

IDOL Server

Software Version 12.11.0

Release Notes



Document Release Date: February 2022
Software Release Date: February 2022

Legal notices

© Copyright 2022 Micro Focus or one of its affiliates.

The only warranties for products and services of Micro Focus and its affiliates and licensors (“Micro Focus”) are as may be set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

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.

To check for updated documentation, visit <https://www.microfocus.com/support-and-services/documentation/>.

Support

Visit the [MySupport portal](#) to access contact information and details about the products, services, and support that Micro Focus offers.

This portal also provides customer self-solve capabilities. It gives you a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the MySupport portal to:

- View information about all services that Support offers
- Submit and track service requests
- Contact customer support
- Search for knowledge documents of interest
- View software vulnerability alerts
- Enter into discussions with other software customers
- Download software patches
- Manage software licenses, downloads, and support contracts

Many areas of the portal require you to sign in. If you need an account, you can create one when prompted to sign in.

Contents

Introduction to IDOL 12	5
New in this Release	6
Content Component	6
New in this Release	6
Resolved Issues	6
Category Component	7
New in this Release	7
Resolved Issues	7
Community Component	7
New in this Release	7
Resolved Issues	7
Connector Framework Server	8
New in this Release	8
Resolved Issues	8
Controller	8
New in this Release	8
Resolved Issues	9
Coordinator	9
New in this Release	9
Resolved Issues	9
Distributed Action Handler	9
New in this Release	9
Resolved Issues	9
Distributed Index Handler	10
New in this Release	10
Resolved Issues	10
File System Connector	10
New in this Release	10
Resolved Issues	11
Find	11
New in this Release	11
Resolved Issues	11
HTTP Connector (Solaris only)	11
New in this Release	11
Resolved Issues	11

IDOL Admin	11
IDOL Proxy Component	12
New in this Release	12
Resolved Issues	12
IDOL Site Admin	12
Knowledge Graph Component	12
New in this Release	12
Resolved Issues	12
License Server	13
New in this Release	13
Resolved Issues	13
Media Server (Windows and Linux only)	13
New in this Release	13
Resolved Issues	14
Query Manipulation Server Component	14
New in this Release	14
Resolved Issues	14
Statistics Server Component	15
New in this Release	15
Resolved Issues	15
View Server Component	15
New in this Release	15
Resolved Issues	15
Web Connector (Windows and Linux only)	16
New in this Release	16
Resolved Issues	16
Requirements	17
Minimum System Requirements	17
Software Dependencies	17
Supported Operating System Platforms	18
Notes	19
Documentation	24

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 Education), 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 12.11.0.

Content Component

New in this Release

- The IDOL Content component supports a new field specifier named `REGEXMATCH`. You can use this to query for documents where the value of a document field matches a regular expression. `REGEXMATCH` is optimized for `MatchType` fields, and `ParametricType` fields when `ParametricNumericMapping=TRUE`.
- Improved support for geospatial data and queries. You can now index, and query for, geometric objects in the Well-Known Text `LINESTRING`, `MULTIPOINT`, `MULTILINESTRING`, `MULTIPOLYGON`, and `GEOMETRYCOLLECTION` formats.

You can use these geometric objects in queries with geospatial operators such as `GEOWITHIN`, `GEOCONTAINS`, and `GEOINTERSECTS`. For example, you could query for documents containing points or polygons that intersect a `LINESTRING`, which could represent a route passing through various regions.

- The generic security module (used when the security type is `AUTONOMY_SECURITY_V4_GENERIC_MAPPED`) supports `SecurityInfo` strings that contain a comma-separated list of user names. Earlier versions supported only a single user name. This improves support for repositories where users can have alternative user names, such as an e-mail address and a user ID.
- The `DREINITIAL` index action has new parameters that make it easier to restore an index from a backup created by a different Content component. You can use the new parameter `BackupTime` to specify the time when the backup was created, so that the Content component can determine which index commands it has to replay from the index command archive. You can use the `ReplayArchivePath` parameter to specify the path to the index command archive that was generated by the other Content engine.
- The `DREREGENERATE` index action can regenerate the phrase index (`/DREREGENERATE?Type=Phrase`).
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- Indexing a large number of documents was significantly slower with Content 12.10 than with earlier versions.

