

Labs64 NetLicensing - Innovative Licensing Solution

NetLicensing is a first-class solution in the Licensing as a Service (LaaS) sector. Based on open standards, it provides a cost effective, integrated and scalable license management solution for software vendors and developers who want to concentrate on their product's core functionality instead of spending resources on developing an own license management software. NetLicensing allows vendors and developers to enable license management for their new or existing products right away and with minimum effort.

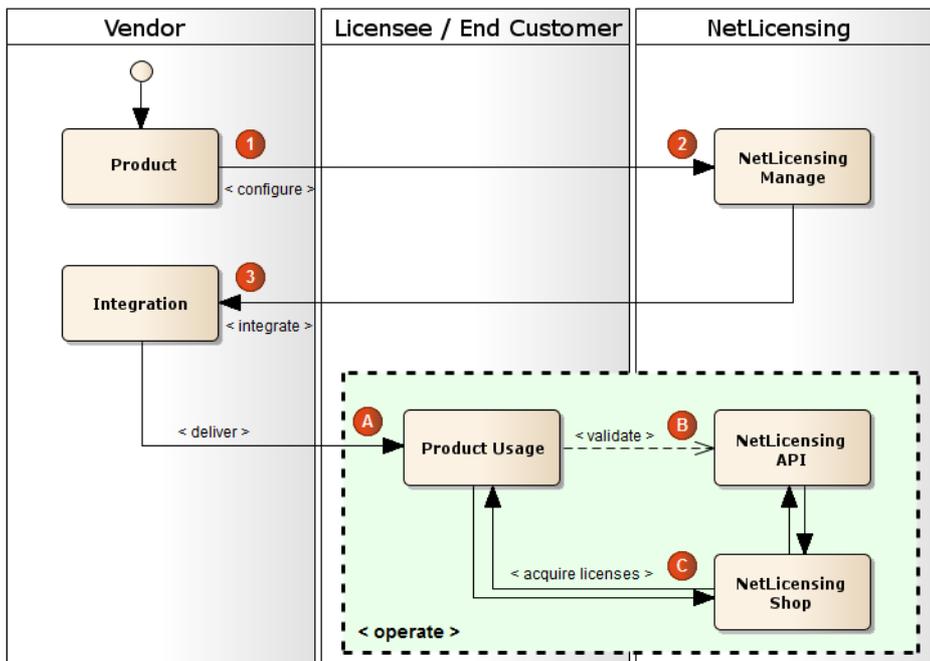
Motivation

In the past few decades, various new businesses have rose based on innovative technologies such as virtualization, mobile devices, and, of course, the Internet. Traditional "off-the-shelf" sales and licensing have become too limiting and new approaches are required. Today, online selling and licensing is a de-facto standard.

Behind the online shops, subscription services, rentals, and sales of physical goods, an extensive and reliable infrastructure is required, comprised of servers, service personnel, payment processing and data services. Implementing such an infrastructure requires a significant amount of time and cost.

The solution is Labs64 NetLicensing. It lets you set up new and flexible product and software licensing models on demand, and gives you a reliable and secure service which is easy to manage.

Workflow



As a vendor, you need just three steps to integrate NetLicensing into your product. Once the product delivered to customers, the customers can purchase their licenses directly at

NetLicensing Shop, without the need of further vendor intervention. Payments for the licenses are credited directly to the account of the product vendor through the payment service built into NetLicensing Shop. Alternatively payment may be processed by the vendor directly, in which case vendor creates and assigns the licenses using the NetLicensing management console or the process of license creation can be automated using NetLicensing API.

Integration steps

- 1) Formulate your licensing needs: identify product modules that may need to be licensed separately, define license types and find appropriate licensing models.
- 2) Log in to NetLicensing Manage (sign up if not having an account yet) and create desired licensing configuration. You can get back to NetLicensing Manage at any time to alter your configuration or monitor the licenses.
- 3) Link your product with NetLicensing by implementing calls to the NetLicensing API. Actual licensing information for particular licensee is returned by a single 'validate' call, which is a minimum required for service operation. Returned licensing information is already processed and conveniently formed for direct use in your product's business logic.

