KNIME Analytics Platform Installation Guide

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Installing KNIME Analytics Platform

1. Go to the download page on the KNIME.com website to start installing KNIME Analytics Platform.

2. The download page shows three tabs which can be opened individually:

   ◦ *Register for Help and Updates*: here you can optionally provide some personal information and sign up to our mailing list to receive the latest KNIME news

   ◦ *Download KNIME*: this is where you can download the software

   ◦ *Getting Started*: this tab gives you information and links about what you can do after you have installed KNIME Analytics Platform

3. Now open the *Download KNIME* tab and click the installation option that fits your operating system. KNIME Analytics Platform can be installed on Windows, Linux, or macOS.

   Notes on the different options for Windows:

   ◦ The Windows installer extracts the compressed installation folder, adds an icon to your desktop, and suggests suitable memory settings.

   ◦ The self-extracting archive simply creates a folder containing the KNIME installation files. You don't need any software to manage archiving.

   ◦ The zip archive can be downloaded, saved, and extracted in your preferred location on a system to which you have full access rights.

Figure 1. KNIME Analytics Platform available installers

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4. Read and accept the privacy policy and terms and conditions. Then click *Download*.

5. Once downloaded, proceed with installing KNIME Analytics Platform:

   ◦ *Windows:* Run the downloaded installer or self-extracting archive. If you have chosen to download the zip archive instead, unpack it to a location of your choice. Run `knime.exe` to start KNIME Analytics Platform.

   > **i** With KNIME Analytics Platform version 5.3 you have the possibility to start KNIME Analytics Platform in high-resolution mode. To do so, go to the installation folder and run `knime-hidpi.bat`. Please notice that the batch file to start the KNIME Analytics Platform in the high-resolution mode is an experimental feature designed exclusively for Modern UI. This feature aims to enhance visual fidelity but is not yet fully supported across the classic user interface and the Modern UI. So, users should be aware of potential limitations and compatibility issues when switching between Modern UI and Classic UI contexts.

   ◦ *Linux:* Extract the downloaded tarball to a location of your choice. Run the `knime` executable to start KNIME Analytics Platform.

   ◦ *Mac:* Double click the downloaded dmg file and wait for the verification to finish. Then move the KNIME icon to *Applications*. Double click the KNIME icon in the list of applications to launch KNIME Analytics Platform.

The following operating systems versions are supported:

- Windows
    - ◦ Windows 10, 11
    - ◦ Windows Server - 2016, 2019, 2022,
- Ubuntu 20.04 LTS and 22.04 LTS and derivatives
- RHEL/CentOS/Rocky Linux 8, 9
- macOS (12 and above - macOS x86_64 Intel) and M1 (macOS arm64 - Apple silicon) (only the last two major versions are supported)
    - ◦ macOS 12: Monterey
    - ◦ macOS 13: Ventura

> **i** Also check the KNIME Getting Started Guide and the KNIME Analytics Platform User Guide.

Configuration settings and knime.ini file

When installing KNIME Analytics Platform, configuration settings are set to their defaults, and they can later be changed in the *knime.ini* file. The configuration settings, i.e. options used by the Java Virtual Machine when KNIME Analytics Platform is launched, range from memory settings to system properties required by some extensions.

You can find `knime.ini` in the installation folder of KNIME Analytics Platform.

> **ℹ** **On MacOS**: To locate `knime.ini` on MacOS, open Finder and navigate to your installed Applications. Next, right click the KNIME application, select *Show Package Contents* in the menu, and navigate to `Contents → Eclipse`.

The `knime.ini` file can be edited with any plaintext editor, such as Notepad (Windows), TextEdit (MacOS) or gedit (Linux).

Allocating memory in knime.ini file

The entry `-Xmx1024m` in the `knime.ini` file specifies how much memory KNIME Analytics Platform is allowed to use. The setting for this value will depend on how much memory is available in your machine. KNIME recommends setting it to approximately one half of your available memory, but you can modify the value based on your needs. For example, if your computer has 16 GB of memory, you might set the entry to `-Xmx8192m`.

Installing Extensions and Integrations

If you want to add capabilities to KNIME Analytics Platform, you can install extensions and integrations. The available extensions range from free open source extensions and integrations provided by KNIME to free extensions contributed by the community and commercial extensions including novel technology nodes provided by our partners.

The KNIME extensions and integrations developed and maintained by KNIME contain deep learning algorithms provided by Keras, high performance machine learning provided by H2O, big data processing provided by Apache Spark, and scripting provided by Python and R, just to mention a few.

Install extensions from:

- KNIME Hub:

    ◦ Search for the Extension or Integration you want to install in the search bar

    ◦ Click Extensions on the results page

    ◦ Click the extension you want to install, and from the extension page and drag and drop the squared yellow icon, shown in Figure 2, to the KNIME Analytics Platform. A window will open asking if you want to search and install the extension or integration. Click *Yes* and follow the instructions.
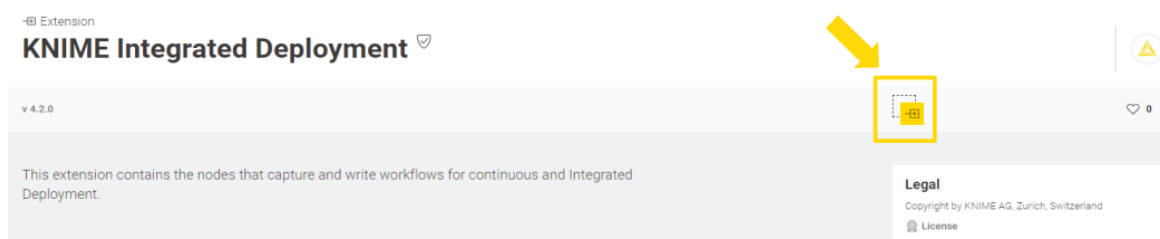

Figure 2. Install the KNIME Integrated Deployment Extension from KNIME Hub

    ◦ Restart KNIME Analytics Platform.

- KNIME Analytics Platform:

    ◦ Go to the *Menu* in the top right corner of the KNIME Analytics Platform.