- When indexing documents in a language with sentence breaking and normalization enabled, particular inputs could cause Content to terminate unexpectedly.
- On Windows, compaction and regeneration of the security index could fail if the value of the configuration parameter `SecIndexPath` was an absolute path using "/" (rather than "\\") as the directory separator.
- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Category Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Community Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- Requests to `action=UserRead` could fail to return, causing Community to become unresponsive.
- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".

not receive request (HTTP message-header is too long)".

- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Connector Framework Server

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

New in this Release

- CFS supports new Lua functions, `decrypt_security_field` and `decrypt`, to decrypt access control lists and strings that you encrypted with the `encrypt` function.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- CFS could fail to move extracted files to the extract directory. (When you set `KeepExtractedFiles=TRUE` and processing of a document is complete, CFS moves extracted files from its `WorkingDirectory` to the specified `ExtractDirectory` instead of deleting them. As in earlier versions of CFS, this is accomplished using a move operation. If this is not successful, CFS now falls back to copying the files to the destination and then deleting them from the working directory).
- CFS could terminate unexpectedly if documents were processed by an Education task.
- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Controller

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Coordinator

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Distributed Action Handler

New in this Release

- You can use the `EngineManagement` action to change the host or port of a child server. The `EngineAction` parameter accepts a new value, `EngineEdit`.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Distributed Index Handler

New in this Release

- The DIH supports engine removal in mirror mode. To remove a Content engine, use the DREREDISTRIBUTE index action and set the RemoveGroup parameter to the group ID of the Content engine to remove. In mirror mode the Content engines contain the same documents, so redistribution does not occur.
- The DIH supports the actions BackupServer and RestoreServer.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter TempDir in the [Paths] section of the configuration file.

Resolved Issues

- A request to action=GetChildren could return an error after a child engine was removed.
- When engines were removed, the DIH could only power down the first engine in the DAH.
- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

File System Connector

New in this Release

- When running the connector on Windows, you can choose the user account to use to read files in the file system. If the user account you are using to run the connector does not have permission to read the files that you want to synchronize, set the new parameters ReadUsername and ReadPassword.
- The connector supports new Lua functions, decrypt_security_field and decrypt, to decrypt access control lists and strings that you encrypted with the encrypt function.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter TempDir in the [Paths] section of the configuration file.
- The IDOL NiFi Ingest connector has been updated so that the advanced configuration UI is compatible with Apache NiFi 1.15.0 to 1.15.3.

Resolved Issues

- When the connector was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".
- The connector was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Find

New in this Release

There were no new features in Find version 12.11.0.

Resolved Issues

- The graph shown for date field filters would fail to display under some circumstances.

HTTP Connector (Solaris only)

New in this Release

- The connector supports new Lua functions, `decrypt_security_field` and `decrypt`, to decrypt access control lists and strings that you encrypted with the `encrypt` function.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.
- The IDOL NiFi Ingest connector has been updated so that the advanced configuration UI is compatible with Apache NiFi 1.15.0 to 1.15.3.

Resolved Issues

- When the connector was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpClient error - could not receive request (HTTP message-header is too long)".
- The connector was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

IDOL Admin

IDOL Admin was not included in this release. IDOL 12.11.0 includes IDOL Admin 12.10.

IDOL Proxy Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

IDOL Site Admin

IDOL Site Admin was not included in this release. IDOL 12.11.0 includes IDOL Site Admin 12.10.

Knowledge Graph Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

License Server

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".

