

# RasterMaster Release Notes

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## v20.1.0 - September 3, 2019

General availability release.

### New features

- Overlay Callback API for AFP file conversion  
`public int IMGLOW_set_overlay_callback(java.io.reflect.Method callbackMethod)`
- Thread Interrupted Detection
- Rubber Stamp support for P8 Annotation
- MS Office XML
  - Faster first page conversion/generation

- Limited Theme support
- Ellipse custom shape support
- Word
  - Footnote support
- Legacy MS Office
  - RTF
    - Significant performance improvement using new Document based API
- PDF
  - Support for Portfolio files
  - API to detect AcroForms
  - Added UNICNS-UTF16-H CMAP
  - Support for LiveCycle 9 created files

## Known Issues

None

## Bug Fixes

- Annotations
  - Corrected Sticky Note annotation background color
  - Fixed Annotation flip functionality
- Redaction
  - Improved redaction accuracy
- ASCII (TXT)
  - Improved Chinese text rendering
- AFP
  - Support for certain symbol fonts
  - Improved superscript support
  - Improved pattern rendering
- HTML
  - Fixed text extraction
- JPEG2000
  - Improved encoder support

- Support for 4 bit palette images
- Legacy MS Office
  - Excel
    - Improved custom format support
  - Word
    - Fix crash for files with large number of styles
- MS Office XML
  - Miscellaneous Null Pointer Exception fixes
  - Improved Chart support
  - Improved support for palette images
  - Improved rendering of images with alpha channel
  - PowerPoint
    - Improved custom geometry
  - Excel
    - Improved custom format support
    - Improved cell color support
    - Improved rendering of extremely large files
  - Word
    - Improved rendering of embedded media
    - Improved Z index graphics rendering
- PDF
  - Improved CMAP detection and handling
  - Improved Type1, Type2, Type3 and TrueType font rendering
  - Improved annotation rendering
  - Improved redaction
  - Fixed file bug when saving to raster PDF
  - Fix for malformed media box
  - Improved pattern support
  - Improved 4 bit embedded palette images
  - Improved Form parsing
  - Improved rendering of Calibri, Univers fonts
  - Improved rendering of outline text
  - Improved exporting to PDF

## **v20.0.3 - July 17, 2019**

Internal testing release for VirtualViewer.

## **v20.0.2 - June 28, 2019**

EMR release.

## v20.0.1 - June 25, 2019

GA release for VirtualViewer Java 5.0.0

### Bug Fixes

- Office improvements.

## v20.0.0 - May 13, 2019

General availability release.

### New features

#### Document based API

New document based API for MS Office XML and Legacy MS Office Word documents, which retains document information and significantly reduces processing time of subsequent pages.

#### SnowDoc

`SnowDoc` is a new way of managing and manipulating documents available in RasterMaster 20.0. `SnowDocs` are created by `SnowDocFactory`. Once a `SnowDoc` has been created, it is able to generate pages of output in any export format that RasterMaster supports. Retrieving pages from a `SnowDoc` is *thread-safe*, meaning that it's possible to retrieve an arbitrary number of pages at the same time from a single `SnowDoc` object.

#### SnowDocFactory

`SnowDocFactory` provides two essential functions for `SnowDoc` creation. Each function accepts any of three possible representations of an input file.

- A `java.io.DataInputStream` created from the input file
- A `java.lang.String` consisting of the system path to the input file
- A `byte[]` containing the byte data of the input file

#### Methods

- `public static boolean isSnowDocFormat(DataInputStream fileStream)`
  - Determines format of the input file & returns true if that format is supported by `SnowDoc`

- Will continue to be updated as more formats are adapted to support SnowDoc
- `public static SnowDoc createSnowDoc(DataInputStream fileStream)`
  - Creates a SnowDoc from the input file & returns it
  - Accepts optional parameters to specify layout resolution & bit depth, as well as the ability to override the file's default page width & height. For example:
    - `public static SnowDoc createSnowDoc(DataInputStream fileStream, int resolution, int bitDepth)`
    - `public static SnowDoc createSnowDoc(DataInputStream fileStream, int resolution, int bitDepth, int width, int height)`
  - These optional parameters are also available for the `String` & `byte[]` versions of `createSnowDoc`
  - The default resolution is 300dpi
  - The default bit depth is 24
  - The optional width and height parameters are in pixels at the specified resolution

## SnowException

`SnowException` class extends `java.lang.Exception` and will be thrown from some `SnowDoc` and `SnowDocFactory` functions. There are currently three types of `SnowException`.

