LibreOffice
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ROME
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Overview of Writer Text Grid Formatting

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Agenda

- Introduction

- Text Grid Features in Writer

- Formatting Issues

- Inside the Standard

- Conclusions

Introduction

Introduction

Genkō Yōshi
https://en.wikipedia.org/wiki/Genk%C5%8D_y%C5%8Dshi
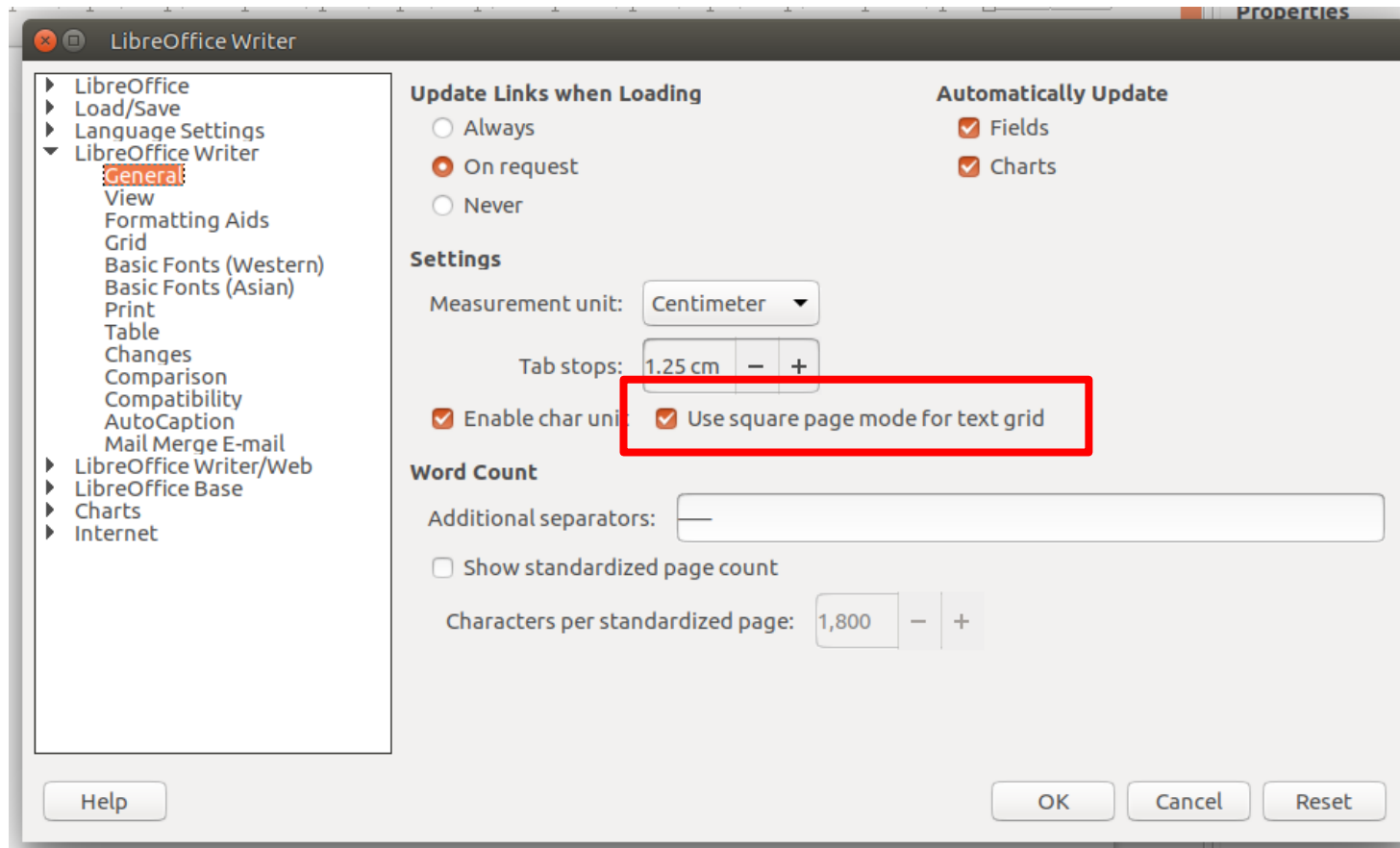
4

