IDOL
KeyView Filter SDK

Software Version 12.11.0

Release Notes

MICRO FOCUS

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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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Contents

New in this Release

This section lists the enhancements to KeyView Filter SDK version 12.11.0.

- KeyView format detection has been extended, with support for 36 additional file formats. By identifying a larger range of formats present in the enterprise, decisions can be made on how to route, filter, or alert on such documents. For the full list, refer to the *KeyView Filter SDK Programming Guides*.
- Improved compiler support for the C SDK on Linux and MacOS Apple-Intel 64-bit platforms, so that you can compile your application with newer compilers.
- The C file extraction API provides a way to open a subfile as an input stream. This is useful because some operations do not require all of the data contained within a subfile. For example, format detection can often be performed using only the beginning and end of a file, without needing to extract the entire file to disk or memory. Using this feature to extract only part of a subfile can take less time and improve the performance of your application.

  When using this new API to access the content of a large deflated stream in a ZIP (`PKZIP_Fmt`) file, there are some cases where KeyView will use an innovative new technology to provide access to the end of the stream without needing to decompress the whole stream, resulting in a saving in processing time and cost.
- When using the C API, if you provide a file size in `KVInputStream.lcbFilesize`, KeyView will no longer seek to the end of the file to get the file size (though it may seek to the end for other reasons).

  > **NOTE:** Micro Focus recommends that you check your code to ensure that `lcbFilesize` is either set correctly or initialized to `0`. Failure to initialize it will result in undefined behavior. Previously this value was ignored.
- KeyView sets the flag `KVSubFileInfoFlag_Secure` when you get subfile information using the reader `multiarcsr` and the subfile is encrypted. In earlier versions of KeyView, this flag was set only for ZIP, RAR, and PDF files.
- KeyView can extract Zstandard compression format (`Zstandard_Fmt`) files.
- KeyView can extract binary blobs from Git Packfiles (`Git_Packfile_Fmt`), and when you filter them provides the text content from deltas.
- KeyView can filter text from Apache ORC (Optimized Row Columnar) data on `MACOS_X86_64`, in addition to the platforms that were already supported by KeyView 12.10.
- KeyView can filter text from Apache Avro binary format files that use Snappy compression. Earlier versions of KeyView support `Avro_Fmt` but not when Snappy compression is used. `Avro_Fmt` is supported only on `WINDOWS_X86_64` and `LINUX_X86_64`.
- On Windows, Linux, and MacOS platforms, the Filter API (C only) provides a way to run the out-of-process server (KVOOP) as a different user to the calling application. You can use this feature to run KeyView with lesser privileges than your application.

- When using Optical Character Recognition (OCR), KeyView can detect tables in raster images. Tables detected as part of OCR are output in the same way as other filtered tables.
- When hidden text filtering is enabled, KeyView outputs the options from combo boxes in Microsoft Word (.docx) documents.
- KeyView outputs list markers when filtering lists in Microsoft Word (.docx) documents. For example, KeyView outputs the numbers from a numbered list or the bullet points from an unordered list.
- KeyView can extract Excel formulas that contain functions added in recent versions of Excel (when you configure KeyView to extract the formula instead of or in addition to the cell value). In previous versions of KeyView these functions appeared in the output with an `_xlfn.` prefix.
- KeyView can extract files that are embedded in Microsoft PowerPoint (.pptx) master and layout slides.
- KeyView reports extended file names for subfiles that are extracted from TAR files with PAX headers.
- Improved filtering performance for very large Microsoft Word (.docx) files containing many hyperlinks.
- Improved filtering performance for many PDF (`PDF_Fmt`) files.
- A file named `format_descriptions.tsv` is included in the KeyView `bin` directory. This provides a mapping between file format ID, human-readable format description, and the format's MIME type (if one exists). This file is in tab-delimited format, and the tab character will only appear as a delimiter. This information is also available in the KeyView documentation but the TSV file provides it in a machine-readable format.

Resolved Issues

The following issues were resolved in KeyView Filter SDK version 12.11.0.