    ◦ Select *Install Extensions*. The dialog shown in Figure 3 opens.
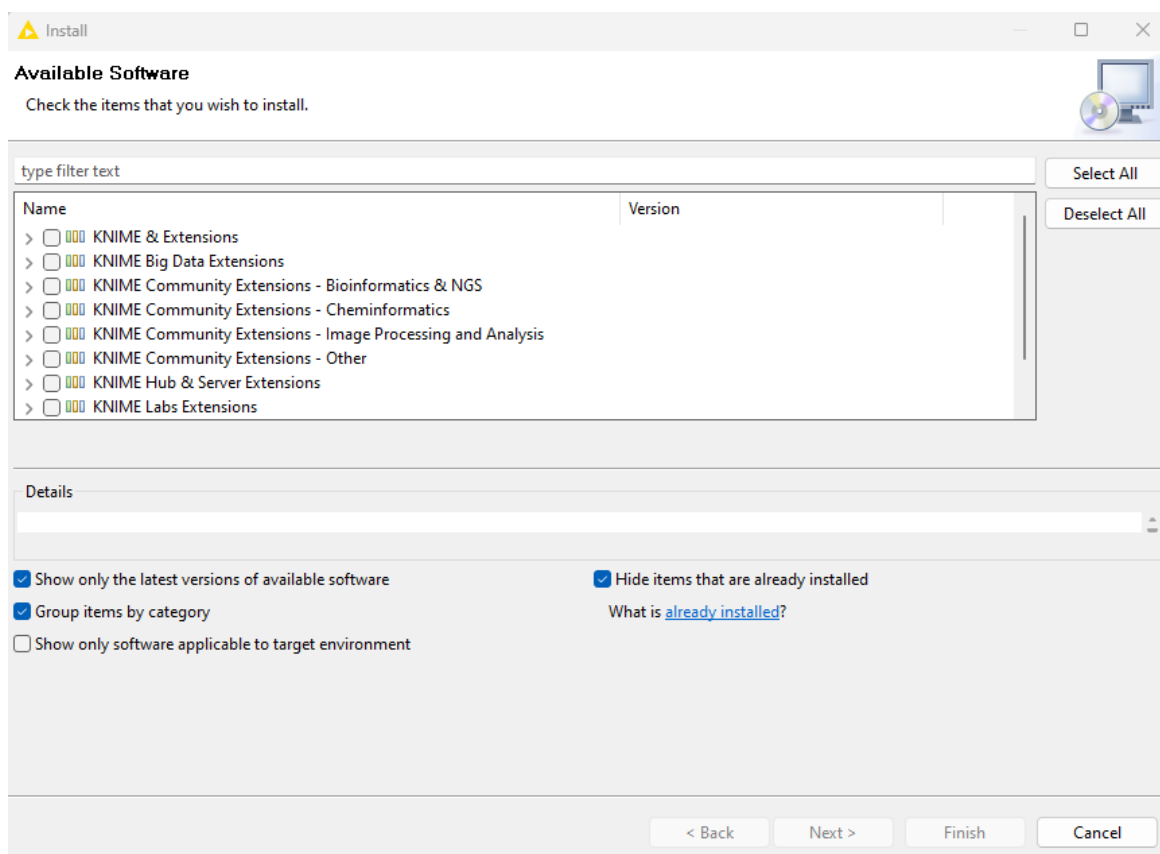
Figure 3. Installing Extensions and Integrations from KNIME Analytics Platform

- Select the extensions you want to install

- Click *Next* and follow the instructions

- Restart KNIME Analytics Platform.

The *Install Extensions* menu provides the extensions that are available via the update sites you have enabled.

> ℹ️ If you encounter issues during the installation of Python based extensions, these might be related to challenges specific to this type of extensions. Find here information about how to troubleshoot these issues.

To uninstall an extension, go to the *Help* menu in the top right corner of the user interface and select the *About KNIME Analytics Platform*. In the window that opens click *Installation Details*. A dialog shown in Figure 4 opens. Now, select the extension that you want to uninstall, and click *Uninstall*….
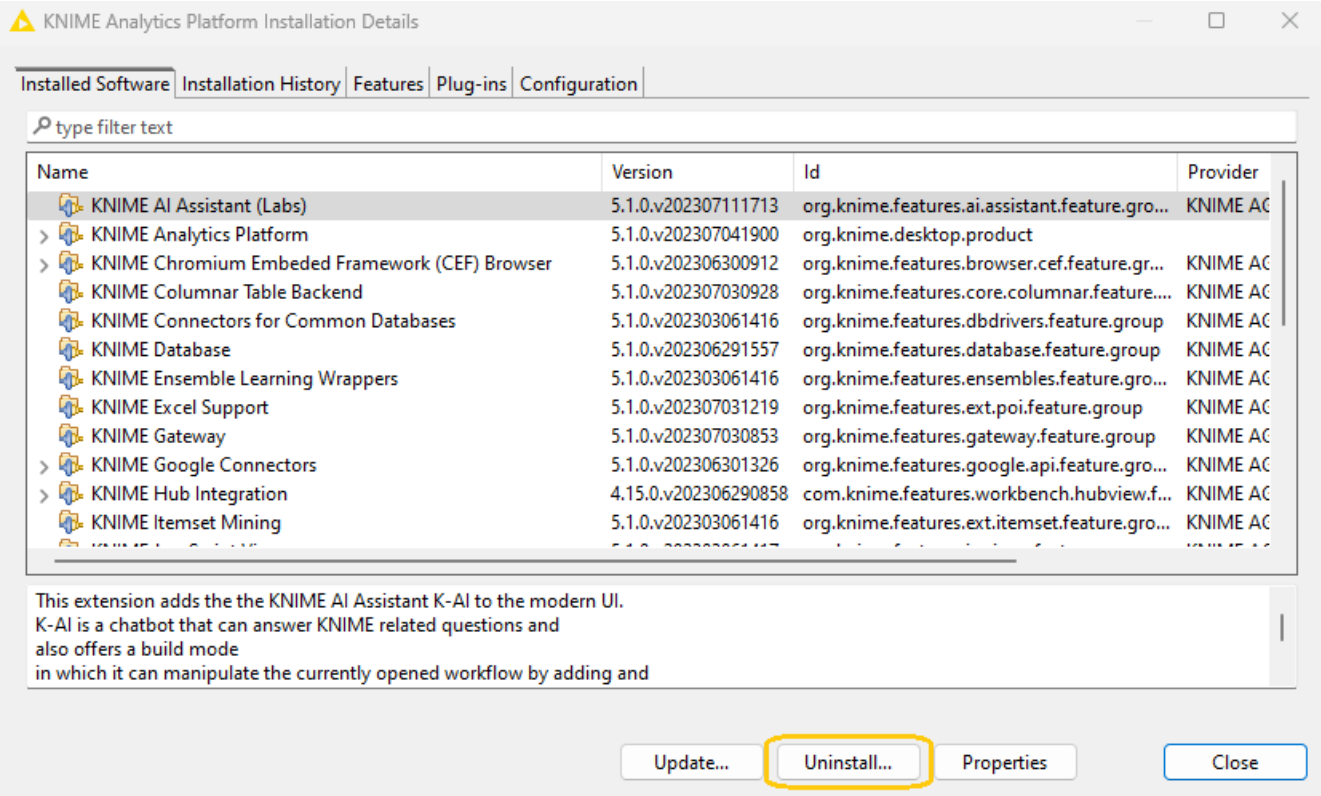
Figure 4. Uninstalling Extensions and Integrations

Updating KNIME Analytics Platform and Extensions

It is good to make sure that you always use the latest version of KNIME Analytics Platform and its extensions.

To do so:

1. Go to the *Menu* in the top right corner of the KNIME Analytics Platform.

2. Select *Check for updates*. In the dialog that opens, select the available updates you want to install and then click *Next*.

3. Proceed by following the instructions. KNIME Analytics Platform has to be restarted in order to apply the updates.

Update Sites

The Update Sites are where KNIME retrieves additional software in the form of extensions as well as updates. To see or edit the available update sites, click *Preferences* in the top right corner of the user interface. This opens the *Preferences* dialog. Select *Install/Update → Available Software Sites*.

