IDOL Server

Software Version 12.4.0

Release Notes

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Software Release Date: October 2019

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Documentation updates

The title page of this document contains the following identifying information:

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

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Many areas of the portal require you to sign in. If you need an account, you can create one when prompted to sign in. To learn about the different access levels the portal uses, see the Access Levels descriptions.

Contents

Introduction to IDOL 12

IDOL 12 is the latest major version of IDOL, and introduced some significant new features.

- **IDOL Audio Analysis** functionality is now available in Media Server, so that you do not need to install IDOL Speech Server separately.

  > **NOTE:** As a result of this change, IDOL Speech Server is not available in IDOL 12.0.0 and later.

- **IDOL Text Index Encryption**. You can now encrypt your IDOL text data index, using AES encryption.
- **Geospatial Index**. The new IDOL text geospatial index improves the handling of geographical search. You can now index geographical regions, as well as points, and the new index supports several new FieldText operators for geographical searches.
- **Dynamic Corpus Functionality**. Web Connector has new functionality to allow you to embed IDOL analytics into the decision making during the data collection process. It can now use custom algorithms to choose whether to ingest a page based on the result of a Lua script.
- **Improved embedded Web browser**. The Web Connector has a new and improved embedded Web browser.

IDOL NiFi Ingest

In addition to the new features and improvements available in the existing IDOL components, the wider IDOL framework now includes IDOL NiFi Ingest.

IDOL NiFi Ingest is a new way to plan and configure your ingestion stream. It uses Apache NiFi to allow you to easily configure and manipulate your data ingest process, from your connectors, to KeyView and other import processes (such as media analysis and Eduction), and your IDOL index.

NiFi Ingest is intended as an alternative to the Connector Framework Server. For more information, refer to the *IDOL NiFi Ingest Help*.

New in this Release

The following sections describe the enhancements for the components of IDOL Server version 12.4.0.

Content Component

New in this Release

- When indexing an agent document, Content now attempts to ensure that the index contains fields that match any simple field restrictions in the configured `AgentBooleanCacheField` and `FieldTextCacheField` fields. It creates fields for restrictions that do not contain wildcards, or that contain only a single leading `*/` wildcard. This feature reduces the need for indexing dummy documents.
- The `StateMatchOriginalSection` action parameter has been added to the query actions that accept state ID restrictions to control how to expand reference-based stored state tokens when they refer to multi-section documents. By default, IDOL returns all sections of documents whose references are saved in the state token, even if the original query returned only some sections. You can set `StateMatchOriginalSection` to **`True`** to only return the original matching sections.

Resolved Issues

- Efficiency has been improved for looking up a document by reference when it has a large number of sections.
- In rare circumstances, Content could fail to allocate sufficient memory when evaluating FieldText operators on optimized numeric fields.
- In an encrypted index, no new data was indexed following a `DRERESET` index action, and results were unsearchable until after a complete restart of the engine.
- In an encrypted index, if the encryption key was modified and a `DREINITIAL` index action was sent, no new data could be indexed until after a complete restart of the engine.

  > **NOTE:** When you change or remove the encryption key from an encrypted index, the `DREINITIAL` index action no longer removes the `servicekeyhash.dat` file from your main directory. You must manually delete this file.

- The highlighting of wildcard terms was sometimes incorrect if there were fields configured as `HighlightType`, but not `Index` type.
- When indexing failed for a document with a large number of sections that surpassed the 2GB storage limit, all indexing could stall.

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Category Component

New in this Release

There were no new features in Category Component version 12.4.0.

Resolved Issues

- Category could erroneously override the values of the `Clients` configuration parameter in the `[AuthorizationRoles]` sections for the `admin` and `query` StandardRoles with the values of the deprecated `AdminClients` and `UserClients` parameters (or their defaults).
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Community Component

New in this Release

There were no new features in Community Component version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Connector Framework Server

CFS includes KeyView filters and can run Eduction. For new features and resolved issues related to these components, refer to the *KeyView Release Notes* and *Eduction Release Notes*.

