

Flexible Licensing – Context, Backups and other use information

As part of the transition from our older legacy license manager to the new Flexible Licensing mechanism that we introduced with LumenVox 11, we've made a number of changes including:

- Simplified our license definitions. All licenses (and license servers) now have an attribute that we call "Context".
- Contexts available are:
 - **Production** – Production licenses are for use on production systems and may only be loaded on production context license servers.
 - **Backup** – Backup licenses may only be loaded on backup context license servers. Backup licenses are associated with parallel production licenses and may only be used when the primary production licenses are unavailable. Our flexible license servers report license usage including the simultaneous use of production and backup context licenses.
 - **Development** – Development Licenses are granted under the N.F.R. clause (Not for Resale or Commercial Use) of our EULA and are only for development and testing purposes. They can only be loaded on a development context license server and may not be used for either production or backup purposes.
- License and License Server "Context" must match for licenses to be assigned to a given license server.
- We consolidated "Hot" and "Cold" backup licenses into "Backup Licenses".
- Any given LumenVox installation may only have one (1) production context License server or one (1) development context license server and may have one (1) or more backup context license servers associated with that production or development context license server.
- We have automated the process of retrieving licenses from LumenVox by the local license server. By default, the local license server attempts to connect to any one of the LumenVox License nodes in the cloud to:
 - Retrieve any new licenses that have been newly purchased or transferred to this license server from another.
 - Remove any licenses that may have been transferred to another license server or expired.
 - Update the software maintenance date on any installed licenses, if needed.
 - Report license usage at a summary level. No individual call details, or personally identifiable information is passed during any exchanges between License Servers and the Flexible Licensing Nodes - only summary license usage information is sent, and in return an updated list of available licenses for that server is returned.
- The local LumenVox License Server must be able to connect to the LumenVox License Nodes in the cloud, as described in our Knowledge Base.
- The frequency of those connections is configurable.
- Licenses are no longer tied to physical hardware attributes like MAC addresses or CPU IDs. Individual license deployments are identified by a unique GUID (Globally unique identifier) that looks something like this: {DF9960A1-7BD5-633B-F0F4-B1470BBD0B8E}. This makes it simpler for you to virtualize your LumenVox installation or deal with restoring failed physical or virtual servers. Only one instance of this GUID (and its associated licenses) may be in use at any given moment.

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- The LumenVox Media Server (or any other product using LumenVox licenses) keeps a local cache of the available licenses. When a license is needed/requested by the Media Server, the local cache is checked and updated. Every two seconds, it updates this cache from the License Server. This update is a background process.
- When the Media Server cannot connect to the primary License Server to update its local cache, it then attempts to connect to a backup License Server (if configured) to do the update. If it cannot connect to any License Server for two minutes, it then flushes its local cache and will not allow new license requests. Once it reconnects with a License Server (primary or backup) it will commence allowing license requests.
- This means all license requests are handled locally on the Media Server and do not traverse a network connection. The network traffic between the Media Servers and License Servers are usage updates and license cache updates. Any latency in that traffic will not affect the speed at which license requests are handled.
- The Media Server will allow up to 10 seconds of network delay with the primary License Server before attempting to use the backup License Server instead. Once per day, the License Server will communicate with the hosted LumenVox License Nodes, to update usage information, and check for license updates. The frequency of this communication is configurable by LumenVox, depending on customer needs and network setup; this can be made less often. Contact LumenVox Support to request a change to this frequency.
- If the license server cannot contact LumenVox, it will keep trying each day. If no communication can be made for approximately 60 days, then it will remove its licenses until a connection can be made. The exact number of days that no communication is allowed depends on many factors, but it is never less than 60 days.
- Please note that GUID values must be unique per server, and should not be used on multiple machines. Each individual license server instance requires its own unique Server ID (and related licenses)
- If multiple machines need to be configured to use flexible licensing (requiring additional flexible License GUIDs), users should contact LumenVox Technical Support for assistance.
- Similarly, if License GUIDs need to be reassigned or the distribution of licenses adjusted to other License Server machines, users should again contact LumenVox Technical Support for assistance with this.

We have also introduced a new web based management interface that we call the [LumenVox Dashboard](#) that is used to:

- Initially configure the local license server with its Server ID (or GUID)
- To ask the local license server to instantly sync or re-sync with the Flexible Licensing Nodes that we maintain in the cloud.
- To view the available licenses, including license specifics such as the software maintenance expiration date for all locally installed licenses.
- Make configuration and installation easier with a set of configuration editing, monitoring and diagnostic tools all in one convenient user interface.

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For additional details, you can refer to the following articles in our online Knowledgebase:

- Flexible Licensing Overview
<http://www.lumenvox.com/knowledgebase/index.php?/article/AA-02004/0/>
- Registering the Flexible License Server
<http://www.lumenvox.com/knowledgebase/index.php?/article/AA-02031/194/>
- Firewall Configuration
<http://www.lumenvox.com/knowledgebase/index.php?/article/AA-02084/>

With the introduction of LumenVox 14.1.100 (January 2016) we no longer offer the option of using our older legacy license mechanism for new deployments or new customers. We have retired the legacy license system.

Sample Data to/from LumenVox License Nodes

The files below contain samples of the data traffic between the local LumenVox License Server and the LumenVox License Nodes in the cloud.



UsageLicenseSample
Upload.txt



UsageLicenseSample
Download.txt

Note that no individual call details, or personally identifiable information is passed during any exchanges between License Servers and the Flexible Licensing Nodes in the Internet - only summary license usage information is sent, and in return an updated list of available licenses for that server is returned.