Operation steps

- A) Deliver your product or service to customers, assigning a unique licensee identity to each customer. This unique identity is referred as "Licensee Number".
- B) Using the assigned Licensee Number, your product will query via NetLicensing API (see Integration step 3) the actual licensing state of that customer.
- C) In case you decide your customers purchase licenses on their own, your product lets customers to visit NetLicensing Shop for obtaining new licenses. Payment integrated in NetLicensing Shop takes over the complexity of multiple individual monetary transactions.

NetLicensing Object Model

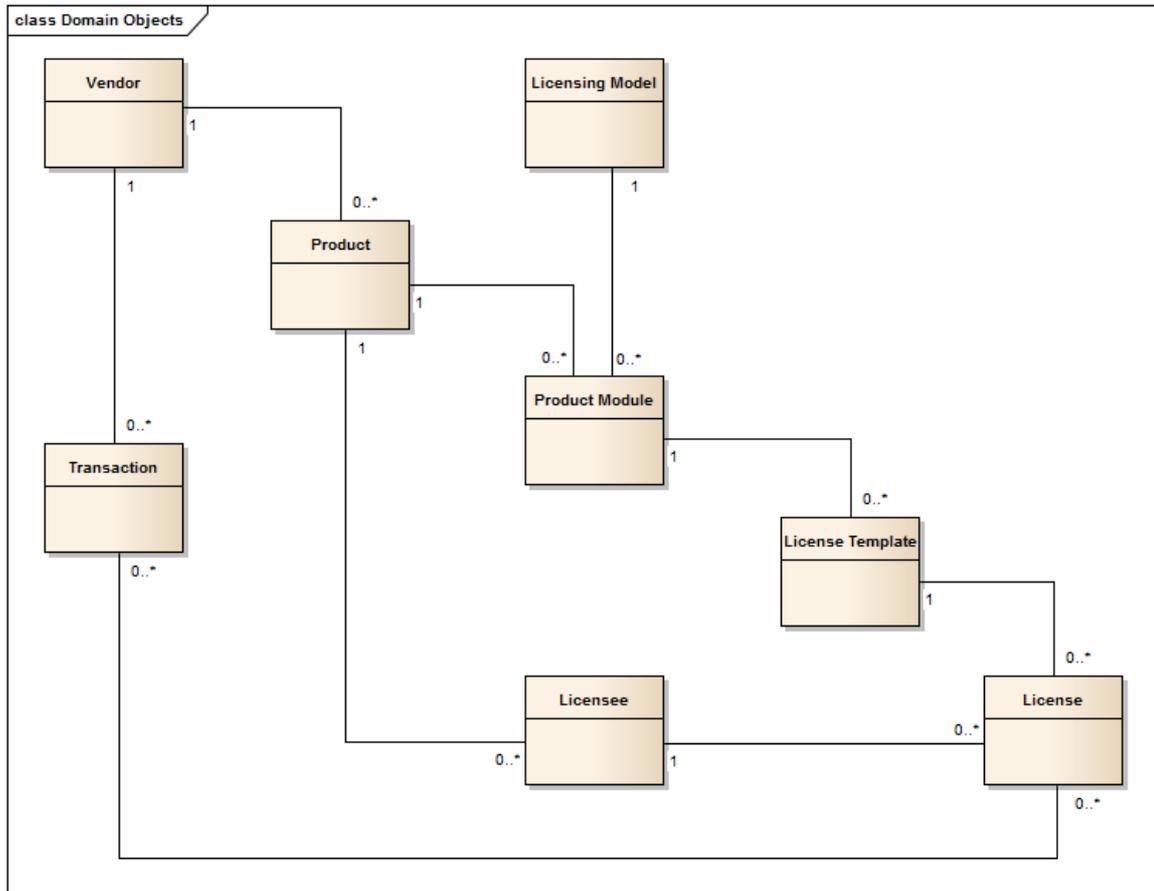
Understanding of various NetLicensing entities and relations between them is crucial in order to design proper licensing scheme for a product.