New in this Release

- CFS has import tasks and Lua functions to decrypt files that are protected with Microsoft Azure Rights Management (RMS) encryption. You can also encrypt files using RMS encryption. This feature supports Office and `.pfile` files, but cannot decrypt PDF files.
- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- CFS could terminate unexpectedly when processing some documents that had the field `ImportOriginalEncoding` set.
- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Controller

New in this Release

- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Coordinator

New in this Release

- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Distributed Action Handler

New in this Release

- DAH supports the new `StateMatchOriginalSection` action parameter, which it passes through to the Content component. For more information, refer to the IDOL Content component documentation.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Distributed Index Handler

New in this Release

There were no new features in Distributed Index Handler version 12.4.0.

Resolved Issues

There were no resolved issues in Distributed Index Handler version 12.4.0.

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

File System Connector

New in this Release

- The NiFi Ingest connector includes a processor to perform the view action (`ViewFileSystem`).
- When mapped security is enabled, the connector adds Access Control Lists (ACLs) to each document to describe browse and write permissions. Browse permission means that a user or group can see that a document exists in a repository. Write permission means that a user or group can modify the document. The new ACLs are added in metadata fields named `AUTONOMYMETADATA_BROWSE` and `AUTONOMYMETADATA_WRITE`, and complement the existing ACL in the `AUTONOMYMETADATA` field that describes read permissions.
- The `identifiers` fetch action has a new parameter, `ShowExcluded`. If you set this parameter to `TRUE`, the connector returns identifiers for excluded items (items that would not be synchronized because they are excluded by the task configuration).
- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Find

New in this Release

- You can now configure the `StoredStateField` parameter that Find sends to IDOL Server, by using the `storedStateField` property in the Find configuration file. This parameter affects requests that retrieve a state token, which are used, for example, to compare sets of search results.

Resolved Issues

- Search results could fail to display when a document had a date field with an non-valid value.

HTTP Connector (Solaris only)

New in this Release

- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

IDOL Admin

New in this Release

- The Real Time page now shows timestamps in the browser's local timezone.

Resolved Issues

There were no resolved issues in IDOL Admin version 12.4.0.

IDOL Proxy Component

New in this Release

There were no new features in IDOL Proxy version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

IDOL Site Admin

New in this Release

There were no new features in IDOL Site Admin version 12.4.0.

Resolved Issues

- IDOL Site Admin ignored the "admin" and "useradmin" roles, so users could not configure anything that required these privileges.
- IDOL Site Admin did not save configuration settings when OEM encryption was enabled.

Knowledge Graph Component

New in this Release

There were no new features in Knowledge Graph version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

License Server

New in this Release

There were no new features in License Server version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Media Server (Windows and Linux only)

New in this Release

Media Server Core

- Media Server can import and export classifiers, databases, recognizers, and custom speech language models, so that you can move training from one server to another. For example, you can export a face database and then import it into a different Media Server that does not share the same database. The modules that support importing and exporting training data are: audio matching, face recognition, image classification, image comparison, image hash, object class recognition, object recognition, speaker identification, speech-to-text, and vehicle model recognition.
- Media Server supports a new macro, `%system.port%`, so that you can include the Media Server ACI port in configuration parameter values.
- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Analysis