Default Update Sites

These four updates sites are provided by KNIME and are always available:
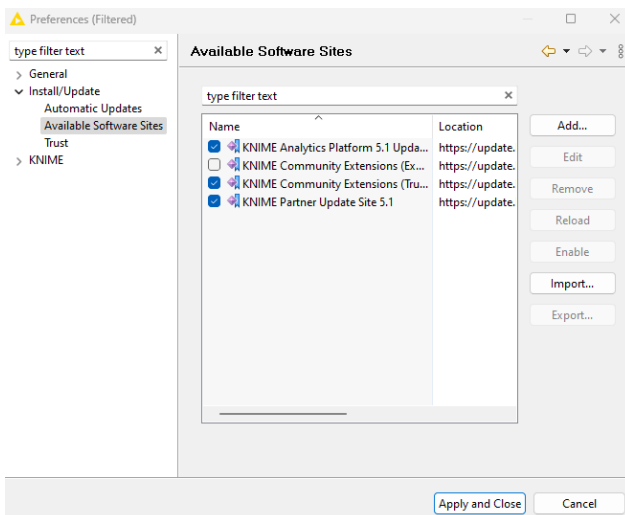
Figure 5. Available Update Sites

KNIME Analytics Platform 5.3 Update Site: Provides all extensions and integrations maintained by KNIME: R, Python, H2O Machine Learning, Apache Spark for big data, and many more. Contains KNIME Labs Extensions, which are extensions that are not yet part of the set of stable KNIME extensions because their functionality may not yet be finalized.

Community Extensions (Experimental): Provides additional extensions created by the KNIME community.

KNIME Community Extensions (Trusted): Provides trusted community extensions, i.e. extensions created by the KNIME community, which have been tested for backward compatibility and compliance with KNIME quality standards.

KNIME Partner Update Site 5.3: Provides extensions created by KNIME partners.

KNIME Analytics Platform 5.3 Update Site and *KNIME Community Extensions (Trusted)* are

enabled by default.

Adding External Update Sites

To install extensions that are not part of the above update sites, click *Add* to manually add the relevant update site, inserting the Name and Location as shown in Figure 6.
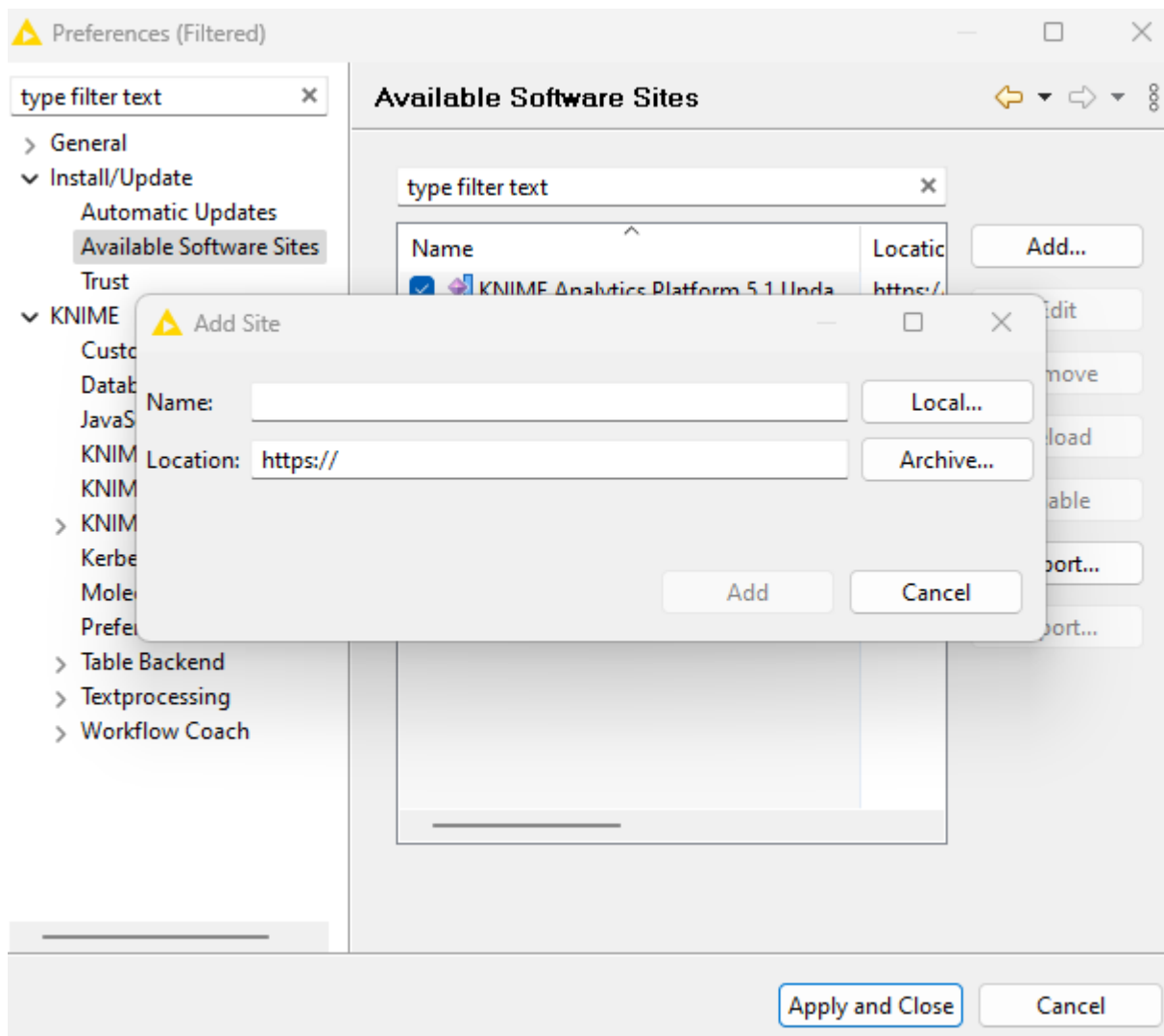
Figure 6. Add Update Sites

After adding a new update site you will see it listed in the *Available Software Sites*. You must now enable it by selecting it from the list.

Adding Local Update Sites

If your working environment has limited internet access or you receive an error message "Proxy Authentication Required" when connecting to a remote update site (provided by a URL), you can install extensions from a local zip file.