- `InvalidLicenseException` is thrown when `SnowDoc` is unable to locate a valid RasterMaster license
- `PageNotFoundException` is thrown when a requested page number doesn't exist in the document
- `UnsupportedFormatException` is thrown by `SnowDocFactory.createSnowDoc()` when the input file is in a format not supported by `SnowDoc`

## Other improvements/features

- MS Office XML
  - General
    - Significant performance improvement using new Document based API
    - Support for Area Charts
    - Support for Rounded Rectangle in vector output
  - PowerPoint
    - Support for rotated custom geometry
    - Support for 'homeplate' preset geometry
    - Support for embedded MS Charts
- Legacy MS Office
  - Word
    - Significant performance improvement using new Document based API
  - Excel
    - Support for non-indexed files
- Enhanced Product Licensing

- PDF
  - Enhanced support for adding Meta Data when exporting to PDF
  - Support for indexed separation color space images
  - Support for Header and Footer Annotation
  - Support for 8 bit color images
  - Support for degree character
  - Support for line join and line cap
  - Support for Portfolio files
  - Support for 2 bit images
  - Split n-page file into n separate files using `IMGLOW_splitPDF()`
- MSG
  - Support for embedded HTML streams
  - Support for Unicode files

## Known Issues

None

## Bug Fixes

- Redactions
  - Fix redaction rectangle placement and accuracy when exporting to PDF
- PDF
  - Fix Type1 Font rendering mode
  - Fix character width for some Courier fonts
  - Fix clip path when exporting to SVG
  - Fix masked images when exporting to SVG
  - Fix for watermark images
  - Fix for missing or misplaced PDF annotations
  - Enhanced dictionary parsing
  - Fixed scaling of non-embedded fonts
  - Fixed XFA detection
  - Fix parsing of unicode fonts
  - Fix handling files with indirect rectangle dictionaries
  - Fix for CMYK progressive jpeg images
  - Fix for Thai character set fonts
  - Fix for ZapfDingBats fonts
  - Fix for transparent images/objects
  - Fix for inline images
  - Fix for encrypted files
  - Fix for SMasks

- Fix for German Copyright symbol
  - Fix for non-standard PDF headers
  - Fix 8 bit images with 4 components
  - Fix for Spot Color Type 0
  - Fix for greyscale G4 images
  - Fix for RunLengthDecode images
  - Fix for invisible text
  - Fix clipping rectangle for annotations
  - Fix parsing of Palette stream
  - Fix shading patterns
  - Fix redaction of PDF annotation-based content
  - Fix for rotated image masks
- MS Office XML
    - General
      - Fix line arrow drawing and direction
      - Fix chart background and series colors
      - More robust XML parsing
      - Fix embedded enhanced meta (EMF) file background color
    - Word
      - Fix highlighted text position
      - Fix for Theme colors
    - Excel
      - Fixes for missing rows and content
- Legacy MS Office
    - Legacy Word (DOC)
      - Fix text color in vector output
      - Fix handling of outlines/border for Office Shapes
      - More precise text placement
      - Fix checkboxes in vector output
      - Fix text for embedded enhanced meta files (EMF)
    - Legacy Excel (XLS)
      - Fix date custom formats
      - Fix support of extended ascii character set
      - Fix exporting embedded images to PDF
      - Fix for non-indexed files with merged cells
    - Legacy PowerPoint (PPT)
      - Support for cropped and rotated embedded images
      - Fixed textbox border display
      - Fixed display of embedded enhanced meta files (EMF)
- MSG
    - Fix for header to display on first page only

- AFP
  - Fix font spacing issue for small font sizes
  - Fix font attributes for Courier
  - Fix image patterns and masks
  - Fix 'DATA1' font to map to Courier
  - Fix for packed bit encoded images
  - Fix fill patterns
  - Fix handling of malformed files
  - Fix for masked images
  - Fix display of underscore character
  - Fix color for graphics objects
  - Fix text when extracting to vector
  - Fix 32 bit LZW images
- ASCII
  - Fix page offset for multi-page files
  - Fix extended ascii and UTF8 files
- JPG
  - Fix for displaying low-contrast greyscale images
- TIFF
  - Fix for Tiled TIFF/JPEG images
- HTML
  - Fix graphics when exporting to PDF
- Annotations
  - More robust P8 annotation parsing
  - Fix for P8 Sticky-note background color
  - Fix bug with rubber stamp annotation when exported to PDF
  - Fix swapped annotation colors
  - Fix display of ampersand character in text annotations
  - Fix flipping of bubble annotation
  - Fix line text wrapping for Post-it annotations
- Pattern Search
  - Fix for 'greedy' pattern search results

**v14.12/19.12 - June 29, 2018**



General availability release.

