LexEVS Release Roadmap

The table below outlines the major features which are a priority for **future releases**. This table does not guarantee that a particular function or fix will be included in a particular release. Read this table as our best guess for a snapshot in time.

Version	Development Focus
Future	- Additional Loader enhancements - Graph DB feature 3rd party software updates

The table below outlines the major features in **delivered releases**.

Note:

- LexEVS 6.5.3 was created immediately after 6.5.2 was developed. LexEVS 6.5.2 was never officially deployed. LexEVS 6.5.3 includes all of the changes from LexEVS 6.5.2.
- LexEVS 6.4.1 was created immediately after 6.4 was developed. LexEVS 6.4 was never officially deployed. Therefore, the documentation refers to 6.4.1, not 6.4. LexEVS 6.4.1 includes all of the LexEVS 6.4 changes.

Version	Development Focus	Release Date
LexEVS 6.5.5 *This version is available and supported.*	**Log4j Fixes** Update log4j to 2.17.1 **Bug Fixes and API Updates**	February 2022
LexEVS 6.5.4 *This version is available and supported.*	**Loader Fixes** Loader updates. **Bug Fixes and API Updates** Graph DB and Graph Resolve REST API	August, 2020
LexEVS 6.5.3 *This version is deprecated.*	**Loader Fixes** Loader updates. **Bug Fixes and API Updates**	September, 2019
LexEVS 6.5.1.3 *This version is deprecated.*	**Loader Fixes** Loader updates.	December, 2018
LexEVS 6.5.1.2 *This version is retired and unavailable.*	**Loader Fixes** Loader updates.	November, 2018
LexEVS 6.5.1.1 *This version is retired and unavailable.*	**Loader/UI Patch** Loader and UI fixes.	September, 2018
LexEVS 6.5.1 *This version is retired and unavailable.*	**NCIt Source Asserted Value Sets** Allow the automated building of value sets based on keywords built into the NCI Thesaurus. There are currently over 1000 value sets in NCIt.	August, 2018
LexEVS 6.5.0 *This version is retired and unavailable.*	**Java 1.8** Update LexEVS to be built and run with CentOS 7, Java 1.8, Tomcat 8, MySQL 5.6	June, 2017

LexEVS 6.4.1.4 *This version is retired and unavailable.*	**Resolved Defects** LexEVS 6.4.1.4 NCIT loader upgrade to load OWL2, Loader fixes and Admin script fixes.	April, 2017
LexEVS 6.4.1.3 *This version is retired and unavailable.*	**Resolved Defects and Enhancements** LexEVS 6.4.1.3 Loader fixes and Admin UI and CLI enhancements.	March, 2017
LexEVS 6.4.1.2 *This version is retired and unavailable.*	**Resolved Defects** LexEVS 6.4.1.2 Fixes a codingSchemeReference defect: hashCode Method in CodingSchemeReference can fail.	November, 2016
LexEVS 6.4.1.1 *This version is retired and unavailable.*	**Resolved Defects** LexEVS 6.4.1.1 Fixes a search defect: Searching for the NCI Metathesaurus concept with source SRC and source-code V-NCI (or any source code of the form SRC-(source name) is failing.	November, 2016
LexEVS 6.4.1 *This version is retired and unavailable.*	**LexEVS Lucene upgrade, LexEVS Loader Enhancements, new HTTPS Requirements, Admin script updates, and Resolved Defects** LexEVS 6.4.1 provides an upgrade to Lucene, the underlying search engine, additional OWL2, HL7 and other loader enhancements, ability to run services over HTTPS, and updates to existing admin scripts. • Lucene software upgrade to 5.2.1. • OWL2 loader enhancements around restrictions and annotations. • HL7 loader enhancement to account for a namespace. • Enable LexEVS services to run on the HTTPs protocol. • Admin script updates around general usage.	October, 2016
LexEVS 6.3 *This version is retired and unavailable.*	**LexEVS Loader Enhancements and Enhanced CTS2 API Documentation.** LexEVS 6.3 provides additional OWL and loader enhancements and an update to the interactive CTS2 API documentation. • OWL2 loader enhancements largely included loading a wide variety of conditional restrictions. • Interactive CTS2 API documentation has been updated.	August, 2015

LexEVS 6.2
This version is retired and unavailable.
	CTS2 REST Implementation Enhancements, **LexEVS software component upgrades, Implementation of a prototype Value Set Viewer, and Resolved Defects**
	LexEVS 6.2 provides additional implementation of the CTS2 REST specification as well as upgrading LexEVS software components to new versions.
	