1. Download KNIME update sites as zip files at the following links:

    ◦ KNIME Analytics Platform Update Site

    ◦ KNIME Community Extensions

    ◦ KNIME Partner Update Site 5.3

2. Save the zip file containing the extensions to your local system

3. Click *Preferences* in the top right corner of the user interface. This opens the *Preferences* dialog. Select *Install/Update → Available Software Sites* and enter the path to the zip file by clicking *Add → Archive…* as shown in Figure 7.
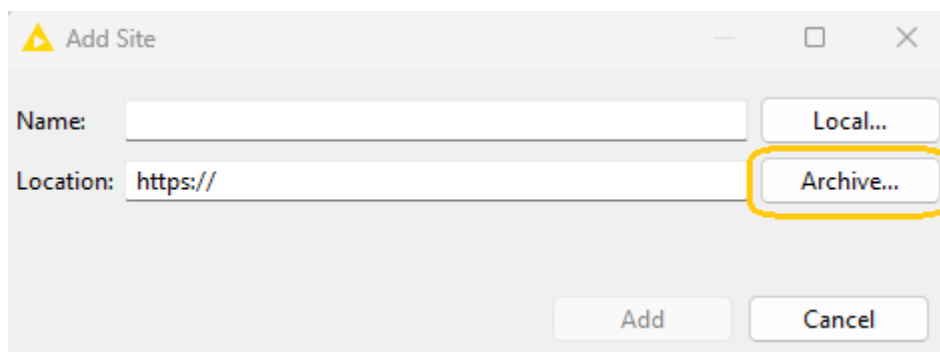
Figure 7. Adding Update Sites from Zip Archive

> ℹ️ If the same extensions are provided by a URL, you will first have to disable the update site by disabling it in the list.

4. Now click *Apply and Close*

> ℹ️ If the same extensions are also provided by a remote update site, you will first have to disable that update site by deselecting its entry in the *Available Software Sites* dialog and confirming via *Apply and Close*.

Working with the Nightly Builds

Once a night, a new version of KNIME Analytics Platform is created directly from our development branch. The Nightly Build versions available here provide insight into what's coming up in the next regular release. However, for real work, always use a version of a standard KNIME release. Also read the following disclaimer before proceeding:

Really, really, *really* important disclaimer

This is most definitely not production quality code. These nightly builds are what we use internally to validate and test recent developments, so they are not tested as thoroughly as standard KNIME releases. Furthermore new nodes or functionality may change substantially (or disappear entirely) from one build to the next. It's even possible that workflows you edit or create with nightly builds stop being readable by future (or past) versions…

These nightlies are a great way to get a sneak peek at what may be coming in the next version of KNIME and provide feedback and suggestions. They are not a particularly safe way to do real work.

Release notes and changelogs (KNIME Analytics Platform 5.3)

Release notes and detailed changelog for v5.3.x releases

KNIME Analytics Platform 5.3.0

Release date: July 10, 2024

Release notes

Updates and compatibility

- In-app upgrades from KNIME Analytics Platform 5.2 are supported

- KNIME Analytics Platform 5.3 allows switching between Modern UI and the Classic UI without having to close and reopen workflows. In future versions, this will change in order to reduce technical complexity and pave the way for further enhancements of the Modern UI

- Requirements:

  - KNIME Analytics Platform 5.3 requires KNIME Hub 1.9 or newer

  - KNIME Analytics Platform 5.3 must not be used as executor on KNIME Server 4.16.x or before. KNIME Server 4.17 with full compatibility will be released soon.

- Compatibility:

  - The "Excel Reader" node might produce slightly different results when processing special xlsx files with array formulas and the re-evaluate formulas option checked. In KNIME Analytics Platform 5.2 certain formulas would evaluate to missing cells and now evaluate to "0", like in Excel

  - Text Processing: The "Tika Parser" node might produce slightly different results when processing documents with inline images. The reason is an update of the underlying Apache Tika library from version 1.26.0 to 2.9.1

  - Hadoop 3.x upgrade might require updating the Hadoop settings within KNIME Analytics Platform

  - Workflows running on Spark 3.3 and earlier require installation of the new Sparkling Water legacy plugin

- End-of-life:

- Sparkling Water with Spark 3.4 and later will no longer be supported

- Existing workflows running on Spark 3.3 and earlier require the new Sparkling Water legacy extension

- Hive 2 and earlier will no longer be supported out of the box, users must register their own driver

- Updates:

  - Eclipse 2024-03 (underlying framework), to be "up to date" and to address known CVEs

  - Many third-party library updates (for more information see Preview of KNIME Analytics Platform 5.3.0)

  - Spark 3.5 support

  - Hadoop 3.x support

  - MongoDB driver updated to 5.1.1 to support latest MongoDB versions

  - Hive driver updated to 3.x to support latest version

  - Update of various built-in drivers and flagging of no longer supported DB drivers

For node developers only: (API) Interface definitions for datetime related types were moved to a more central place (`org.knime.core`), e.g. `org.knime.core.data.time.localdate.LocalDateValue`.

Known Issues

- Reporting:

  - Fonts of reports might be incorrect if a component that produces a report has been saved in an executed state before updating to 5.3. Re-executing the component will solve the problem.

Changelog (KNIME Analytics Platform 5.3.0)

New nodes

- AP-16515: Filter flow variable(s) (kudos to @rolandnemeth @berti093 @darbon for reporting 1 2 3)

- AP-21746: Email Sender (rewrite of old node, includes ability to inline KNIME reports in HTML) (kudos to @beginner @cppong for reporting 1 2)

- AP-22415: Text Chunker (kudos to @TosinLitics for reporting 1)

- AP-22861: Google Ads Geo Targets

- AP-22829: Row Filter and Row Splitter (rewrite, with modern dialog and additional filter functionality)

- AP-22644: KNIME Hub Embeddings Connector

- AP-22289: OpenAI Fine-Tuned Model Deleter

- AP-22281: Presidio Analyzer

- AP-22104: Google Ads Keyword Ideas

- AP-22038: Giskard Scanner

- AP-21860: Expressions with modern Script Editor

- AP-21835: OpenAI Chat Model Fine-Tuner

- AP-21821: HF TEI Embeddings Connector

- AP-21793: KNIME Hub Chat Model Connector

- AP-21737: Credentials Property Extractor

- AP-21695: Salesforce Connector

- AP-21025: Google Ads Query

- AP-21021: Google Ads Connector

- BD-1290: (Big Data Extensions): Databricks Workspace Connector

- BD-1275: (Big Data Extensions): Databricks Unity File System Connector

- UIEXT-1818: Example Data Reader

Enhancements

- AP-15669: "Send to Tableau Server " node to support credentials variable (currently requires user+pass in dialog) (kudos to @KristianRohde for reporting 1)

- AP-21747: Add Request Body to DELETE Request node (kudos to @SharafutdinovRuslan @Gem for reporting 1 2)

- AP-22461: Columnar Backend: Improve Json cell handling by avoiding unnecessary (un)marshalling (kudos to @mwiegand for reporting 1)

- NXT-1102: Handle little space for workflow breadcrumb (kudos to @mlauber71 for reporting 1)

- NXT-2535: User interface scale (kudos to @Gentleman0758 for reporting 1)

- NXT-2633: Edit layout of linked component project (kudos to @rrousselot for reporting 1)

- UIEXT-1642: Web UI for String Splitter (Regex) (aka Regex Split) and support for named capture groups (kudos to @mwiegand for reporting 1)

- AP-22692: Support path variables as JDBC parameters

- AP-22682: Omit (confusing) warning about PMML incompatibility in Missing Value node

- AP-22677: No longer prompt for "hard restart " after knime.ini changes (no longer needed)

- AP-22669: Build python metapackages for 5.3 and update all python-based extensions to use them

- AP-22665: Pass both, HTTP and HTTPs Proxy information to Python processes if they differ.

