# 4 - Use of LexEVS Java API on EVS Servers

The next sections cover the following topics.



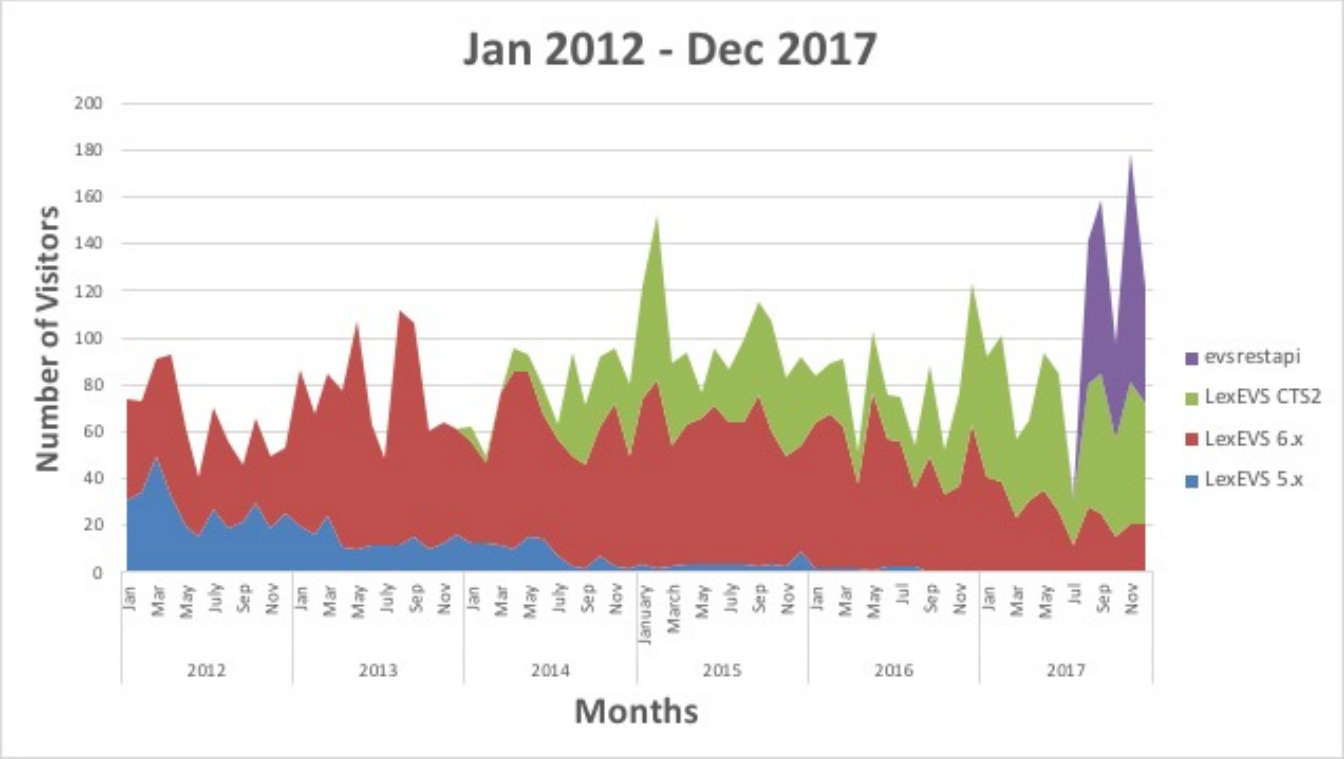
## Statistical Overview

The LexEVS Distributed (Remote) Java API has averaged 70 "visitors" a month for all production versions combined, generating 500 visits monthly with an average length of over 30 minutes. Applications that latch onto the API and maintain contact will count as a single visit, accounting for the substantial number of long visits.