	• CTS2 Implementation Enhancements
	   ◦ Updated the CTS2 compliant REST service from the 1.0 to 1.1
	   ◦ Implementation of the CTS2 Value Set Module
	   ◦ Added the ability to filter for active only entities or active and inactive entities
	   ◦ Added the ability to adjust landing page in the LexEVS CTS2 service application
	• LexEVS Software Component Upgrades
	   ◦ Java 1.7.x
	   ◦ MySQL 5.5.x
	   ◦ Apache Tomcat 7.0.x
	   ◦ CentOS 6.0
	• Additional Functionality
	   ◦ Implemented a convenience method for identifying and retrieving resolved value set coding schemes
	• NCI CTS2 Value Set Viewer
	   ◦ Thin client user interface for viewing distributed CTS2 Value Set content
	   ◦ Provided ability to search for and view value sets and resolved value set entities
		October, 2014

LexEVS 6.1
This version is deprecated. It is supported until the end of 2016.
	CTS2 REST Specification Implementation, Content Loaders
	LexEVS 6.1 provides support for the emerging CTS2 REST specification as developed in by the HL7 and OMG Standards organizations
	
	• Entity Description Read and Query and features text matching with wild card, exact match, starts with and word starts wit
	• Code System Version Read and Query with text matching on exact match, starts with, and contains.
	• Association Query with restrictions on the following:
	
	   ○ Parents
	   ○ Children
	   ○ Restrict a source
	   ○ Restrict a target
	
	• MapCatalog Read and query with restrictions to code system (name of map) and either source or target code system
	• Features Map Version Catalog Entry Read and Query with restrictions to/from code system and entity code system to/from
	• MapEntry Read and query with restrictions to code system (name of map) and either source or target code system
	• Resolved Value Set Read and Query with restrictions on code system version and contained entity
	• Value Set Definition Query, Read, and Resolve with restrictions on code system version and contained entity
	• LexEVS now loads content based on the latest OWL standard
	• MedDRA content can now be loaded from native MedDRA ASCII files
	• HIgh efficiency search is implemented for a "contains" type search
	• Cross content search with reasonable performance is implemented
	• This implementation ameliorates the issue of resolving and returning large value sets by persisting value set resolutions locally
	• Hierarchy convenience methods allow quick resolution of large shallow depth relationships.
		May, 2014

LexEVS 6.0 *This version is retired and unavailable.*	**Higher Standards** This release is primarily about alignment with standards. Other significant functionality, especially in the authoring APIs, value sets, mappings, and exporters makes a big difference. • LexEVS 6.0 adds comprehensive support of the Common Terminology Services - Release 2 functionality as described in the Health Level Seven (HL7) CTS 2 Draft Standard for Trial Use (DSTU). • LexGrid Model and database updates to support CTS 2 • Loader and data access layer changes to support CTS 2 functions • Additional versioning and value set / picklist functionality to support CTS 2 functions • New OWL/RDF Exporter • XML exporter enhancements to provide filtered export of code system • New Authoring API services to support CTS 2 functions • New Query API services to support CTS 2 functions • Associations/Mappings enhancements to support CTS 2 functions and user requirements	February 2, 2011

LexEVS 5.1
This version is retired and unavailable.
	Enhancing Search and Sorting Performance
	This is an enhancement version, based on the new architecture introduced in LexEVS 5.0. 5.1 focuses on providing features that support the NCI Metathesaurus Browser in the areas of performance and loading. Value Domain, Pick List Services and the loader framework had significant changes as well.
	