- AP-22632: Skip unneeded duplicate checking at end of node execution (speedup at nodes such as Row Filter/Splitter, Sorter, GroupBy, File Reader etc)

- AP-22629: Enable Async Hub Uploads/Downloads in Modern UI

- AP-22582: Update AWS SDK libraries to version 2.25.61

- AP-22557: Internal API: New 'DataContainerSettings' to avoid expensive duplicate checking at end of node execution

- AP-22554: Add Python node dialog rule that can depend on the DialogCreationContext

- AP-22553: Option to use Presidio Analyzer output in Presidio Anonymizer

- AP-22538: (Programming API) New node description schema version supporting modern markup

- AP-22525: Document Python Extension installation proxy settings

- AP-22508: Only poll for job updates if team has execution enabled on Hub

- AP-22491: K-AI keyboard navigation

- AP-22429: Programming API: Enable per-workflow logs with dedicated filter levels detached from "logfile " filter in NodeLogger

- AP-22424: Workflow Reader to support Item Versions

- AP-22409: Enable user feedback in K-AI

- AP-22396: Deprecate Salesforce Authentication Extractor node

- AP-22382: Filter hubs K-AI can connect to via customization profile

- AP-22346: Add link from Python-based extension descriptions to installation troubleshooting docs

- AP-22253: HTML Column Expressions, String Formatter: Make clickable links open in a new tab

- AP-22251: Update H2 JDBC driver to version 2.2.224

- AP-22202: Update Node Icons to HighRes version

- AP-22191: Update SQLite JDBC driver to version 3.45.2.0

- AP-22190: Update PostgreSQL JDBC driver to version 42.7.3

- AP-22186: Update Redshift JDBC driver to version 2.1.0.26

- AP-22185: Deprecate several outdated JDBC drivers for H2, MySQL, Postgres, Redshift, Snowflake, SQLite, and SQL Server

- AP-22168: Remove KNIME Server EJB support

- AP-22167: Text Processing: Update Apache Tika from 1.26 to 2.9 (used in nodes such as "Tika Parser ")

- AP-22109: Row Aggregator and Value Lookup optionally support Hiliting

- AP-22081: Alignment suggestion for Format Manager nodes

- AP-22037: Python: Add schema_provider for ColumnFilterParameter and ColumnParameter

- AP-21983: Include knime-extension-bundling version (git hash?) in bundled extensions and pipe it into create_env.out for easier troubleshooting

- AP-21977: Hide script editor side and bottom panels if editor size is too small

- AP-21959: Value switch for model selection mode in OpenAI Connectors

- AP-21940: Python nodes: different connections port objects give incomprehensible error

- AP-21931: Lower runtime of LLM Prompter via async calls

- AP-21924: Update models in OpenAI Connectors

- AP-21909: Local file browser for GPT4All nodes

- AP-21888: Improve URL handling in REST client nodes

- AP-21875: Rework HeapCache in Columnar Backend (aka HeapBadger)

- AP-21856: Support hiding Python-based nodes

- AP-21811: knime-ext-bundling: remove KNIME version selector from scripts

- AP-21797: H2O Integration: Add H2O version 3.46.0.x

- AP-21790: New KNIME Hub mountpoint option in KNIME Hub Authenticator

- AP-21786: Use URLConnection instead of HttpClient for REST requests (improves stability for concurrent requests)

- AP-21774: Keywords for AI Extension nodes

- AP-21773: Support keywords for Python Node extensions

- AP-21748: Add Legacy/Deprecated labels to the extension names

- AP-21713: Add Python-node unit testing capabilities

- AP-21667: Support protected Hugging Face Inference Endpoints

- AP-21599: Support random seeds for LLMs

- AP-21579: Add configuration option for 'receiveTimeout' in Salesforce Query nodes

- AP-21550: Add option to KNIME Hub Authenticator to expose URL of current KNIME Hub as flow variable

- AP-21335: Option to output similarity score in Vector Store Retriever

- AP-21269: Update of underlying Eclipse version from 2023-03 to 2024-03

- AP-20990: Fix security issues on parent-iframe communication in Generic ECharts View

- AP-20735: Extract Context Properties: provide additional fields

- AP-20367: Call Workflow Service node: List shared deployments

- AP-19971: Improve performance of the Parallel Chunk Loop with the Columnar Backend

- AP-19943: Append/Replace Option for String to Path Node

- AP-19911: Extract Column Header to Support Streaming

- AP-19137: Python Nodes: Allow a node to define dynamic ports

- AP-18499: Update MongoDB library to version 5.1.1

- BD-1311: (Big Data Extensions): Mark Sparkling Water nodes as legacy (Sparkling Water support will be discontinued)

- BD-1300: (Big Data Extensions): Deprecate built-in JDBC driver for Impala

- BD-1299: (Big Data Extensions): Support unity file system in DB Loader for Databricks

- BD-1283: (Big Data Extensions): Add support for Apache Spark 3.5

- BD-1274: (Big Data Extensions): Update built-in JDBC driver for Apache Hive to version 3.1.3 (no longer supports connection to HiveServer 2 and earlier)

- BD-1272: (Big Data Extensions): Deprecate Sparkling Water for Apache Spark version 3.3 and earlier (moved to legacy extension)

- BD-1271: (Big Data Extensions): Update Create Local Big Data Environment to Apache Spark 3.5

- BD-1269: (Big Data Extensions): Update Apache Parquet to version 1.12.2 and ORC to version 1.4.4

- BD-1268: (Big Data Extensions): Update Hadoop libraries to version 3.4.1 (Depending on your environment this might require changes in the KNIME AP Hadoop settings

page)

- BD-1267: (Big Data Extensions): Deprecate no longer maintained Apache Spark versions 3.2 and earlier (moved to legacy extension)

- BD-1262: (Big Data Extensions): Support H2O Sparkling Water with Apache Spark 3.5 (only local Spark)

- BD-1260: (Big Data Extensions): Add H2O Spark MOJO support for Apache Spark 3.4

- NXT-2725: Update Equo Chromium to 116.0.13

- NXT-2671: Dynamic home content tile

- NXT-2664: Create, open, edit locked components inside workflows

- NXT-2625: Highlight message in Workflow monitor when nodes with problem are selected

- NXT-2588: Apply UI scaling factor to all detached browser windows

- NXT-2585: Create new private Hub space

- NXT-2582: Add Ctrl+Space to trigger quick nodes adding panel

- NXT-2553: Keyboard navigation support for node repository

- NXT-2543: Make project and sidebar tabs accessible via keyboard

- NXT-2533: Add setting to port view to "Show only selected rows"

- NXT-2530: Open context menu on the currently selected item(s) via a shortcut in workflow canvas