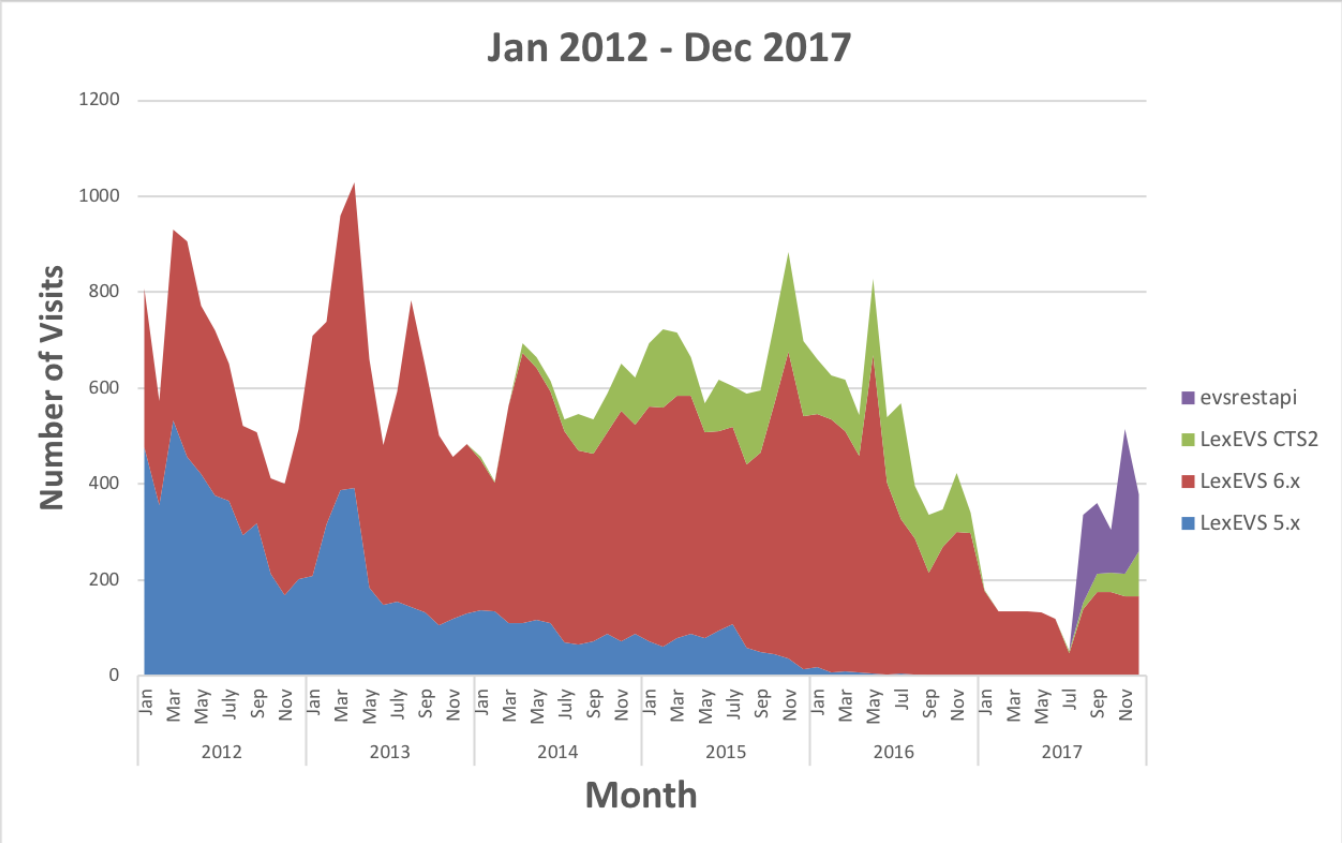
In 2014 EVS introduced the LexEVS CTS2 service - a REST interface into the EVS data.  This service saw growing use over the last three years.

The 5.1 API was deprecated and phased out after October 2015.  LexEVS 6 APIs all now point to the most recent release, and users are encouraged to use the more generic LexEVS6 addresses.