	• Enhanced query performance and behavior:
	   ○ Lucene 2.4 fast search engine with lazy document loading.
	   ○ Plug-in search framework that allows a text query string input and generates a Lucene query output.
	   ○ Plug-in sort framework that allows rapid creation of new sort algorithms and techniques.
	   ○ SQL query optimaizations that increase database performance.
	• LexEVS Value Domain Service - provides programmatic access to load value domain definitions using the domain objects that are available via the LexGrid logical model.
	• LexEVS Pick List Service - provides programmatic access to pick list definitions using the pick list that are available via the LexGrid logical model.
	• Loader framework enhancements - improved loading capability; allows loaders to be modular and easily extendable; ability to load custom data.
	• RRF loader enhancements - ability to fully load RRF data; support the NCI Metathesaurus Browser.
	• BDA (Build and Deployment Automation) support - build and deployment of LexEVS project artifacts to remote servers.
		January 5, 2010

LexEVS 5.0 *This version is retired and unavailable.*	**Next generation of NCI Enterprise Vocabulary Services** This version represents the next generation of NCI Enterprise Vocabulary Services. In this release, the LexBIG Java API and LexGrid model become the strategic EVS interfaces, replacing the legacy EVS API and EVS 3.2 model. • Complete shift from the EVS Model and EVS API to the LexBIG API and LexGrid Model. LexGrid Enterprise Vocabulary Services is now known as LexEVS. • Introduces LexGrid-based QBE services. • Consistent naming and release numbers for API and services. • Unified OWL loader (Migration from the NCI OWL loader and a generic OWL loader to a single loader). • The 2008/01 model is updated to the 2009/01 LexGrid Model. • Optimized query execution (ability to place an arbitrary number of restrictions on a search request, which are automatically combined by the runtime when on node or graph resolution). • Improved graph navigation (navigation of arbitrary relationships within a specific distance, uni or bi-directional navigation, ability to place multiple search restrictions based on association name or qualifier). • Compared to the legacy EVS model, the LexGrid model is capable of representing additional ontology sources and/or semantics for some sources. • Improved concept search (support of additional match algorithms, ability to place multiple search restrictions based on properties by type, name, value, or qualifier). • LexEVS now offers a LexEVS data grid service in addition to the analytical grid service .	May 14,2009
LexEVS 4.2.1 *This version is retired and unavailable.*	**Migration Path** This version supports the EVS adapters through LexBIG but also introduces LexEVS API. • Represents a hybrid design, integrating components of legacy EVS architectures with LexGrid/LexBIG technologies. This allows the same vocabularies to be served in terms of the older EVS model (via pre-existing EVS APIs) or the LexGrid model (via the LexBIG API). • The legacy EVS model and API have been formally deprecated in this release. • Fundamental goal for the release is to provide a migration path that allows users to transition from the older /legacy EVS interfaces toward adoption of newer LexEVS interfaces (based on the LexGrid model and LexBIG API). • Many EVS and LexGrid/LexBIG components are individually packaged, versioned, and installed. As the transition from the legacy EVS interfaces completes (in version 5.0), all packages will begin to carry the LexEVS name and abide by the same conventions for version numbering	February 6, 2009

LexBIG 2.3
This version is retired and unavailable.
	Robust vocabulary services
	This release provides a robust and scalable open source implementation of EVS-compliant vocabulary services.
	
	• The API specification is based on but not limited to fulfillment of the caCORE EVS API - The input/output parameters used by EVS API adapters. The specification also accommodates changes and requirements based on prioritized needs of the caBIG® community.
	• Provides a flexible implementation for vocabulary storage and persistence, allowing for alternative mechanisms without impacting client applications or end users. Initial development will focus on delivery of open source freely available solutions, though this does not preclude the ability to introduce commercial solutions (e.g. Oracle).
	• Provides standard tooling for load and distribution of vocabulary content. This includes but is not limited to support of standardized representations such as UMLS Rich Release Format (RRF), the OWL web ontology language, and Open Biomedical Ontologies (OBO).
	• This model provides the core representation for all data managed and retrieved through the LexBIG system, and is rich enough to represent vocabularies provided in numerous source formats including:
	   ◦ Open Biomedical Ontologies (OBO)
	   ◦ Web Ontology Language (OWL)
	   ◦ Unified Medical Language System (UMLS) Rich Release Format (RRF)
		October 10, 2008