Vendor

Vendor is a licensor that uses NetLicensing service for managing the licenses for his products. Vendor registers with NetLicensing by opening an account. Vendor configures his products and desired licenses within the NetLicensing service via NetLicensing Manage. Besides, vendor has to integrate NetLicensing service into his products by means of NetLicensing API.

Product

Product of the vendor within NetLicensing. Usually it corresponds to an actual product of the vendor, but variations possible - in some cases it may be feasible to configure two or more separate products within NetLicensing for a single actual product of the vendor. Licensing rules are defined for each product individually, products are completely independent of each other in terms of license management.



Product Module

Product may comprise of multiple modules, but must have at least one. Each module is licensed using one of the licensing models offered by NetLicensing service. Licensing within a module is independent of other modules, however all modules belonging to a product are visible to every licensee of the product.

License Template

License template is a configuration element that is bound to a module. License templates define concrete items available for obtaining by a licensee, specifying what is an item, its price, amount (if applicable), etc. Actual licenses created off these templates are then given to licensees.

Licensing Model

Licensing model is a set of rules and algorithms that define how to process the licenses obtained by a licensee. A number of licensing models is supported by NetLicensing service, see below.

License

Licenses are cloned off the corresponding templates when a licensee obtain them. Licenses always belong to a certain licensee. Collection of all licenses that belong to a licensee are processed by a licensing model(s) on validation request (sent via NetLicensing API), and the validation result is then sent back for further processing on the vendor/end user side.

Licensee

Licensee is usually an end customer, capable of obtaining licenses for the product. From the technical perspective a licensee may correspond to a physical instance of the product, customer account within a vendor's service, or it can be associated with an USB dongle with unique id. In practice, a licensee must only have a unique identifier associated with it, that is communicated to NetLicensing for performing operations related to this licensee. Licensee doesn't need to have an own account within NetLicensing. There are two main operations performed for licensee: validation and obtaining new licenses. Validation process is typically completely transparent to the licensee and performed from the product by means of NetLicensing API. Licensee can be offered to obtain new licenses for the product by redirecting him to the NetLicensing Shop in web browser.

Transaction

Transaction is created each time a new bunch of licenses is obtained by a licensee. It can be either a direct purchase by a licensee via NetLicensing Shop, licenses can be given to a licensee by a vendor, or assigned implicitly by NetLicensing if it is defined so by some license model (e.g. evaluation license may be given automatically). All these events are reflected in transactions.

Licensing Models

Licensing model is a set of rules and algorithms that define how to process the licenses obtained by a licensee. Licenses in turn may be of various types, such as Evaluation, Single-user, Time-limited, etc. With NetLicensing you have a choice of ready-to-use licensing models that can be used in any combination within a single product. Besides, NetLicensing has an open architecture that allows easy extension with new licensing models, thus customized licensing models may be developed to suit your unique business needs and goals. Currently NetLicensing supports the following three licensing models:

Try & Buy (Time Limited Evaluation)

Try & Buy licensing model reflects a very common scenario when a product is first provided free of charge in demo or evaluation mode for a limited period of time. After evaluation time has expired, the product use in evaluation mode is no more allowed. As soon as product is purchased, it switches to an unlimited full-featured mode.