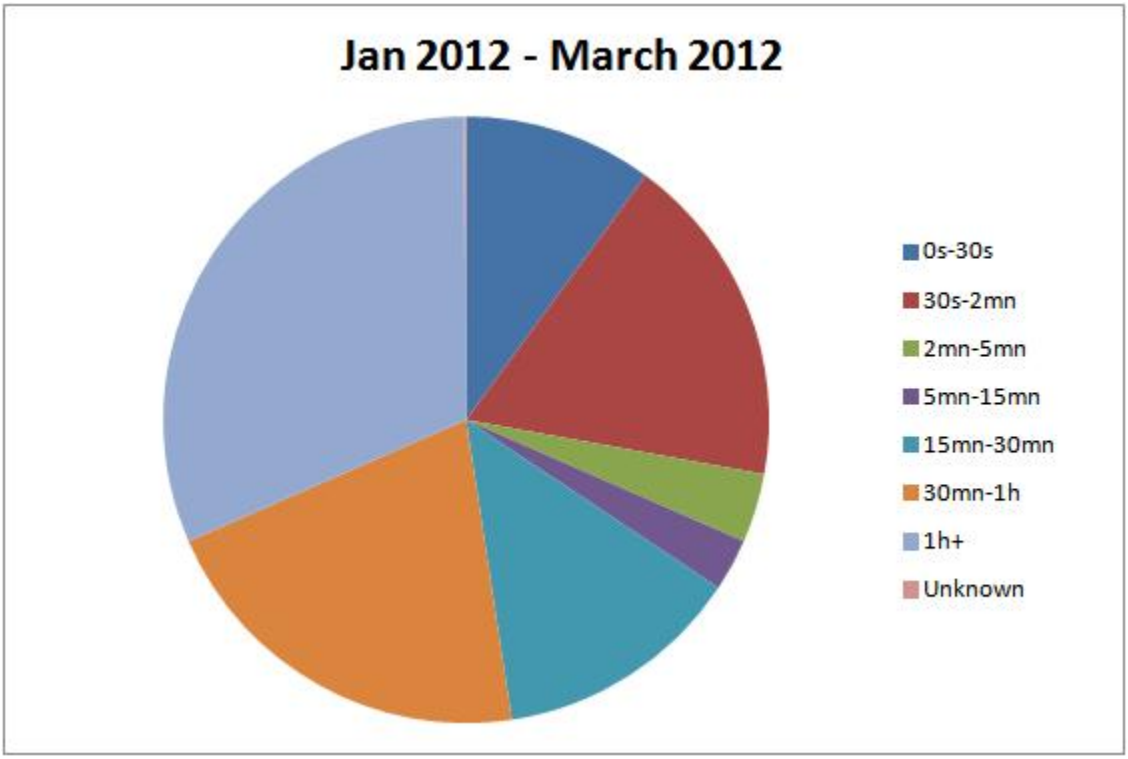
**Unique visitors to LexEVS Java APIs per month**



**Number of visits to LexEVS Java APIs per month**




**Duration of visits to LexEVS Java APIs**



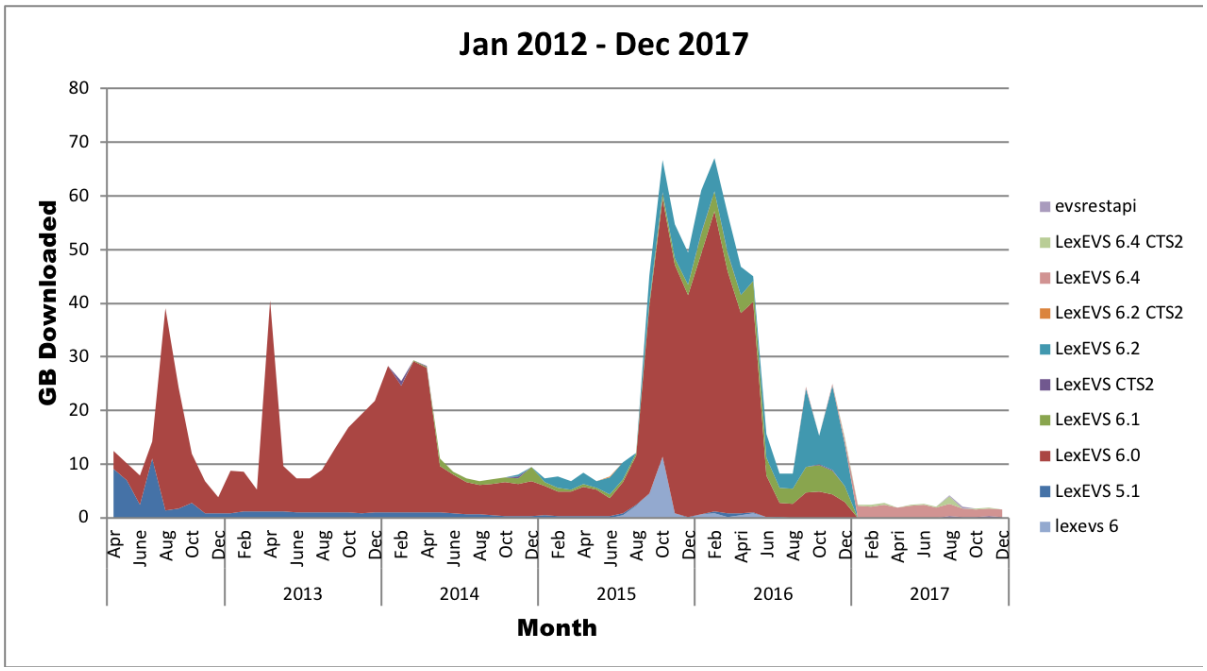

The table below shows the raw data on visit duration used to generate the pie chart above. The statistics program recorded how long each visitor spent connected to an API and dropped it into one of 8 time categories. The number in each category for each API was then totaled and displayed as a percentage pie chart.