- NXT-2448: Add "workflow configuration" to workflow description

- NXT-2447: Select space items after import

- NXT-2395: Change default size of workflow annotations

- NXT-2320: Restructure home page

- NXT-2266: Display full space item name in title

- NXT-2248: Custom link entries in Help menu

- NXT-2034: Allow right click for empty workflows to show context menu

- NXT-1534: Keyboard navigation support for space explorer

- NXT-1296: Create new workflow in current space level via plus icon in app header

- NXT-953: Change target of links e.g. in node description, workflow and component meta information to be target= "_blank "

- NXT-389: Use arrow keys to navigate from one to another element inside the workflow editor and move the selected element

- UIEXT-1667: Web UI for Chunk Loop Start

- UIEXT-1644: Web UI for Value Counter

- UIEXT-1634: Web UI for Column Combiner

- UIEXT-1631: Web UI for Missing Value Column Filter

- UIEXT-1629: Web UI for Group Loop Start

- UIEXT-1628: Web UI for Date&Time Part Extractor (aka Extract Date&Time Fields)

- UIEXT-1328: Axis labels should default to selected column if not defined otherwise

- NXT-1461: Recent workflows and components in Home tab (kudos to @ArjenEX for reporting [1])

- NXT-2195: Display errors and warnings in the Workflow monitor panel (kudos to @rfeigel @Jerry @Schroedinger @takbb @iCFO @DiaAzul for reporting [1] [2] [3] [4] [5] [6])

- NXT-2297: Reveal and select active project in space explorer via workflow or component tab context menu (kudos to @mlauber71 for reporting [1])

- NXT-2394: Add keyboard shortcut(s) to open port view and detach active port view or inactive port views (kudos to @stefanomosca for reporting [1])

- NXT-508: Connect nodes via shortcuts (kudos to @Christian_Essen for reporting [1])

- NXT-2675: Filter functionality for shortcuts with a search input

- NXT-2666: Filter current space explorer level with a search input

- NXT-2615: Click-away handling for workflow and component description changes

- NXT-2602: Access dynamic port actions with shortcuts

- NXT-2554: Disconnect nodes via a shortcut

- NXT-2392: Edit annotation with shortcut

- NXT-2374: Select multiple elements via shortcuts

- NXT-2042: Enable selection for embedded port and node views

- NXT-1880: Rich text metadata editing for components and workflows

- NXT-1867: Fill suggestions in quick nodes panel using most commonly used nodes with compatible port type

- NXT-1786: Keyboard shortcut overview

- UIEXT-1864: Enable keyboard navigation in table selection

- UIEXT-1834: Introduce max row setting for Bar Chart in case of no aggregation

- UIEXT-1810: Rework dialog elements to be smaller for node dialogs

- UIEXT-1702: Sanitization of widgets leads to escaped rendered characters in certain

cases

- UIEXT-1568: Enable horizontal virtual scrolling in table

- AP-22627: Deprecate nodes correctly that only have "(deprecated) " in their name

- AP-22585: Python framework: Raise an error if the table contains a column with the reserved column <RowID> as that might/will cause follow up errors

- AP-22453: Update Packages in Bundled Python Environment

- AP-22452: Update Python version in Web Interaction Nodes to Python 3.10.14

- AP-21733: Don't start executor in case the preferences can't be fetched

- AP-21730: Change name of temp folder for Hub jobs

- AP-21704: Title of 5.1 Workflows Shown as "There has been no title set […]. " on KS

- AP-21680: Credential Flow Variable should show user name in string representation

- AP-21653: Investigate successful REST requests using then URLConnection while connecting to authenticated Proxies

- AP-20676: Move KNIME-built Python extensions to internal update site

- AP-18422: Set up pipeline for automatic metapackage build + upload

- NXT-2531: Pixel based side panel

- NXT-2417: Prevent jobs from being swapped while interacting with job viewer

- NXT-2386: Replace legacy database port types with new db port types in component input/output port list

- UIEXT-1611: Relax sanitization for Text Output Widget (legacy)

- AP-22426: Move new timeseries extension from community to labs

Bug Fixes

- AP-21471: DataType.getCommonSuperType() returns type of pm4knime (kudos to @iankruger for reporting 1)

- AP-21669: The component output port gets activated in an inactive branch in case of missing flow variable (kudos to @takbb @masgo for reporting 1 2)

- AP-21672: Broken Community Extension might break PortType#availablePortTypes (should try-catch ExceptionInInitializationError) (kudos to @mwiegand @ajackson @joel_lewinson for reporting 1 2 3)

- AP-21681: Node repository is empty after installing certain extensions (kudos to @rfeigel @danielesser for reporting 1 2)

- AP-21702: Report port deserialization may not respect original fragment order (kudos to @njconnolly for reporting [1])

- AP-21720: String to Date&Time node: Improve error message (kudos to @PKRISH for reporting [1])

- AP-21776: Joiner might complain about duplicate columns although there are none (but col names matching '(#1)') (kudos to @weiclav for reporting [1])

- AP-21872: Reset All button doesn't function properly for metanodes (kudos to @Christopher41 for reporting [1])

- AP-21960: Excel Reader: data shifts to wrong columns if re-evaluate formulas option is not checked (kudos to @Appear3044 @cinthy for reporting [1] [2])

- AP-22294: Python Script node does not respect KNIME's proxy settings (kudos to @koeties for reporting [1])

- AP-22339: REST nodes fail when using a credentials flow variable for Digest authentication (kudos to @tescnovonesis for reporting [1])

- NXT-1939: If Statistics view/computation is aborted, data in Table is no longer shown (kudos to @DiaAzul for reporting [1])

- NXT-2123: Clicking/tapping really fast on a node can cause an issue (kudos to @takbb for reporting [1])

- NXT-2240: Description in space explorer card overlaps the space card boundaries (kudos to @mlauber71 for reporting [1])

- NXT-2607: MUI load error in case of open temp workflow in a different drive than workspace's drive (kudos to @mwiegand for reporting [1])

- UIEXT-1619: The preview of twin list column selection in WebUI dialogs includes wrong columns (kudos to @mwiegand for reporting [1])

- UIEXT-1674: Error in console for column filter when is manual not selected (kudos to @mwiegand for reporting [1])

- UIEXT-1900: View nodes do not work in metanodes if directly connected to inner metanode output (kudos to @BPU for reporting [1])

- AP-21958: Using local update archive is not possible (kudos to @arushib30 for reporting [1])

- AP-22412: Python View plot preview does not work (kudos to @JHVines for reporting [1])

- AP-22737: Excel Reader throws IllegalStateException when parsing is cancelled too quickly (kudos to @locodust6 for reporting [1])

- NXT-2490: Modern UI doesn't load in presence of outdated community extension (kudos to @Ardilla @arief_rama for reporting [1] [2])

- UIEXT-1493: JavaScript Views do not work with bundled chromium (kudos to @USCHUKN1ME for reporting 1)

- AP-18133: Excel Reader does not correctly load sheet selection mode (kudos to @Geo @sw1336 for reporting 1 2)

- AP-21237: macOS Sonoma: Splash screen is displayed upside down (kudos to @ssq @mlauber71 for reporting 1 2)