- **(Security update)** The third-party `libxml2` library has been upgraded to version 2.9.12 to resolve known vulnerabilities, including CVE-2021-3516, CVE-2021-3517, CVE-2021-3518, CVE-2021-3537, and CVE-2021-3541.
- **(Security update)** The third-party `ODA` library has been upgraded to version 2022.12 to resolve known vulnerabilities, including CVE-2021-3711, CVE-2021-3712, CVE-2021-32936, CVE-2021-32938, CVE-2021-32940, CVE-2021-43274, CVE-2021-43391, CVE-2021-43582, CVE-2021-44047, CVE-2021-44048, CVE-2021-44422, and CVE-2021-44423.
- **(Security update)** The third-party `Snappy` library has been upgraded to version 1.1.9 on Windows, Linux, and MacOS. This resolves a possible vulnerability, CVE-2018-7577. Snappy 1.1.2 is still used on `SOLARIS_X86_64`.
- **(Security update)** The third-party `PDFium` library has been upgraded to version `chromium/4500`, to resolve multiple security vulnerabilities.
- **(Security update)** An outdated version of the third-party `zlib` library was used to decompress PNG files.
- Some `MIME_Fmt` files with unusual repeated headers were incorrectly identified as `ASCII_Text_Fmt`.
- KeyView could appear to stop responding in some circumstances, when running out-of-process in a multi-threaded application.
- KeyView could terminate unexpectedly if it was not able to read the `formats.ini` configuration file.
- KeyView could return invalid characters when processing some PDF files using the reader `pdf2sr`.
- KeyView could stop responding (in-process) or time-out (out-of-process) when attempting to extract images from some Microsoft Word (`.doc`) files.
- KeyView returned the error code `KVERR_badInputStream` when attempting to extract some valid PKCS #7 signed-data files, rather than `KVERR_FormatNotSupported`.
- KeyView could stop responding (in-process) or time-out (out-of-process) when processing some PDF files with circular references.
- When getting subfile information, some formats would not contain file hierarchy information, or that information would be incorrect.
- Retrieving summary information from plain text files would result in a general error, rather than a format not supported error. This would cause the out-of-process server (kvoop) to refresh more times than required, and could lead to a performance degradation.
- The output could include invalid characters when converting text to `KVCS_UTF16`.

- When filtering out-of-process, some configurable options could not be disabled after being enabled.
- The function `fpCanFilterFile` reported that `MS_Outlook_Fmt` (`.msg`) files could be filtered. This was incorrect because these are container files.
- KeyView did not correctly process password-protected documents when the same context pointer returned from one `fpOpenStream` call was re-used after setting the password (when running out-of-process in stream mode).
- KeyView could terminate unexpectedly (in-process) or return an error (out-of-process) when attempting to filter encrypted Corel Quattro Pro for Windows (`QPW_Fmt`) files.
- KeyView could stop responding (in-process) or time-out (out-of-process) when attempting to process corrupt Microsoft PowerPoint (.PPT) files.
- KeyView could stop responding (in-process) or time-out (out-of-process) when attempting to process corrupt OLE based files.
- KeyView would stop responding (in-process) or time-out (out-of-process) when attempting to process some ODF Spreadsheet (`ODF_Spreadsheet_Fmt`) files that had extremely small or extremely large values.
- When extracting Mac Executable files, KeyView incorrectly handled file segments with an offset of 0, which could cause extraction to enter an infinite loop.
- When filtering Microsoft Word (.docx) files, the total page count in a footer such as "Page 3 of 5" could be missing. KeyView did not output the cached field result for the NumPages field within complex fields.
- KeyView could stop responding when a stream was closed following a failure in streaming mode.
- KeyView did not set `KVMainFileInfoFlag_HasContent` in the `KVMainFileInfo` `infoFlag` field for Microsoft Visio (`MS_Visio_Fmt`) files.
- KeyView could terminate unexpectedly (in-process) or return an error (out-of-process) when attempting to detect the format of some text documents.
- KeyView returned `KVERR_badInputStream` for some compressed PDF documents.
- An unhandled exception could occur when KeyView processed some custom format strings in Microsoft Excel (.xlsx) files.

Requirements

For information about supported platforms, supported compilers, and software dependencies for the KeyView Filter SDK, refer to the *KeyView Filter SDK Programming Guides*.

Notes

- KeyView 12.11 drops support for Linux distributions using a `glibc` version earlier than 2.17, including Red Hat Enterprise Linux 6 and SuSE Linux Enterprise Server 11. Please refer to the documentation for the list of supported platforms.

Deprecated Features

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

Category	Deprecated Feature	Deprecated Since
C API	The `KVMemoryStream` structure and all uses of it are deprecated. KeyView does not guarantee to make memory allocations through this structure, and it might be removed in future.	12.10.0
Licensing	The ability to provide KeyView license information as a file (`kv.lic`) has been deprecated. In the C API, the function `fpInit()` has been deprecated. Micro Focus recommends that you use `fpInitWithLicenseData()` instead, so that your license key is passed to KeyView through the API. You should not include license information in your application as a file. `fpInit()` is still available for existing implementations, but it might be incompatible with new functionality and might be removed in future.	12.7.0

Documentation

The following documentation was updated for KeyView Filter SDK version 12.11.0.

- *KeyView Filter SDK C Programming Guide*
- *KeyView Filter SDK C++ Programming Guide*
- *KeyView Filter SDK Java Programming Guide*
- *KeyView Filter SDK .NET Programming Guide*