- Face recognition accuracy has improved significantly.
- Object class recognition supports two new types of recognizer. These recognizers have different characteristics so that you can prioritize accuracy or run-time speed.
    - The recognizer type that was available in Media Server versions 12.3 and earlier is now named `Generation1`, and remains the default type. This type of recognizer is the fastest to train but the new recognizers provide equal or better accuracy and are much faster at run-time.
    - The new `Generation2` recognizer offers the best accuracy, but takes the longest to train. The training time is impractical on a CPU, so Micro Focus recommends that you train the recognizer on a machine with a supported GPU. You can use a trained `Generation2` recognizer with or without a GPU but Micro Focus recommends using a GPU for best performance. If you run recognition on a GPU, this type of recognizer is much faster than the `Generation1` recognizer, which allows you to set much shorter sample intervals.
    - The new `Generation3` recognizer is the fastest at run-time, but accuracy is slightly lower than the `Generation2` recognizer.
- Optical Character Recognition can detect the alphabet (such as Latin, Cyrillic, or Arabic) used on each image or page of a document. This can reduce the processing time when you configure multiple languages that span more than one alphabet, because Media Server can ignore languages that do not match the detected alphabet. To use this feature, set the new configuration parameter `DetectAlphabet`.

- Optical Character Recognition has a new output track, named `CharResult`, that provides character-level detail. This track is available only when you ingest images or documents. It is not available if the source is a video file or stream.
- The scene analysis engine has a new output track named `PTZChange`. Media Server writes a record to this track when a PTZ camera is moved away from, or back to, the configured scene.

Transformation

- The Crop transformation engine supports the configuration parameters `Region` and `RegionUnit`, so that you can crop images to a fixed region. The default behavior is unchanged (Media Server crops the image to the region specified in the input record, for example the bounding box around a detected face or object).

Resolved Issues

- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Query Manipulation Server Component

New in this Release

- QMS supports the new `StateMatchOriginalSection` action parameter, which it passes through to the Content component. For more information, refer to the IDOL Content component documentation.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Statistics Server Component

New in this Release

There were no new features in Statistics Server version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

View Server Component

New in this Release

There were no new features in View Component version 12.4.0.

Resolved Issues

- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Web Connector (Windows and Linux only)

New in this Release

- The NiFi Ingest connector includes a processor to perform the view action (`ViewWeb`).
- Web Connector can synchronize web sites that require TLS version 1.3.
- Web Connector has a new configuration parameter, `DisableJavaScript`, that you can use to disable JavaScript execution on the pages that are processed.
- Web Connector has new configuration parameters, `ResourceUrlCantHaveRegex` and `ResourceUrlMustHaveRegex`. You can set these parameters to prevent the connector downloading resources such as stylesheets, JavaScript files, images, and other files that are used to construct a page. Previous versions of the connector could be configured not to ingest documents for these items, but would still download the resources in order to render pages. The new configuration parameters prevent the connector downloading the unwanted resources under any circumstances.
- Web Connector can be configured to not ingest a page when a CSS selector specified by `ClipPageUsingCssSelect` or `ClipPageUsingCssUnselect` does not match any elements on the page. You can configure this behavior by setting the new configuration parameters `CssSelectOnFailure` and `CssUnselectOnFailure`.

- Web Connector can normalize the white-space in ingested documents. This can prevent pages being re-ingested when the only difference in the page content is a change in white-space. To normalize white-space set the new configuration parameter `NormalizeWhitespace`.
- The `identifiers` fetch action has a new parameter, `ShowExcluded`. If you set this parameter to `TRUE`, the connector returns identifiers for excluded items (items that would not be synchronized because they are excluded by the task configuration).
- In schedules defined with the `schedule` action, you can now add holiday periods during which no actions are started.

Resolved Issues

- Web Connector did not synchronize content contained in an `iframe`.
- Web Connector did not respect the `SSLCheckCertificate` configuration parameter when negotiating a secure connection to a web site.
- In some cases, Web Connector did not wait for scripts to finish.
- In some cases, instances of the embedded web browser (WKOOP) did not terminate correctly.
- In some cases, HTML meta-refresh instructions were not handled correctly.
- In some cases, the documents created by Web Connector had an empty title.
- Sometimes Web Connector did not stop correctly.
- Schedules created with `action=Schedule` were lost if the server was restarted.
- On Linux, when running some older versions of the Linux kernel, IDOL components could fail to connect to network ports.

