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Important Notes

JRE 1.6 support ended with RM 14.10/19.10 except for special arrangements. Current and future products are/will be built against JRE 1.7 and higher. Any customers with special requirements should contact Snowbound Customer Support.

Product Releases
Generally Snowbound product releases are quarterly with RasterMaster preceding VirtualViewer by approximately a month. However point releases may be made monthly depending on scheduling and backlog. Schedules are approximate and may change. Please check with support if you have any special concerns.

Important Phone Numbers and Links
For the most current information, please contact Snowbound Sales at

1-617-607-2010


questions@snowbound.com

https://mylivechat.com/chatnoscript.aspx?HCCID=17729140 (sales inquiries only)

Filing a Support Ticket
https://snowboundsupport.force.com/SupportPortal/CommunityLogin?

Release Notes and Product Manuals:
Go to the following link for the most current documentation:

http://www.snowbound.com/support/manuals

March 5, 2019
(Note: Releases X.12.6-.10 were internal/customer-specific builds)

Bug Fixes

- General
  - Fixed crash in text search
- PDF
  - Fixed stretched header
  - Fixed mirrored document
  - Fixed shifting/scaling pages to vector
  - Fixed overlapping text with certain Thai fonts
  - Fixed some CMAP handling
  - Fixed missing characters with ZapfDingbats
  - Fixed some 'greedy' redactions removing extra characters
  - Fixed some misbehaving/unimplemented filters
- XLS
  - Fixed converting certain XLS with non-standard structure to PDF
  - Fixed missing Euro symbol in certain documents
  - Chart rendering improvements
- DOCX
  - Fixed missing text to SVG
  - Fixed font selection logic when dealing with missing fonts on host
- ASCII
  - Fixed certain extended ASCII files
- AFP
  - Fixed blank output for certain files

New Features

- MS Office XML
  - Improved chart engine brings
    - Improved line chart rendering
    - Basic pie chart rendering
    - Stability

Bug Fixes

- MS Office XML
  - Fixed several crashes/NPEs related to charts
  - Improved font mapping on Linux systems
    - If a document’s fonts are not installed on the host system, you may see differences in page count/document rendering on the client.
    - The most common Office fonts are available on Debian and Ubuntu in the ttf-mscorefontsinstaller package.
      - apt install ttf-mscorefonts-installer

Errata

- MS Office XML
  - As part of the chart engine replacement, bar charts have been disabled for this release.

New Features

- PDF
  - Added two new error codes which can be returned by IMGLOW_redact_page().
    - PDF_PAGE_NO_TEXT - The page being redacted has no fonts or redactable text
    - PDF_PAGE_REDACT_IMAGE_UNDER_RECT - A redaction was applied over an image

- MS Office XML
  - Implemented area charts

- PPTX
  - Several new features to improve the overall rendering of PPTX files
    - Implemented custom geometry
      - Implemented luminance color modifications
      - Implemented rounded rects

Bug Fixes

- PDF
  - Fix occasionally 'greedy' redactions (more text than requested was removed)
  - Fix some pattern drawing logic that would obscure certain content
  - Fix some masked and rotated images
  - Fix some embedded JPEG images
  - Fix shading patterns
  - Fix some missing graphics drawn with Transparency (.NET)
  - Fix conversion to SVG with no crop box
  - Fix conversion to SVG with embedded images

- XLS
  - Fix CORRUPTED_FILE error on files with missing index records
  - Fix regression with string labels

- PPTX
  - Fix improperly rotated text in headers
  - Fix issues with PPTM files reporting 0 pages

- MSG
  - Improved overall rendering. Headers (To, From, cc, etc.) no longer appear at the top of every rendered page
  - Fixed rendering issue with embedded RTF containing Unicode characters

Bug Fixes

- PDF
  - Fix certain documents generated by Microsoft's "Print to PDF" mechanism
  - Fix image stretching/cutoff in certain PDFs

- TIFF
  - Fix certain TIFF G3 file dimensions
  - Fix TIFF_JPEG extract
  - Fix stripped images with non-matching h/w DPI

- MSG
  - Fix missing Euro symbol

- PNG
  - Fix certain PNG files which would fail to render

- RTF
  - Fix missing elements/style in tables

- AFP
  - Fix for NPE and invalid page counts in certain files

Bug Fixes

- General
  - Fix `SANN_merge_annotations` when document is rotated

- PDF
  - Fixed missing copyright symbol in certain PDFs
  - Fixed missing check marks in checkboxes
  - Fixed an issue with character rendering with Type 0 fonts
  - Fixed an issue with PDF->SVG
  - Fixed an interaction with `IMG_resize_bitmap_bicubic` which would render the page black

- DOCX
  - Fixed a certain class of files that would hang trying to fit content

- XLSX
  - Fixed several XLSX formatting issues
  - Fixed some unintended `#REF!` text
  - Fixed an AIOOBE w/ hidden columns

- DOC
  - Fixed an issue with document vs. system character encoding where text rendering would be garbled if it failed.