Media Server (Windows and Linux only)

New in this Release

- The process action has a new parameter named `timeout`, which you can use to automatically stop an action if the processing time exceeds a specified time duration.
- Object recognition supports partial matches, where only part of a trained object appears in the ingested media. To use this feature, set the new parameter `MinimumMatchPercentage` in your object recognition task.
- Video matching supports partial matches, where only part of a trained video clip appears in the ingested media. To use this feature, set the new parameter `MinimumMatchDuration` in your video match analysis task. For example, if you train a video clip with a duration of 20 minutes and set `MinimumMatchDuration=60s`, Media Server will report a match when the analyzed video contains at least one minute of the trained clip.
- Media Server stores the video clips that you supply to train video matching. This means that if the video match algorithm changes in future and re-training is required, you will not need to supply the video clips again. Storing video clips in the training database could consume a large amount of disk space. If you prefer not to store the clips, set the action parameter `NullVideoData=TRUE` when you run the action `TrainVideoMatchClip`.
- You can use the new action `ScoreCustomSpeechLanguageModel` to determine whether a custom language model provides the accuracy you require, or needs further training.
- A new language pack is available for speech-to-text (ZHTW, "Mandarin - Taiwanese", broadband 16kHz only). This is available as a separate download.
- Face detection produces a new `AlignedImageResult` track. This contains one record for each detected face. Each record includes the identifier of the detected face and an image. The image is rotated so that the face is upright and is cropped around the person's head.

- The results produced by barcode detection, face detection, object recognition, object class recognition, optical character recognition (OCR), and text detection include a new field named `parentID`. This field is empty, unless you configure the analysis engine with `Region=Input` in which case it contains the UUID of the input record. This provides a way to link a result with other records (from another analysis task) that supplied the region to analyze.
- The records generated by Optical Character Recognition (OCR) contain more information.
 - OCR provides information about the font size. If you know the resolution at which the image was scanned or created (in dots per inch), you can calculate the font size in points.
 - The `OCRDetail` record type (used in the `CharResult` track) includes the text and region information for the full line of text.
 - The records in the `PageResult` track include a list of alphabets used on the page.
- The clip encoder can create video clips where the frames are cropped, such that the video shows only the person or object associated with an event. To produce cropped video clips, set the new parameter `RegionInput`.
- The PDF encoder accepts additional types of OCR input. You can use the `Result` or `WordResult` track from an OCR analysis task. In earlier versions of Media Server, the PDF encoder accepted only the `CharResult` track.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Query Manipulation Server Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- ACI actions using `IntentRankedQuery` or `ExplicitProfiling` could fail to return, resulting in a denial of service. (This could occur if QMS simultaneously received multiple actions for a `Username` without cached profile data.)

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Statistics Server Component

New in this Release

- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

View Server Component

New in this Release

- You can configure the View Component to encrypt its cache (of documents that have been rendered as HTML). To encrypt the cache, set the configuration parameter `AESKeyFile` or start the server with the argument `-dataencryptionkey`.
- Highlighting is supported for Microsoft PowerPoint documents in the new rendering mode (`LegacyRendering=FALSE`).
- View Server provides a basic view of container formats such as ZIP or MSG files, when `LegacyRendering=FALSE`.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.

Resolved Issues

- View Server did not respect the values of the `StartTag` and `EndTag` parameters in the new rendering mode (`LegacyRendering=FALSE`), so highlighting would use the default tags.

- When the server was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The server was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Web Connector (Windows and Linux only)

New in this Release

- In the CSS Selector Builder tool, the third-party libraries jquery and jquery-ui have been updated to versions 3.6.0 and 1.12.1 respectively.
- The connector supports new Lua functions, `decrypt_security_field` and `decrypt`, to decrypt access control lists and strings that you encrypted with the `encrypt` function.
- The path of the temporary directory, where the server stores files that were uploaded in multipart requests, can be configured using the new parameter `TempDir` in the `[Paths]` section of the configuration file.
- The IDOL NiFi Ingest connector has been updated so that the advanced configuration UI is compatible with Apache NiFi 1.15.0 to 1.15.3.