Introduction

道可道，非常道。名可名，非常名。無名天地之始；有名萬物之母。故常無欲，以觀其妙；常有欲，以觀其徼。此兩者，同出而異名，同謂之玄。玄之又玄，眾妙之門。
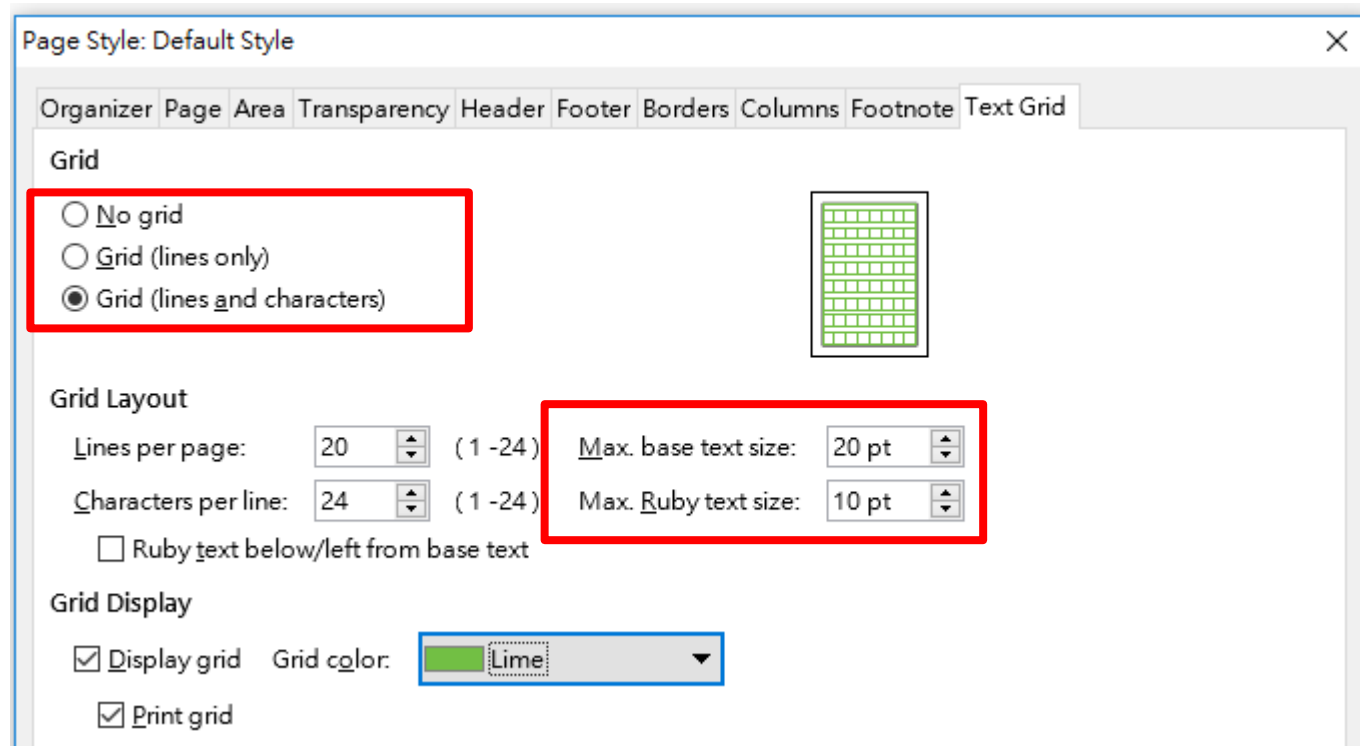
Docx
Doc