- XLS
  - Fixed extra trailing blank page

- FOB
  - Improved FOB/Filenet image support

- RTF
  - A host of formatting fixes to improve accuracy of rendering
  - Fix to `NullPointerException` with certain bullet points

- AFP
o Fixed some issues with text suppression

**Known Issues**

- **PDF**
  - Some special characters (ÄŸ, Å°, Å©, etc.) may be not render in a very small subset of documents.
New Features for RM 14.12/19.12

- Added ability to load SnowboundLicense via Input Stream (14.12)
- 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
  - Added support for Paper Spaces/Custom Views. Additional view is treated as a separate page
- HTML - New HTML renderer (19.12)
- ASCII (TXT) - Performance improvement for large ASCII files.

Known Regression: (should be corrected for the next point release) Please contact support if this is critical to you.

Converting PDF to PNG: missing contents These two files were created by Arbortext 5. They are unique because the Tf calls are passed negative font sizes."
Closed/Fixed Issues for RM 14.12/19.12

- 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 to Java
  - 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 on Java
  - 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/issues#12347
  - 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 on Java
    - 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
  o Fixed parsing of un-handled unicode characters
  o Add get/setShowExchange(boolean) method in Snowbnd to toggle the display of MS Exchange header info

• HTML
  o Correctly set page width/height as configured

• RTF
  o Fix for initial line spacing

• LND
  o Added support for searching Line Data files
  o Fix page counting between methods
  o Added LINE_DATA to FormatHash
  o Implemented getPages and getFileType
  o Fixed crash

• PCL
  o get/display correct glyph for truetype composite fonts.

• GIF
  o Ignore pages other than page 1 (aka Animated GIF frames)

• Annotations
  o Read in CREATEDATE and MODIFIEDDATE for Daeja annotations
New Features for RM 14.11/19.11

• DOCX .NET performance improvement dependent on document type and size
• PPTX file support improvement including group shapes
• Very large ASCII text file conversion hugely sped up - ~20x
• PDF Quick Append capability added - see sample code
• PDF encryption added - see sample code
• Lots of improvements on supporting unusual PDFs
• HTML file formats can now be converted into vector PDF and SVG formats
• Improvements on Daeja format and annotation support
• Improvements in MS Office for unusual documents
• HTML conversion to SVG and embedded text PDF now added - see sample code
• OCR support for raster PDF - see sample code

Closed/Fixed Issues for RM 14.11/19.11

● TIFF -> PDF "Blurry Picture"
● Rectangle not aligning in DOCX
● xlsx sheet is not shown completely
● pptx: Content is shifted or missing
● PDF Cutoff right side
● TIFF to PDF Corrupt
● TIFF Saturated Image
● XLSX Decimals rounded up
● PDF Missing Info and Logo Corrupted
Sample Code

File changes for HTML improved support
The following JARs and DLLs have been updated.

RasterMaster Java

<table>
<thead>
<tr>
<th>Removed</th>
<th>Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>itextpdf-5.5.7.jar</td>
<td>cleanup-2.0.0.jar</td>
</tr>
<tr>
<td>itext-pdfa-5.5.7.jar</td>
<td>forms-7.0.4.jar</td>
</tr>
<tr>
<td>Removed</td>
<td>Added</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>itextsharp.dll</td>
<td>itext.forms.dll</td>
</tr>
<tr>
<td>itextsharp.xfaworker.dll</td>
<td>itext.hyph.dll</td>
</tr>
<tr>
<td>itextsharp.xmlworker.dll</td>
<td>itext.io.dll</td>
</tr>
<tr>
<td></td>
<td>itext.kernel.dll</td>
</tr>
<tr>
<td></td>
<td>itext.layout.dll</td>
</tr>
<tr>
<td></td>
<td>itext.licensekey.dll</td>
</tr>
<tr>
<td></td>
<td>itext.pdfxfa.dll</td>
</tr>
<tr>
<td></td>
<td>itext.html2pdf.dll</td>
</tr>
<tr>
<td></td>
<td>log4net.dll</td>
</tr>
</tbody>
</table>
**PDF Quick Append capability added** - see sample code

RasterMaster Java

```java
int IMGLOW_set_pdf_writer(String outputPath)
int IMGLOW_set_pdf_writer(ByteArrayOutputStream oStream)
int IMGLOW_pdf_append_file(DataInputStream dis)
int IMGLOW_pdf_append_file(String inputPath)
void IMGLOW_close_pdf_writer()
```

