will provide up to 5 hours of technical orientation either at our location or remotely through electronic means. Numenta will provide technical support for debugging and for understanding the source code during regular business hours, California time. Numenta will make commercially reasonable efforts to respond to technical requests within two business days.

Trademarks & Copyrights

If requested by Numenta, Company will use the Numenta "ingredient brand", *Intelligence by Numenta*, in a mutually agreeable place on the Company product, website and collateral materials.

Assignability

The license is not assignable except in the event of an acquisition by either party. In the case of an acquisition, the license is assumed and will be honored by the acquiring party.

Termination

The Agreement terminates in the event of Company not adhering to any terms in the Agreement, including not paying royalties, after a notice and 30 day cure period. In the event of Company's bankruptcy, Numenta may terminate the Agreement. Numenta cannot otherwise terminate the Agreement.

Company can terminate the Agreement without cause with a 90 day notice period.

Marketing Rights

Both Company and Numenta will issue a press release announcing the Agreement with wording to be mutually agreed. Both Company and Numenta may reference the relationship in their marketing materials, including web sites, subject to compliance with trademark and other marketing guidelines.



Information Rights and Royalty Reporting

Within 30 days after the end of each quarter, and within 90 days after the end of Company's fiscal year, Company will provide Numenta an income statement, balance sheet and royalty report, all in accordance with GAAP. The full fiscal year financial reports must be audited by a certified public accountant.



Numenta, Inc.

Example term sheet - Royalty License

Last updated: August 10, 2015

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License to Company

Numenta will grant Company an unrestricted, global, non-exclusive, commercial source code license to all software in http://github.com/numenta and its associated intellectual property. This includes, but is not limited to:

- http://github.com/numenta/nupic
- http://github.com/numenta/nupic.core
- http://github.com/numenta/numenta-apps

The Agreement includes a right to sublicense as long as the technology licensed is bundled with Company technology, and Company technology is required in order to use the product (in other words, Company cannot just be a pass-through license of HTM). The Agreement allows Company to build derivative products and offer NuPIC and any derivative products to customers. The Agreement is not restricted as to field of use except that it does not allow creation of or use with custom semiconductor applications. Company acknowledges that Numenta source code is available under the AGPLv3 license currently and that Numenta cannot restrict uses that are consistent with that license.

License to Numenta

Company will grant Numenta the right to use its product, at no charge, for Numenta internal operations, if applicable. In addition, Company will grant Numenta the right to demonstrate the Company product. Company does not grant any commercial or resale rights to Numenta.

Royalty

Numenta will receive a royalty from Company as follows:

Basis: Royalty applies to gross revenue, before deductions, from all products, solutions and services that include HTM or the ideas associated with HTM (including consulting, maintenance, support contracts, etc.).

Amount: For up to US\$20 million annual revenue (of HTM related products and services), royalty will be 5% of that revenue on the basis described above (i.e. up to US\$1M in annual



royalties). For the amounts over US\$20 million in annual revenue, royalty will be 3% of gross revenue for those sales in excess of US\$20million.

Minimum royalty: US\$100,000/year, paid at a rate of US\$25,000 per quarter Reporting and payment: Within 30 days after the end of each quarter, Company will provide to Numenta, along with the royalty payment, a royalty report that includes sales volumes by type (product, consulting, etc.), minimum royalty and actual royalty calculation. Standard reporting and audit rights.

Support

Numenta will provide up to 5 hours of technical orientation either at our location or remotely through electronic means. Numenta will provide technical support for debugging and for understanding the source code during regular business hours, California time. Numenta will make commercially reasonable efforts to respond to technical requests within two business days.

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Termination

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