- AP-22839: Email Reader (Labs): Network utilized but no task identifiable due to bad progress report (kudos to @mwiegand for reporting 1)

- NXT-2211: "Save As" workflow not working properly (kudos to @sw1336 for reporting 1)

- AP-22413: AP-wide proxy does not use Eclipse proxy capabilities

- AP-22321: Updating nested linked components may fail in executor

- AP-22277: Proxy credentials not supplied for Workflow Jobs with HTTPS Connections

- AP-22103: Python Views don't open after unsaved re-execute

- AP-22019: Can't set execution retries when initially creating a schedule

- AP-22015: Credentials Configuration and Widget nodes no longer allow overriding credentials with String variables

- AP-21997: Integrated deployment: workflow manager instance doesn't retain custom workflow name

- AP-21967: Authenticated proxy credentials are saved and reused KNIME-wide till restart after the first use

- AP-21738: Missing Plotly extension leads to workflow/component error on load with deleted node

- AP-22826: Google Authenticator does not always get a refreshable credential during interactive login

- AP-22811: Global proxy settings in executor will break executor functionality

- AP-22803: Customization profile download doesn't work with proxy configuration

- AP-22793: Environment bundling picks cuda version of packages if available

- AP-22749: Google Big Query Connector complains about wrong file extension when using the OAuthPvtKeyPath JDBC parameter

- AP-22690: Call Workflow Service Node fails calling Service Deployments with "Use current Hub " Hub Auth Connection

- AP-22667: KNIME Hub mountpoints are greyed-out if logged in as consumer (read-only user)

- AP-22664: Box Plot under some circumstances does not calculate the Q3 values correctly

- AP-22558: Fix problem when escaping column placeholder in parameterized and looping db nodes

- AP-22543: Google nodes do not use proxy settings

- AP-22522: Specific characters cause invalid SVG and failure to upload workflow to hub

- AP-22427: NodeLogger incorrectly handles OFF appender level

- AP-22411: Generic ECharts View cannot work with JSON columns

- AP-22397: ROWINDEX is always 0 in Math Formula when executed in Streaming mode

- AP-22320: Markdown documentation of auto-complete not styled correctly

- AP-22316: Duplicate Row Filter may fail with certain settings

- AP-22302: BufferedRowWrite#setFrom does not handle missing values and reads from wrong offset

- AP-22230: Error when bulk-downloading items from KNIME Server (json and xml)

- AP-22199: DB Pivot and DB Row Filter: Escape single quote values

- AP-22178: Generic ECharts View Placeholder not centered if script evaluation fails

- AP-22152: ProxyManager initialisation deadlock on startup

- AP-22131: Node recommendations update fails over authenticated proxy also causing proxy settings unreachable

- AP-22095: Proxy environment variable NO_PROXY is ignored

- AP-22094: Possible workflow load problem in "Microsoft Authenticator " when port is connected to component output

- AP-22052: Redundant proxy authentication popups on AP startup

- AP-22017: REST Web Service nodes: Adding hub credentials port swaps port tooltips

- AP-21996: Shared component link cannot be changed to a Business Hub destination

- AP-21785: KNIME-wide proxy exclude list dominates REST client nodes

- AP-21777: Email Reader might run indefinitely if a message gets deleted during processing

- AP-21764: Generic ECharts View "only 2500rows " notification doesn't auto-dispose after a while

- AP-21759: HTTP connections to URLs ignore proxy exclude list

- AP-21749: Credentials are saved in node dialog even after switching to other methods for authentication

- AP-21735: Missing node message duplicated for each missing node

- AP-21728: Text Embedder fails if the input table has missing and/or empty values

- AP-21718: Include Conda Packages of Bundled Python Environment by default

- AP-21650: Duplicate Row Filter: "Column name of row status " field should disappear when removing duplicate rows

- AP-21622: Race condition when shutting down draining executor

- AP-21540: Email Reader node flags read emails as unread if the "Mark read emails as read " option is disabled

- AP-21341: Web Interaction Browser does not use KNIME's proxy settings

- AP-21251: Cannot change component link type when it is workflow-relative

- AP-21243: Components can be modified (e.g. node added) when downstream nodes are executing

- AP-20970: REST Client nodes: Lose flow variable credentials configuration when reconfigured

- AP-20878: AI Extension nodes fail on column name collisions

- AP-20516: "Model Reader" (and other readers) may leave temp files behind after use (only for large, complex models such as XGBoost)

- AP-20299: Duration in Table View (classic & modern) sorted like strings

- AP-20045: (Old) Table View access node data one last time after data is discarded (node reset), possibly causing confusing error logs

- AP-19420: Component in inactive branch stops workflow execution

- AP-11652: REST nodes Credentials Authentication can be overwritten to null

- NXT-2684: Casing of space items cannot be changed by "rename " in Modern UI on Windows

- NXT-2542: Workflow-changed-events aren't sent after a job has been swapped and unswapped again

- NXT-2512: Dialog crashes AP when being closed and a 'window.alert' window was open (5.3)

- NXT-2491: Yellow-Bar Component Projects do not Save Changes Back to Hub/Server in MUI Hybrid Mode

- NXT-2419: Hidden metanodes aren't hidden in Modern UI

- NXT-2295: Empty metanodes with input or output bars are not displaying the bars

- NXT-2289: Place nodes deletes all bendpoints and undo won't recreate them

- NXT-2260: Changes in annotations are lost if a users switch the tab and styles are lost if you switch from one to another workflow annotation

- UIEXT-1985: HTML Writer does not make use of file picker

- UIEXT-1969: Multiple selection widget in combobox mode doesn't trigger re-execution

- UIEXT-1966: Two combo boxes on the same interface result in selection issues

- UIEXT-1845: File Chooser Widget does not show files and empty folders

- UIEXT-1836: InvalidSettingsException when opening dialog for unconnected Column Filter

- UIEXT-1795: Modifying displayed statistics settings in Statistics View dialog doesn't reset/refresh the preview

- UIEXT-1787: Allow missing values for excluded columns in twinlist

- UIEXT-1782: Line plot lines are ignored if not in view port

- UIEXT-1751: Wrong data type shown in table view

- UIEXT-1733: Textarea closes dialog on enter

- UIEXT-1691: Cannot save Report PDF in the HUB

- UIEXT-1620: File Upload Widget finishes too early

- UIEXT-366: Re-execution is way slower in AP then in WebPortal

Nodes changing in KNIME Analytics Platform 5.3.0

New nodes:

- Fluoric logP

- Fluorine pKa

- CometAdapter

- CruxAdapter

- FidoAdapter

- LuciphorAdapter

- MaRaClusterAdapter

- MSFraggerAdapter

- MSGFPlusAdapter

- MyriMatchAdapter

- NovorAdapter

- OMSSAAdapter

- PercolatorAdapter

- Resampler

- SiriusAdapter

- XTandemAdapter

- Smartsheet Reader

- Smartsheet Writer

- hERG

- Credentials Properties Extractor

- Variable Filter

- Example Data Reader

- Row Filter

- Row Splitter

- Databricks Unity File System Connector

- Databricks Workspace Connector

- Email Sender (Labs)