RasterMaster NET

```java
int CIMLOW_set_pdf_writer(String path)
int CIMLOW_pdf_append_file(String inputPath)
int CIMLOW_pdf_append_file(array<Byte> inputData)
int CIMLOW_close_pdf_writer()
```

**PDF encryption added - see sample code**

Allow Flags

```java
ENCRYPT_ALLOW_LOWRES_PRINTING = 0x4;
ENCRYPT_ALLOW_MODIFY_CONTENTS = 0x8;
ENCRYPT_ALLOW_COPY = 0x10;
ENCRYPT_ALLOW_MODIFY_ANNOTS = 0x20;
ENCRYPT_ALLOW_FILLIN = 0x100;
ENCRYPT_ALLOW_SCREENREADER = 0x200;
ENCRYPT_ALLOW_ASSEMBLY = 0x400;
ENCRYPT_ALLOW_PRINTING = 0x804;
```

RasterMaster Java

```java
byte[] IMGLOW_encryptPDFFile(byte[] in, byte[] userPW, byte[] ownerPW, int allowFlags, int encryptFlags, int error[])
```

RasterMaster NET

```java
byte[] CIMLOW_encryptPDFFile(String filename, String userPassword, String ownerPassword, int allowFlags, int encryptFlags)
```
OCR support for raster PDF - see sample code

OCR Java API

/**
 * Set OCR library location
 * @param path - String full path filename for Tesseract dll
 */
void IMGLOW_ocr_set_dll_path(String path)

/**
 * Convert raster file to vector pdf buffer.
 * @param fileName - String file to convert
 * @return - byte array containing converted pdf
 * @throws Exception
 */
byte [] IMGLOW_ocr_bitmap(String fileName)

/**
 * Convert raster buffer to vector pdf buffer.
 * @param inBuffer - byte array containing raster file to convert
 * @return - byte array containing converted pdf.
 * @throws Exception
 */
byte [] IMGLOW_ocr_bitmap(byte [] inBuffer)

OCR .NET API

void CIMLOW_ocr_set_dll_path(String^ dllLocation)
array<Byte>^ CIMLOW_ocr_bitmap(array<Byte>^ inbuffer)
array<Byte>^ CIMLOW_ocr_bitmap(String^ filename)
Release Notes for RasterMaster Release 14.10/19.10

December 5, 2017

New Features

1) OCR Beta Supporting VirtualViewer
2) Other Special features supporting VirtualViewer
3) Continued work on improved XFA and HTML Support
4) Many customer issues resolved
5) For RasterMaster Java, change to JRE requirements is 1.5 and above. Updating to JRE 1.8 by RM 14.11
6) all builds will include
   - sample-documents
   - documentation (previously a combination of folders)
     ○ all marketing, release notes, manuals, etc

Rastermaster-java
   - sample-code
     ○ rastermaster-java-samples
   - lib (previously a combination of folders and top-level directory)
     ○ all JARs, DLLs, licenses

Rastermaster-net
   - sample-code
     ○ rastermaster-net-samples
   - bin (previously a combination of folders)
     ○ all DLLs, licenses
   - *removal of vvCheck.exe and SnowboundDLLLocations.exe

Closed/Fixed Issues RM 14.10/19.10

- PDF -38 ArrayIndexOutOfBoundsException: -1
- XLSX file posts fatal error on decompress_bitmap
- -38 PDF-XFA
- XLSX sheet is not displayed
• PDF Gibberish Characters
• docx -100 conversion
• XLSX format is being applied differently from Excel
• TIFF Gray Pages
• PNG: Fails to Load in VV
• Bold Text
• TIFF Crash
• XLS Format Issues
• PDF Missing Signature
• afp file converts to random characters
• afp logo is not converted
• PDF Black Pages
• pdf signature missing after conversion to tif
• PDF to SVG character spacing issues
• html to tiff conversion is clipped
• GPL Ghostscript 9.06 - PDF: Signatures turn to black boxes
• TIFF: Crash on conversion
• DOCX: Post NFE
• pdf logo fails to convert
• PDF Black Images
• PDF Condensed Characters
• PDF with -38 error Wells
• RTF 2 pgs converts to 2874 pgs
• XLS Text hidden/Not Included in boxes
• PDF One Pixel Line at Top
• Docx converts with overlapping
• XLSX Long time converting with -38 error
• colors are off in IMG_popularity_color() and IMG_octree_color()
• Pages are rotated in the viewer
• TIFF: Resize after rotate turns display white
• Adobe Designer 7.0 PDF posts -62 at get_pages
• Allow AFp to read in Segments with .tif extensions
• Characters are not rendering well
• AFP: Shaded block chaotically spreads across page
• Some Customer Special Builds