## New Features

- General
  - Added ability to load SnowboundLicense via Input Stream
- PDF
  - XFA Support for Filename calls
- Excel (XLSX)
  - Improved Custom cell formatting engine
- PowerPoint (PPTX)
  - Group Shapes Support
- DWG
  - Updated to latest version of plugin
  - Add support for Paper Spaces/Custom Views. Additional view is treated as a separate page
- ASCII (TXT)
  - Performance improvement for large ASCII files.

## Known Issues

- PDF
  - Certain (rare) PDFs which contain negative font sizes may render incorrectly

## Bug Fixes

- General
  - Several cosmetic issues regarding Redaction Tags have been addressed
- PDF
  - Large Image Rotation
  - Text size fixed on certain 180 degree rotated documents
  - Bring Stroked Text Support
  - Improve default with with empty W array
  - Fix incorrect ETens-B5-H char mapping
  - Add in clipping for rotated images
  - Fixes for masked images
  - Handle negative X/Y in CropBox
  - Handle negative X/Y in FontBox
  - Fixed embedded CMYK images
  - Fix for certain rotated 1-bit Smask images
  - Fix for text scaling causing certain overlaps
  - Found and fixed memory leak
  - Fix for missing characters

- Fix for inconsistent line thickness
  - Fix for several forms of masked images
  - Remove assumption about CID font widths
  - Spacing vs character width fix
  - Improved extracting ligatures
  - Add default width for fonts missing widths
  - Fix pCidToGid context restore
  - Inherit page rotation from parent
  - Fix placement of redaction tags on rotated pages
  - Fix IMGLOW\_rects\_intersect\_with\_image\_on\_page fails with rotation
  - Fix various kerning issues
  - Fix issue with font height and redactions
  - Fix issue with XFA detection
  - Don't emit StructTreeRoot to PDF files
  - Fix TJ case [NUMBER] correctly
  - Use Type3 ToUnicode tables if they exist in font.
  - Fix ArrayIndexOutOfBoundsException on certain files
  - Map Circle annot to our Ellipse
  - Clip to bounding box for annotations SnowboundSoftware
  - Fix for MinionPro font
  - Fix for blank pages in output
  - force XFA flattening to embed external fonts
  - apply text scaling param for svg text output
  - Fix opacity for xobjects.
- MS Office XML
    - General
      - Embedded WMF support
      - Improved text box formatting
      - Improved font selection
      - Improved color selection
    - Word (DOCX)
      - Table formatting improvements
      - Text & graphic positioning improvements
    - Excel (XLSX)
      - Don't try to fit text into a zero-width cell
      - Only grow page width if cells have content, not just borders/shading.
- Legacy MS Office
    - Legacy Word (DOC)
      - Fixed Shifted Text Boxes
      - Fixed a case where IMGLOW\_get\_pages would hang on certain files
    - PowerPoint (PPT)
      - Scale and set opacity for embedded WMF images when converting to SVG.
- ASCII (TXT)

- Fixed thread safety issue
- fixed page offset for utf8 files.
- fixed file handle issue
- AFP
  - Masked images exporting as black to vector PDFs
  - Performance improvements
  - Fix for certain code pages
  - Fix for edge-case records
  - Fix for angled rotated images
- DWG
  - Reset file handle prior to reading DWG
- MSG
  - Fixed parsing of un-handled unicode characters
  - Add get/setShowExchange(boolean) method in Snowbnd to toggle the display of MS Exchange header info
- HTML
  - Correctly set page width/height as configured
- RTF
  - Fix for initial line spacing
- LND
  - Added support for searching Line Data files
  - Fix page counting between methods
  - Added LINE\_DATA to FormatHash
  - Implemented getPages and getFileType
  - Fixed crash
- PCL
  - get/display correct glyph for truetype composite fonts.
- GIF
  - Ignore pages other than page 1 (aka Animated GIF frames)
- Annotations
  - Read in CREATEDATE and MODIFIEDDATE for Daeja annotations