**{{ release\_info.targetVersion }} UMLS® Release Notes and Bugs**

**What’s New**

The {{ release\_info.targetVersion }} release of the Unified Medical Language System® (UMLS) Knowledge Sources is available for [download](https://www.nlm.nih.gov/research/umls/licensedcontent/umlsknowledgesources.html) as of (( release\_info.dateString }}.

The available downloads are:

* **NEW as of 2022AB** UMLS Metathesaurus Precomputed Subsets (Requires no installation, see below for more information.)
* MRCONSO.RRF file (Most widely used Metathesaurus file.)
* Full Release (UMLS Metathesaurus, Semantic Network, Specialist Lexicon and Lexical Tools, database load scripts, and MetamorphoSys for customizing your UMLS subset and browsing the data.)
* **NEW as of 2022AB:** UMLS Metathesaurus History Files (Files that contain historical data from the UMLS Metathesaurus.)

**NEW as of 2022AB: UMLS Metathesaurus Precomputed Subsets**

In past years, we have required the use of MetamorphoSys to install and customize the UMLS Metathesaurus. For the 2023AA release, we are providing two ready-to-use precomputed subsets of the UMLS Metathesaurus that require no installation or customization.

* **UMLS Metathesaurus Full Subset** (complete Metathesaurus data without any customization)
* **UMLS Metathesaurus Level 0 Subset** (Includes only level 0 source vocabularies. Level 0 vocabularies do not have any additional restrictions beyond the standard license terms)

**NEW as of 2022AB: UMLS Metathesaurus History Files**~~.~~

* **Concept History (MRCONSO\_HISTORY.txt)** - This file contains all atoms, concepts, and codes that were dropped from the UMLS Metathesaurus MRCONSO.RRF starting with the 2004AA release.
* **Relation History (MRREL\_HISTORY.txt)** - This file contains all relations dropped from the UMLS Metathesaurus MRREL.RRF file starting with the 2004AA release.
* **Source Vocabulary History (MRSAB\_HISTORY.txt)** - This file includes a row for every version of every UMLS source vocabulary updated in the UMLS Metathesaurus MRSAB.RRF file starting with the 2004AA release.

These files are available from the UMLS Download page: <https://www.nlm.nih.gov/research/umls/licensedcontent/umlsknowledgesources.html>

Please let us know if you find these files useful with comments to the NLM Help Desk (<https://support.nlm.nih.gov/support/create-case/>) using the subject line: “UMLS History Files”.

**Metathesaurus**

The {{ release\_info.targetVersion }} Metathesaurus contains approximately 3.31 million concepts and 15.7 million unique concept names from 185 source vocabularies.

One new language:

* Arabic (ARA)

Three new translations:

* MDRRARA (Arabic Edition of the Medical Dictionary for Regulatory Activities Terminology (MedDRA))
* MDRGRE (Greek Edition of the Medical Dictionary for Regulatory Activities Terminology (MedDRA))
* MDRPOL (Polish Edition of the Medical Dictionary for Regulatory Activities Terminology (MedDRA))

35 English sources and 44 translation sources were updated. These include MeSH®, MedDRA, RxNorm, and SNOMED CT® (English and Spanish). For detailed information on changes in this version of the Metathesaurus, see the [Updated Sources (Expanded)](https://www.nlm.nih.gov/research/umls/knowledge_sources/metathesaurus/release/updated_sources_expanded.html) section. Additional release statistics may be found in the [Statistics](https://www.nlm.nih.gov/research/umls/knowledge_sources/metathesaurus/release/statistics.html) section.

For 2023AA, we made significant changes to our representation of the NCBI Taxonomy (SAB=NCBI). The UMLS will no longer use an algorithm for excluding concepts based on string patterns or hierarchy level. NCBI has added a new field (specified\_species) indicating that a species in a node’s lineage has a formal name. Beginning with this version, we will include the following content:

* Concepts where the "specified\_species" value = 1.
* All higher level concepts needed to make a complete hierarchy.

