# Solid Framework 10.0.12246 Quality Improvements

Reconstruction and API Improvements since Build 11962

Release Date - 9th August 2021

#### Main Improvements

- Improved consistency of conversion, regardless of Operating System used
- Improved detection of page orientation
- Improved detection of All Caps and Small Caps
- Improved handling of Thai combining characters
- NSE improvements

# Each slide has an icon that indicates how the case is tested



Tested automatically at every build

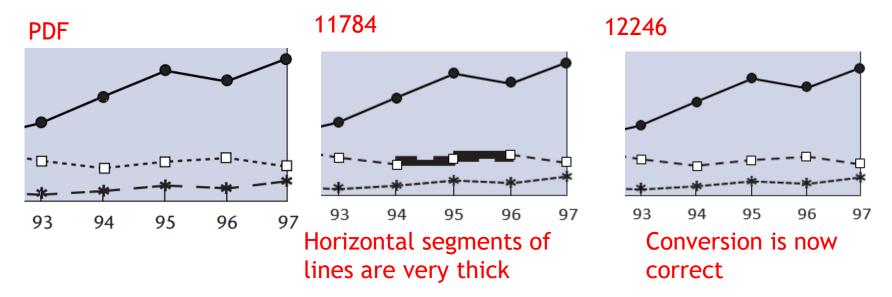


Tested manually. This may be because there is no obvious way to test, or that testing is too slow

Where there are multiple slides for a given issue, these generally represent a small subset of the many files that have been improved

### Reconstruction as Word

#### **Chart Lines Now Detected Correctly**



Original name	
SHA1	a594de8b533cae8dcb5b91a711be273a78e6aed6
FB	26212



#### Correct Detection of All Caps Text

PDF

FEATURES

Vegas Experience

11962

**FEATuRES** 

Vegas Experience

One of the characters is not recovered as upper case

12246

FEATURES

Vegas Experience

Original name	
SHA1	5b96b9a3f35805d9ff344519bb47e4330e1fb280
FB	25924



#### Correct Detection of Small Caps Text

PDF

THE ASTROPHYSICAL JOURNAL,

© 2007. The American Astronomi

D J. W. BARNES<sup>4</sup>

6 December 20

11962

THE Astrophysical Journal, (

© 2007. The American Astronomical

J. W. Barnes<sup>4</sup>

6 December 20

Some of the characters are not recovered as Small Cap

12246

THE ASTROPHYSICAL JOURNAL.

© 2007. The American Astronomical

D J. W. BARNES<sup>4</sup>

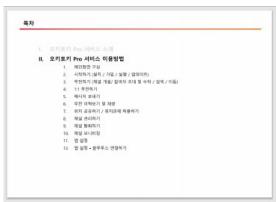
6 December 20

Original name	
SHA1	a994773616639976416ad255f657974f8723aa24
FB	26193



#### Correct Autorotation for Scanned Korean Document

#### **PDF**



11962

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12246

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1. 오키토키 Pro 세비스 이용당별

1. 제안되면 구성

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3. 판선에게 (점실 기업 / 설명 / 업데리체

4. 14 판선에게

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11. 업설정

11. 업설정

11. 업설정

11. 합설정

11. 합설정
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Document incorrectly considered to be upside down. This ruins OCR

Orientation correctly detected. OCR gives good result

Original name	
SHA1	9f30f130c7a8532c28cc9dc5ee2b9e4da055c0f1
FB	27065



#### Better Handling of Thai Combining Characters

PDF 11962 12246

#### ๑. หลักการและเหตุผล

สำนักงานสถิติแห่งจ คิดเห็นของประชาชนเกี่ยว

#### ๑. หลักการและเหตุผล

ี่ผ่าน ักงำนสถ ิต ิแห ว ิเคร ำะห ๎และประส ำนก ั ๑. หลักการและเหตุผล

ส่ำนักงำนสถิติแห่งข คิดเห็นของประชำชนเกี่ยว

The diacritics do not correctly combine, which results in a broken layout

Conversion is now much improved

Original name	
SHA1	7ff948835ef653570c5c94561ed63ffa73daa853
FB	27293



### **NSE Improvements**

We have continued to improve conversion of PDFs that contain Non Standard Encoding.

The following slides are just a few examples of the huge number of improvements.

#### Improved NSE for Exotic Font

PDF
Here is a test

Here is a test

The characters in the font are made of up several disconnected parts

The characters in the font have been mis-recognised

Original name	
SHA1	3188fee0e60f3ae83233ddfadde34ebeb268b7e3
FB	27233



#### Improved NSE for Exotic Font

PDF

The Turtle Bay Pivot: Hov Council Is Reshaping Nav Rogue States, and Pirates

Reconciling Quasi-States v Under the ICC Statute .....