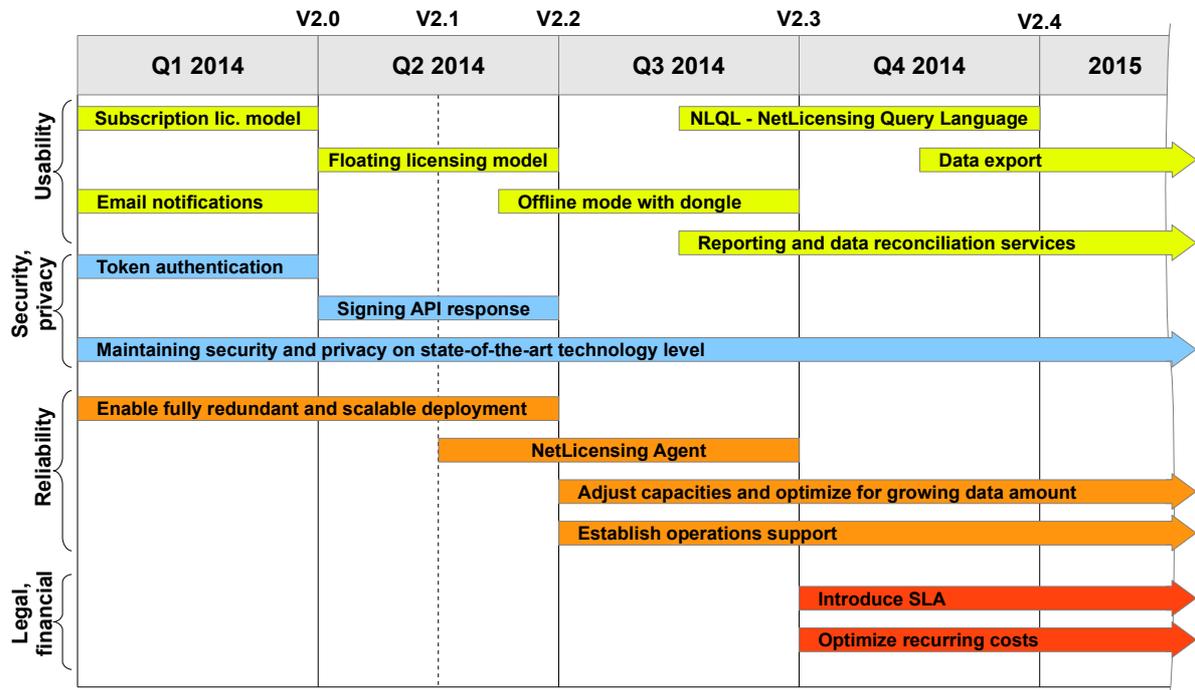
Subscription (Time Volume)

Subscription licensing model reflects a typical subscription scenario, where the use is permitted for a certain period of calendar time and can be extended on demand. Optional free license may be configured that will be automatically provided to all new licensees for evaluation purposes. Validation shows if the use is permitted for a licensee at the time of validation, and the date when the cumulative licensed period for all purchased licenses expires.

Rental (Feature with TimeVolume)

Rental licensing model is an extended version of subscription, useful in the case you want to license (rent out) multiple instances of an item or feature, each instance for a certain period of time.

Development Roadmap



A number of features not available in NetLicensing as of today are planned for the future development:

- **Signing the API response:** NetLicensing API is relying currently on SSL encryption for secure communication between the client and the NetLicensing server. However, for improved security, server replies in addition will include salt and will be digitally signed. This would allow the client to verify the authenticity of the reply no matter how it was transferred.
- **Floating licensing model:** New licensing model will introduce new type of licenses that can be shared by multiple license holders and allow checkout / checkin behavior.
- **NetLicensing Agent:** NetLicensing Agent will improve reliability of the service by enabling service operation also in situations where connection to the main NetLicensing server is not available for any reason.
- **Licenses delivery via dongle, offline mode:** In combination with NetLicensing Agent, this feature would allow full operation of the NetLicensing in offline mode, with licensing information stored on a secured dongle.
- **Reporting:** Reporting allows gathering of statistical information about product usage and other activities seen by NetLicensing during operation.
- **NLQL – NetLicensing Query Language:** Domain-specific request language for flexible filtering and search of the entities. This becomes increasingly desirable feature as number of entities, in particular licensees, licenses and transactions grows over time, and finding quickly particular entity by simple browsing is difficult.