Other concepts are excluded. For more information, see: <https://www.nlm.nih.gov/research/umls/sourcereleasedocs/current/NCBI/sourcerepresentation.html>

{# Include this in each AA release #}

**SPECIALIST Lexicon and Lexical Tools**

* The release includes the updated [SPECIALIST Lexicon](https://lhncbc.nlm.nih.gov/LSG/Projects/lexicon/current/web/index.html) ({{ release\_info.datePrevY }}. Release).
* The release includes the updated [Lexical Tools](https://lhncbc.nlm.nih.gov/LSG/Projects/lvg/current/web/index.html) (({{ release\_info.datePrevY }}. Release) which integrate data from the SPECIALIST Lexicon, ({{ release\_info.datePrevY }}. Release. The Lexical Tools include the Full and Lite versions of lvg. ({{ release\_info.datePrevY }}.
* The Metathesaurus index files were processed using the updated lvg files.

**MetamorphoSys**

* The full release requires 33.5 GB of disk space.

Reported bugs may be viewed on the [Release Notes and Bugs](https://www.nlm.nih.gov/research/umls/knowledge_sources/metathesaurus/release/notes.html#bugs) Web page.

MetamorphoSys can generate custom load scripts for MySQL, Oracle, or Microsoft Access when creating a Metathesaurus subset or installing the Semantic Network. Instructions are available on the [UMLS Load Scripts](https://www.nlm.nih.gov/research/umls/implementation_resources/scripts/index.html) homepage.

**Release Information**

To access the UMLS Release files, you must have an active UMLS Metathesaurus® License and a valid [UTS](https://uts.nlm.nih.gov/) account. You will be prompted to authenticate with an identity provider with the UTS when downloading the files.

**UMLS Learning Resources**

{{ release\_info.targetVersion }} [Source Release Documentation](https://www.nlm.nih.gov/research/umls/sourcereleasedocs/index.html) Web pages are available.

Additional information regarding the UMLS is available on the [UMLS homepage](https://www.nlm.nih.gov/research/umls/index.html). New users are encouraged to take the [UMLS Basics Tutorial](https://www.nlm.nih.gov/research/umls/new_users/online_learning/OVR_001.html) and to explore the [UMLS Quick Start Guide](https://www.nlm.nih.gov/research/umls/quickstart.html), and other training materials.

**UMLS Terminology Services (UTS)**

The [UTS Metathesaurus Browser](https://uts.nlm.nih.gov/uts/umls/home) and the [UTS REST API](https://documentation.uts.nlm.nih.gov/rest/home.html) include the updated release.

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UMLS REST API authentication has changed. You can now authenticate by simply appending an apiKey parameter to your request, for example:

https://uts-ws.nlm.nih.gov/rest/content/current/CUI/C0155502/atoms?apiKey={{YOUR\_API\_KEY}}.

Authentication via ticket-granting tickets (TGTs) and service tickets is deprecated, but we will continue to accept API authentication via this method until the end of 2023.

**UMLS User Contributions**

UMLS users have extended the functionality of the UMLS in a variety of ways by developing APIs, automation scripts, and natural language processing tools. You can find a list of these on the UMLS Community web page: <https://www.nlm.nih.gov/research/umls/implementation_resources/community/index.html>.

Want to add your tool? Send a request to the NLM Help Desk (<https://support.nlm.nih.gov/support/create-case/>) with the subject line: “UMLS Community.”

Be sure to include a link to your source code so that other UMLS users can adapt your tool. We are especially interested in:

* Database load scripts
* Transformation scripts that convert UMLS data into other formats (for example, RDF or JSON)
* Scripts that automate any aspect of UMLS installation
* Applications that leverage UMLS in the processing of text

We value your feedback! For more information about improvements we have made to the UMLS based on user feedback, as well as information about UMLS use in general, see our new UMLS User Feedback Page: <https://www.nlm.nih.gov/research/umls/implementation_resources/community/user_feedback.html>

**Bugs**

*[Included only on the* [*Release Notes and Bugs*](http://www.nlm.nih.gov/research/umls/knowledge_sources/metathesaurus/release/notes.html) *Web page.]*

There are no known problems for the {{ release\_info.targetVersion }} release. Please send any issues or concerns to [NLM Customer Service](https://support.nlm.nih.gov/).