- Salesforce Connector

- Create FileStore Port

- Report To Table

- Residual Analyzer (Labs)

- SARIMAX Learner (Labs)

- Autocorrelation Plot (Labs)

- SARIMAX Predictor (Labs)

- Differencer (Labs)

- SARIMA Predictor (Labs)

- Date&Time Aggregator (Labs)

- Date&Time Aligner (Labs)

- SARIMA Learner (Labs)

- Giskard Scanner

- Google Ads Geo Targets (Labs)

- Google Ads Keyword Ideas (Labs)

- Google Ads Query (Labs)

- Google Ads Connector (Labs)

- Text Chunker

- KNIME Hub Chat Model Connector

- HF TEI Embeddings Connector

- OpenAI Chat Model Fine-Tuner

- Presidio Analyzer

- Presidio Anonymizer

- Presidio Deanonymizer

- RDKit Fingerprint Reader

- RDKit Fingerprint Writer

- RDKit Functional Group Filter

- RDKit Structure Normalizer

Nodes replaced, old nodes deprecated:

- Row Splitter (deprecated)

- Row Filter (deprecated)

- Salesforce Authentication (deprecated)

- Salesforce Authentication Extractor (deprecated)

- RDKit Fingerprint Reader (deprecated)

- RDKit Fingerprint Writer (deprecated)

- RDKit Functional Group Filter (deprecated)

- RDKit Structure Normalizer (deprecated)

Nodes declared legacy:

- Create H2O Sparkling Water Context (legacy)

- H2O to Spark (legacy)

- Spark to H2O (legacy)

Nodes renamed:

- Regex Split → String Splitter (Regex)

- Round Double → Number Rounder

- Extract Date&Time Fields → Date&Time Part Extractor

- GPT4All Chat Model Connector → Local GPT4All Chat Model Connector

- Lasso Regression Learner (sklearn) → Sklearn Lasso Regression Learner (Labs)

- Gaussian Process Classification Learner (sklearn) → Sklearn Gaussian Process Classification Learner (Labs)

- Regression Predictor (sklearn) → Sklearn Regression Predictor (Labs)

- Classification Predictor (sklearn) → Sklearn Classification Predictor (Labs)

- Partial Least Squares Regression Learner (sklearn) → Sklearn Partial Least Squares Regression Learner (Labs)

- Gaussian Process Regression Learner (sklearn) → Sklearn Gaussian Process Regression Learner (Labs)

- Web Interaction End → Web Interaction End (Labs)

- Web Interaction Start → Web Interaction Start (Labs)

- Text Sender → Text Sender (Labs)

- Content Retriever → Content Retriever (Labs)

- Selenium Recording Player → Selenium Recording Player (Labs)

- Clicker → Clicker (Labs)

- Navigator → Navigator (Labs)

Extensions changing in KNIME Analytics Platform 5.3.0

New extensions:

- Chem AI

- Smartsheet extension for KNIME

- KNIME Expressions

- KNIME Timeseries (Labs)

- KNIME Giskard Extension

- KNIME Nodes for Google Ads (Labs)

- KNIME Presidio Extension

Extensions removed:

- KNIME Column Storage (based on Apache Parquet)

Extensions renamed:

- "KNIME Expressions" → "KNIME Column Expressions (Labs)"

- "KNIME HTML/PDF Writer" → "KNIME HTML/PDF Writer (legacy)"

- "KNIME Weka Data Mining Integration (3.6)" → "KNIME Weka Data Mining Integration (3.6) (legacy)"

- "KNIME Weka Data Mining Integration" → KNIME Weka Data Mining Integration (deprecated)"

- "KNIME AI Extension (Labs)" → "KNIME AI Extension"

Extensions moved:

- Time Series Extension - Moved from trusted to KNIME (Labs)

- KNIME Web Interaction - Moved from trusted to KNIME (Labs)

- KNIME Nodes for Scikit-Learn (sklearn) - Moved from trusted to KNIME (Labs)

Community Extensions

Partner Extensions

Extension	Contributor	Changes
ChemAxon/Infocom JChem Extensions Feature	INFOCOM CORPORATION	**Available**
ChemAxon/Infocom Marvin Extensions Feature	INFOCOM CORPORATION	**Available**
Schrödinger Extensions for KNIME	Schrödinger LLC	Available soon
LigandScout Extensions for the KNIME Workbench	Inte:Ligand GmbH	**Available**
MOE Extensions for KNIME	Chemical Computing Group ULC	**Available**

Pharmacelera extensions	Pharmacelera S.L.	**Available**
Spotfire File Nodes	TIBCO Spotfire	**Available**
Symanto Brain	Symanto	**Available**
Market Simulation nodes	Decision Ready, LLC	**Available**
KNIME Connector for SAP(KCS) Nodes	De Villiers Walton Ltd.	Available soon
exorbyte extension	exorbyte GmbH	Available soon

Trusted Community / Open Source Extensions

Extension	Status
Generic Workflow Nodes for KNIME	**Available**
KNIME Groovy Scripting extension	**Available**
KNIME HCS Tools	**Available**
KNIME Python Scripting extension	**Available**
KNIME R Scripting extension	**Available**
Lhasa	**Available**
RDKit Nodes Feature	Available soon
Slack Integration	**Available**
Continental Nodes for KNIME	**Available**
Genentech	**Available**
Geospatial Analytics Extension	**Available**
Neo4J	**Available**
Vernalis KNIME Nodes	Available soon
KNIME Image Processing	**Available**
KNIME-CDK	**Available**

Extension	Status
AF Utility Nodes	Available soon
OpenMS	Available soon
KNIME AI Extension	Moved to KNIME (Labs) since 5.3
Web Interaction	Moved to KNIME (Labs) since 5.3
KNIME Nodes for Scikit-Learn (sklearn) Algorithms	Moved to KNIME (Labs) since 5.3

Experimental Open Source Extensions / Experimental Community Extensions

Extension	Changes
CIR KNIME Integration	**Available**
KNIME Matlab Scripting extension	**Available**
Process Mining Extension	**Available**
Apprise Nodes	**Available**
Erlwood KNIME Open Source	**Available**
KNIME Shapefile Support	**Available**
Indigo KNIME integration	**Available** - Not working on MacOS because of a bug in Indigo
AI.Associates Signal Processing	**Available**
Enalos Nodes for KNIME	**Available**
Redfield BERT Nodes	**Available**
Redfield NLP Nodes	**Available**
3D-e-Chem KNIME nodes	**Available**
FSK-Lab	Available soon
Word2Vec	Available soon

Extension	Changes
PIA	**Available**
AIA Insights Bioactivity Predictor	Available soon - New since 2023
Supplychain visualization node	**Available** - New since 2023
BIM - Building Information Modelling Extension for KNIME (IFC)	**Available** - New since 2023
Smartsheet extension	**Available** - New since 2024
Redfield PST Nodes	**Available** - New since 2024
Chem AI Extension	**Available** - New since 2024
MMI Data Analytics Nodes	Not available anymore since 5.2
OrientDB	Not available anymore since 5.1