Requirements

This section describes the system requirements, supported platforms, and software dependencies for IDOL Server 12.4.0.

Minimum System Requirements

The following are minimum system requirements for IDOL Server 12.4.0 on any supported operating system platform:

- a dedicated SCSI disk
- 4 GB RAM
- 100 GB disk space
- a minimum of 2 dedicated CPU - Intel Xeon or AMD Opteron or above

To run IDOL Server version 12.4.0, or its components, on UNIX platforms, the server must have the following minimum versions of libraries:

- GLIBC_2.3.2
- GLIBCXX_3.4.21
- GCC_4.8.0

> **NOTE:** The IDOL Server installer and component stand-alone zip packages provide these libraries in the `libgcc_s` and `libstdc++` shared libraries.
>
> If you start components from the command line (rather than using the init script), you might need to set the `LD_LIBRARY_PATH` to include the *`InstallDir`*`/common` and *`InstallDir`*`/common/runtimes` directories, to ensure that the component can access the installed shared libraries.
>
> You can also copy the shared libraries to the component working directory.

To run IDOL Server version 12.4.0 on the Microsoft Windows operating system, you might need to install Microsoft Visual C++ Redistributable packages. The IDOL Server installer includes the required redistributable files for Microsoft Visual C++ 2017 and 2010. You can also update your packages by using the latest version at: http://support.microsoft.com/kb/2019667.

Software Dependencies

Some IDOL Server components depend on specific third-party or other Micro Focus IDOL software. The following table details the IDOL Server software and feature dependencies.

Component	Dependencies

Find	Java runtime environment (JRE) 8 or 11
IDOL Data Admin	Java runtime environment (JRE) 8 or 11
IDOL NiFi Ingest	Java runtime environment (JRE) 8
IDOL Site Admin	Java runtime environment (JRE) 8 or 11
Browsers	• Internet Explorer 11 • Mozilla Firefox (latest version) • Chrome (latest version)

Supported Operating System Platforms

IDOL Server 12.4.0 is supported on the following platforms.

Windows (x86-64)

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012
- Windows 7 SP1
- Windows Server 2008 R2
- Windows Server 2008 SP2

Linux (x86-64)

The minimum supported versions of particular distributions are:

- Red Hat Enterprise Linux (RHEL) 6
- CentOS 6
- SuSE Linux Enterprise Server (SLES) 12
- Ubuntu 14.04
- Debian 8

Solaris (x86-64 and SPARC 64)

- Solaris 11
- Solaris 10

Some components, for example IDOL Media Server and IDOL Web Connector, are not available on Solaris.

Notes

- As a result of changes made to support TLS version 1.3:
  - Certificates that use outdated signature algorithms such as `md5WithRSAEncryption` must be replaced with certificates that use a more secure algorithm, such as `sha256WithRSAEncryption`.
  - RC4 ciphers are no longer supported.
- If you are running IDOL server on the Solaris operating system, ensure you specify an installation path that is less than 30 characters. This prevents an issue with the stop script.

Content

- Support for legacy qmethods functionality (`QueryPort`) has been removed.
- Documentation for the `[MySecurityType] ReferenceField` parameter has been removed. This parameter related to qmethods functionality that was previously deprecated and removed from documentation.
- When you change or remove the encryption key from an encrypted index, the `DREINITIAL` index action no longer removes the `servicekeyhash.dat` file from your main directory. You must now manually delete this file.

Community

- The `V4` configuration parameter in the *`MySecurityRepository`* section has been deprecated. Micro Focus recommends that you use only the version 4 Autonomy security types, in which case you do not need to set this parameter.

  The `V4` parameter is still available for existing implementations, but it might be incompatible with new functionality. The parameter might be deleted in future.

Connector Framework Server

- The deprecated parameter `ImportThreadHashing` has been removed.

Eduction

- Classes related to `EDKPostProcessor` have been deprecated. These classes are still available for existing implementations, but they might be incompatible with new functionality. The classes might be deleted in future.