**Number of visits to the LexEVS APIs by duration (used in pie chart above)**

| Duration | LexEVS 4.2 and 5.0 | LexEVS 5.1 | LexEVS 6.0 | Total |
|---|---|---|---|---|
| 0s-30s | 116 | 159 | 125 | 400 |
| 30s-2mn | 205 | 283 | 216 | 704 |
| 2mn-5mn | 9 | 36 | 101 | 146 |
| 5mn-15mn | 33 | 44 | 33 | 110 |
| 15mn-30mn | 149 | 180 | 196 | 525 |
| 30mn-1h | 224 | 339 | 263 | 826 |
| 1h+ | 231 | 674 | 340 | 1245 |
| Unknown | 1 | 3 | 1 | 5 |

Below is a chart of the bandwidth of data pulled from the various APIs for the past year, measured in gigabytes. The 5.1 API is deprecated and its usage is low. Some CBIIT projects being released in Fall 2015 draw heavily on the APIs, further increased as they went through QA, but activity continues well above the previous baseline seen before June 2015 as these new projects take advantage of the LexEVS 6.x capabilities.

**Data downloaded (GB) via LexEVS APIs per month**



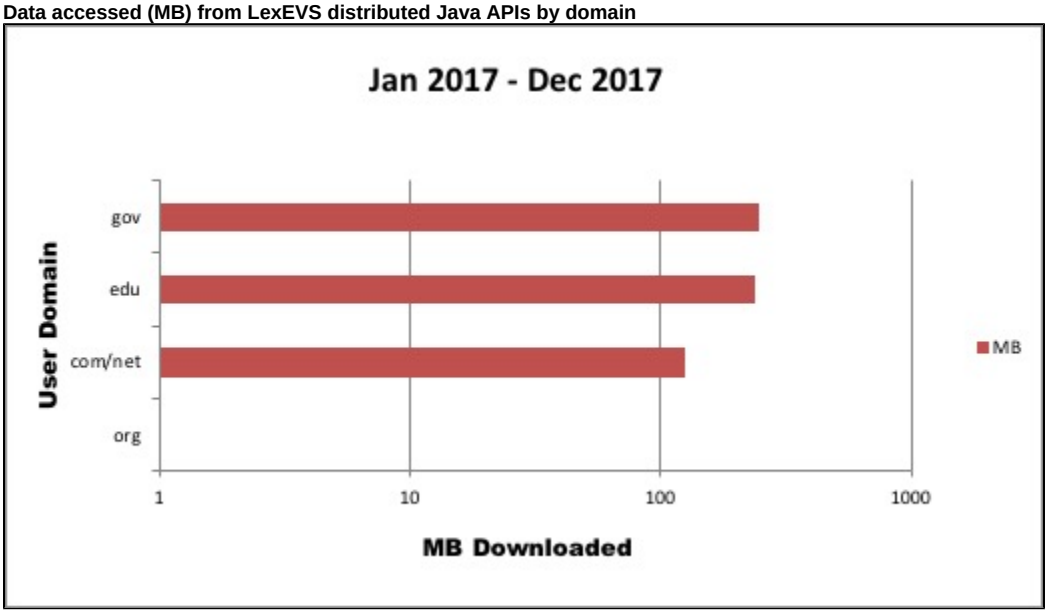

## LexEVS Java API Users

Use of the LexEVS Java API requires programming knowledge and an effort to understand the LexEVS model. This results in a much smaller user base than for the EVS browsers, but these users are often important NCI, NIH, and external applications that in turn reach a much larger user base. Data below cover the months from January - December 2015, and show that the primary users of the API are within the .gov domain. The .edu,.com/.net and .org users are mostly a small subset of top users of other interfaces, but are too sparse to make separate breakdowns useful.

**Data accessed (MB) from LexEVS distributed Java APIs by domain**

| Domain | MB |
|---|---|
| gov | 1156 |
| com/net | 753 |
| edu | 380 |
| org | 0 |

**Data accessed (MB) from LexEVS distributed Java APIs by domain**




## Users from .gov domain

The highest-volume users are within NCI. The next largest group of users are those within NIH for whom more specific affiliation could not be determined.

**Top .gov LexEVS distributed API users: Data accessed (MB)**

| Entity | MB |
|---|---|
| National Institutes of Health | 1143 |
| DEPARTMENT OF HOMELAND SECURITY | 11 |
| National Cancer Institute | 0.6 |
| National Library of Medicine | 0.6 |
| U.S. Dept. of Health and Human Services | 0.4 |

**Top .gov LexEVS distributed API users: Data accessed (MB)**