Resolved Issues

- Documents could be incorrectly deleted from the IDOL index after the connector failed to retrieve a page and incorrectly updated the links from that page.
- The embedded browser (WKOOP) processes, and therefore the connector, did not stop correctly.
- When the connector was configured to require SSL and GSS authentication for incoming connections, POST requests over a certain size could fail with the error "httpServer error - could not receive request (HTTP message-header is too long)".
- The connector was unable to renew its license and would therefore stop, if SSL was required for the connection to the IDOL License Server.

Requirements

This section describes the system requirements, supported platforms, and software dependencies for IDOL Server 12.11.0.

Minimum System Requirements

The following are minimum system requirements for IDOL Server 12.11.0 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 12.11.0, or its components, on UNIX platforms, the server must have the following minimum versions of libraries:

- GLIBC_2.17
- 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 12.11.0 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++ 2019, 2017, and 2013. 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
MMAP	Java Runtime Environment (JRE) 8 or 11
Browsers	<ul style="list-style-type: none">• Mozilla Firefox (latest version)• Chrome (latest version)

Supported Operating System Platforms

IDOL Server 12.11.0 is supported on the following platforms.

Windows (x86-64)

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012

Linux (x86-64)

The minimum supported versions of particular distributions are:

- Red Hat Enterprise Linux (RHEL) 7
- CentOS 7
- SuSE Linux Enterprise Server (SLES) 12
- Ubuntu 14.04
- Debian 8

Solaris (x86-64 and SPARC 64)

DEPRECATED: Support for Solaris x86-64 and SPARC 64 was deprecated in IDOL version 12.10, for all IDOL components except KeyView. IDOL components are currently still available for Solaris, but might not be available in future.

- Solaris 11
- Solaris 10

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

Notes

- 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

- The DRECOMPACT index action (whether scheduled or started manually) no longer compacts the phrase index by default, because doing so can take a significant amount of time for large indexes. If necessary you can restore the previous behavior by setting CompactPhraseIndex=TRUE in the [Schedule] section of the configuration file.

Deprecated Features

The following features are deprecated and might be removed in a future release.

Category	Deprecated Feature	Deprecated Since
Configuration	The HMACValidation configuration parameter. In version 12.9.0, the AES implementation for encrypting security info strings was updated to include built-in authentication, so additional HMAC validation is no longer required or supported.	12.9.0
Configuration	The NGramOrientalOnly configuration parameter. You must now use the equivalent NGramSentenceBrokenScriptOnly parameter instead.	12.7.0

Community

Deprecated Features

The following features are deprecated and might be removed in a future release.

Category	Deprecated Feature	Deprecated Since
Configuration	The HMACValidation configuration parameter. In version 12.9.0, the AES implementation for encrypting security info strings was updated to include built-in authentication, so additional HMAC validation is no longer required or supported.	12.9.0

Education

- The behavior of character expansions has changed. (You can configure character expansions in a compilation configuration file, which you use when compiling grammar files with edktool. For an introduction to character expansions, refer to the *Education User and Programming Guide*.)

Education now considers the source and destination characters as a single list where any character in the list is expanded to any other. The character chosen as the "src" character is significant only because it is used in normalized matches in place of any "dest" character. For example, consider the following configuration:

```
{
  "expansions": [
    { "src": "a", "dest": ["b", "c"] }
  ]
}
```

The following table shows how Education 12.10 and Education 12.11 expand some example patterns with this configuration:

Example pattern	Expanded pattern
<pattern>ade</pattern>	Both Education 12.10 and 12.11 expand this pattern to: <pattern>[abc]de</pattern> Matches are normalized to ade.
<pattern>bde</pattern>	Education 12.10 does not expand the pattern. Education 12.11 expands the pattern as follows, and normalizes matches to ade: <pattern>[abc]de</pattern>
<pattern>bbc</pattern>	Education 12.10 does not expand the pattern. Education 12.11 expands the pattern as follows, and normalizes matches to aaa: <pattern>[abc][abc][abc]</pattern>

Deprecated Features

The following features have been deprecated.