The text is encoded in a non-standard way

11962

The Turtle Bay 3ivot: Hov Council Is Reshaping Nav Rogue States, and 3irates

Reconciling 4uasi-States v Under the ICC Statute .....

Some characters in the font have been mis-recognised

12246

The Turtle Bay Pivot: How Council Is Reshaping Nava Rogue States, and Pirates ...

Reconciling Quasi-States w Under the ICC Statute ......

Original name	
SHA1	b9999763659e64202abb84d1f0eba3d7f35de68b
FB	21373



#### Improved NSE for Romanian Text

PDF



11784



Some characters in the font have been mis-recognised 12246



Original name	
SHA1	67d495364633500e8cfd5048713e2f39523d54b0
FB	18537



#### Recovery of Rupee Character from NSE text

PDF

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15 days from date. The res

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ill be a cost of 2000.00 to be itioner by the West Beng 15 days from date. The res

The Rupee character, which is incorrectly encoded, is not recovered

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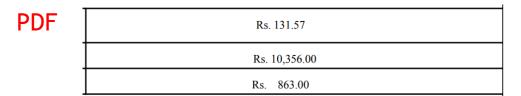
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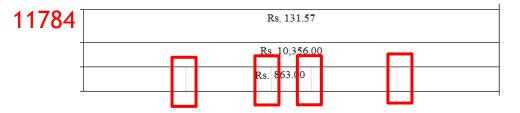
Original name	
SHA1	8b4161e227aa6be18319ba65300a252b22be0375
FB	21868

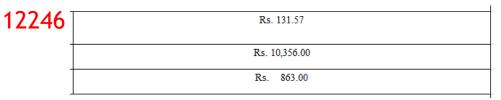


### Reconstruction as Excel

#### Conversion to Excel







Cell is split over 5 separate columns, with text split into separate cells making editing difficult

Cell is merged

Original name	
SHA1	c8aa4aa5163bae47df1d53c68ddc60be5f3fc8d1
FB	26599



## Improved Consistency of Conversion on Different Platforms

Solid Framework is supported on Windows, macOS and Linux

We aim to have the same results regardless of which Operating System is used. In this release we have identified and solved some cases where the result was different on the different platforms

#### Consistent behaviour on Windows, macOS and Linux

#### **PDF**

Connessione fr portato all'ester  $\Psi_{\rm e} = 0.77 \, \text{W/K}$ 

11962

Windows macOS

Connessione fra portato all'ester  $\Psi_e = 0.77 \text{ W/K}$ 

12246

Connessione fra portato all'ester  $\Psi_{\rm e} = 0.77 \, \text{W/K}$ 

Linux

Connessione fra portato all'esterno  $\bigcirc_{e} = 0.77 \text{ W/K}$ 

Connessione fra portato all'esterr  $\Psi_{\rm e} = 0.77 \, \text{W/K}$ 

On Linux "Ψ" is incorrect

Conversion correct on all platforms





#### Improved Layout on Linux





Conversion on Windows was correct. On Linux some characters are not detected which then causes very poor layout.



Conversion correct on all platforms

Original name	
SHA1	403249a03d48477ef6757bd287d63fab806365e1
FB	27125



#### Improved Layout on Linux

COMMUNI

Do they exc
How is the r
Are resident

COMMUNI

D Do they exc
D How is the m
D Are resident

Check boxes reconstructed as "D" on Linux

COMMUNI

Do they exclaim How is the r

12246

Conversion correct on all platforms

Are resident

Original name	
SHA1	d62e674db8b4e497013954163a98f5bbe3ff81a8
FB	27504



#### Improved Layout on Linux - Other Examples

**PDF** 

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*†Licensed in OK & TX* 

Fiche travail Séan

11962

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regra 8.4

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†Licensed in OK & TX

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FB27175

FB27202

FB27173

SEDE OPERATIVA:

FB27203

#### Conversion to UTF7 Text on Linux





While working on Windows, conversion to UTF7 text on Linux resulted in an empty file



Text is now extracted on Linux, Windows and macOS





#### Other Improvements

FB27236, 27238 and 24673: Slight modifications to the docx format, to avoid validation errors while retaining correct appearance

FB22725: Retention of hyperlinks attached to images

FB 26448: Improved support for hyperlinks with unusual characters

# Number of FogBugz Cases with Automated Tests

	30th Nov 2020	13 <sup>th</sup> May 2021	12 <sup>th</sup> Aug 2021
Regression cases - Active	c. 210	268	311
Regression cases - Closed	1155	1740	1991
All cases - Active	c. 1000	1218	1301
All cases - Closed	2590	3575	4118
Total number of tests	c. 3600	4793	5419

A huge effort has gone into creating automated tests to ensure that things that are fixed stay fixed.

In addition there are more than 80,000 other tests which are run on multiple machines and OSs on every build.