Media Server

Audio Analysis

Media Server versions 12.0 to 12.3 started a separate audio service for audio analysis (including language identification, speech-to-text, and speaker identification). Audio analysis functionality has now been integrated into Media Server and, as a result, the following options have been removed:

- The `AudioACIPort`, `AudioDataPort`, `AudioServicePort`, and `AudioStartTimeout` configuration parameters, which were set in the `[Resources]` section of the Media Server configuration file.
- The `AudioApplication` and `AudioAction` log types, which could be specified by the `LogTypeCSVs` configuration parameter.

Deprecated Features

Category	Deprecated Feature	Deprecated Since
Training database	Setting the `SyncInterval` parameter as a number of milliseconds. Micro Focus recommends setting this parameter as a time duration instead.	12.4.0
Event Stream Processing	The `MinTimeInterval` and `MaxTimeInterval` parameters for the `And`, `AndThen`, `AndAny`, `AndThenAny`, `AndNot`, `AndNotThen`, and `Combine` engines. Micro Focus recommends using the new configuration parameter `TimestampCondition` instead.	12.3.0
Barcode analysis	The `ImageBinarizeMethod` configuration parameter.	12.2.0
Speech-to-text	The training action `SyncCustomSpeechLanguageModels`. Micro Focus recommends that you use the new action `SyncCustomSpeechResources` instead.	12.2.0
Scene Analysis	The configuration parameters `IsasTrainingDirectory` and `IsasAlarmDirectory`. Micro Focus recommends	12.0.0

	that you use the parameters `SceneAnalysisTrainingDirectory` and `SceneAnalysisAlarmDirectory` instead.	
Server / Service	The `AdminClients`, `QueryClients`, `ServiceControlClients`, and `ServiceStatusClients` configuration parameters. Micro Focus recommends that you use authorization roles instead.	11.5.0
Rolling buffer	The action parameter `name`, available on the actions `AddStream`, `EditStream`, `GetStreamInfo`, `PreAllocateStorage`, and `RemoveStream`. Micro Focus recommends that you use the parameter `stream`, instead. The action parameters `OldName` and `NewName`, on the action `RenameStream`. Micro Focus recommends that you use the parameters `Stream` and `NewStream` instead.	11.4.0

Removed Features

The following features have been removed:

- Analysis engine event tracks. The analysis engines that produced event tracks now have `Start` and `End` tracks. The `Start` and `End` tracks are the same as the `Data` track, but contain only the first or last record for each event. This means that the records describing the start and end of events have the same schema as records that provide the analysis results.

Documentation

The following documentation was updated for IDOL Server version 12.4.0.

- *IDOL Expert*
- *IDOL Getting Started Guide*
- *IDOL Server Reference* (online help)
- *IDOL Server Administration Guide*
- *IDOL Document Security Administration Guide*
- *Distributed Action Handler Reference* (online help)
- *Distributed Action Handler Administration Guide*
- *Distributed Index Handler Reference* (online help)
- *Distributed Index Handler Administration Guide*
- *License Server Reference* (online help)
- *License Server Administration Guide*
- *Connector Framework Server Reference* (online help)
- *Connector Framework Server Administration Guide*
- *File System Connector Reference* (online help)
- *File System Connector Administration Guide*
- *HTTP Connector Reference* (online help)
- *HTTP Connector Administration Guide*
- *Web Connector Reference* (online help)
- *Web Connector Administration Guide*
- *QMS Reference* (online help)
- *QMS Administration Guide*
- *Media Server Reference* (online help)
- *Media Server Administration Guide*
- *Controller Reference*
- *Coordinator Reference*
- *Knowledge Graph Reference* (online help)
- *Knowledge Graph Administration Guide*
- *Find Administration Guide*

- *IDOL Site Admin Installation Guide*
- *IDOL Site Admin User Guide*