Category	Deprecated Feature	Deprecated Since
Education SDK	The ability to specify a license key by supplying a file path has been deprecated. Micro Focus	12.11

	<p>recommends embedding your license key in your application as a string, to avoid having the license key in a file on disk.</p> <p>In the C API the following functions have been deprecated:</p> <ul style="list-style-type: none"> • <code>EdkEngineCreate()</code> • <code>EdkEngineCreateFromConfigFile()</code> • <code>EdkSetLicenseKey()</code> • <code>EdkSetLicenseKeyFromFile()</code> <p>In the Java API the following have been deprecated:</p> <ul style="list-style-type: none"> • Both of the constructors for <code>EDKEngine</code>. • The <code>setLicenseKey</code> method of <code>EDKEngine</code>. <p>In the .NET API, the following has been deprecated:</p> <ul style="list-style-type: none"> • The <code>EDKFactory</code> constructor: <code>public EDKFactory(string license_key_path)</code> <p>Micro Focus recommends supplying the license key as a string, and creating an Education engine by using an engine factory. For more information, refer to the API reference documentation.</p>	
.NET Education SDK	<p>Education SDK support for .NET Standard 1.1 has been deprecated and might be removed in future. Micro Focus recommends using a .NET implementation that supports .NET Standard 2.0.</p>	12.11
Configuration	<p>[<code>PostProcessingTasks</code>] configuration section. Use the <code>PostProcessingTaskN</code> and <code>PostProcessThreshold</code> parameters in the [<code>Education</code>] section.</p>	12.5

Media Server

- As a result of changes made to support partial matches, video match training that was generated with Media Server 12.10 is not compatible with Media Server 12.11. Media Server 12.10 did not store the video clips in the database, so you must re-train Media Server by providing the video files again.

New Database Schema

- The Media Server database schema has changed. If you are using an internal database, the schema upgrade is performed automatically when you start the new version of Media Server. If

you are using an external PostgreSQL or MySQL database you must run an upgrade script, which is included in the Media Server 12.11.0 installation. For more information about upgrading the database schema, refer to the *Media Server Administration Guide*.

Deprecated Features

The following features are deprecated and might be removed in a future release.

Category	Deprecated Feature	Deprecated Since
Session configuration	The RestrictToInputRegion configuration parameter has been deprecated. Micro Focus recommends setting Region=Input instead.	12.7.0
Session configuration	<p>To simplify configuration, units can be specified in the same parameter as the corresponding value. As a result the following configuration parameters have been deprecated:</p> <ul style="list-style-type: none"> • BorderUnit (Crop transformation) • CharHeightUnit (Number plate recognition, text detection) • PathUnit (Path alerts) • RegionUnit • SizeUnit (Face detection, object recognition, persistent change detection) • TripwireUnit (Tripwire alerts) <p>Micro Focus recommends that you update your session configurations. For example, if you have a configuration that sets the Region parameter, add units alongside the parameter value. If the parameters listed above are removed in a future version of Media Server, values without units will become invalid.</p>	12.7.0
Actions	The GetLatestRecord action. The new actions KeepLatestRecords and GetLatestRecords provide more control over what to store and retrieve.	12.5.0
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

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 deprecated features have been removed.

- The ODBCDriverManager parameter (in the [Database] section of the Media Server configuration file, and for output engines that use ODBC).

Documentation

The following documentation was updated for IDOL Server version 12.11.0.

- *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 Help*
- *HTTP Connector Help*
- *Web Connector Help*
- *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*