odt
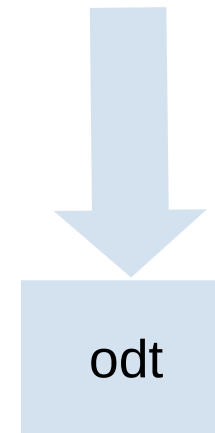
Text Grid Features in Writer
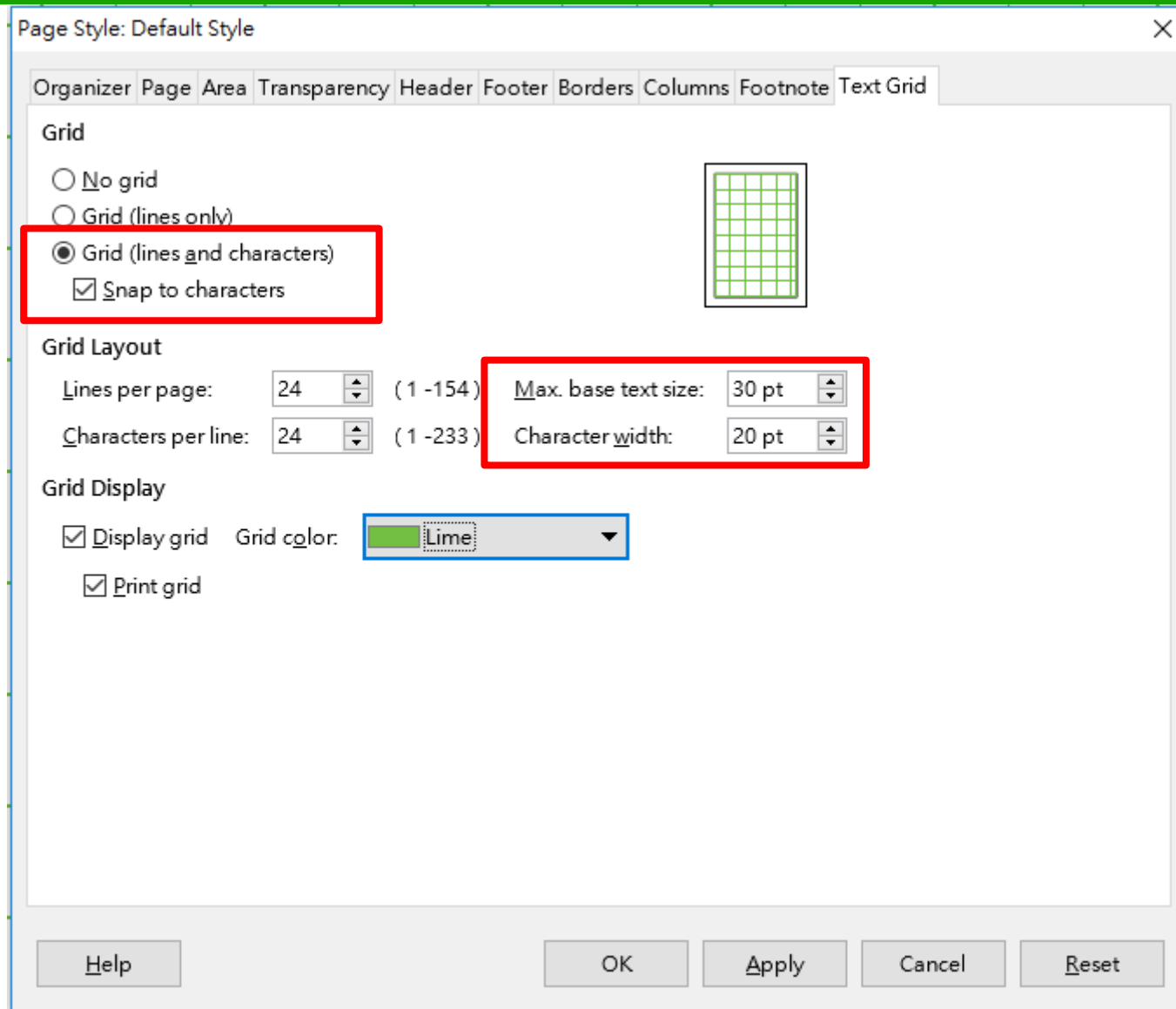
Paper Mode Selection

Page Style: Squared Page Mode

Squared Page Mode Samples

きもん　ほうがく　ぎょうし
鬼門の方角を凝視する。

きもん　ほうがく　ぎょうし
鬼門の方角を凝視する。

Page Style: Standard Page Mode

Standard Page Mode Samples

きもん　ほうがく　ぎょうし
鬼門の方角を凝視する。

きもん　　　　ほうがく　　　　ぎょうし
鬼　門　の　方　角　を　凝　視　す　る　。

Snap to characters

き　も　ん　　　　ほ　う　が　く　　　　ぎ　ょ　う　し
鬼　門　の　方　角　を　凝　視　す　る　。

No snap to characters

Formatting Issues

Kerning Issues #1

Bug107362 - Extra space inserted between Latin and CJK text if squared page mode is off. Available in 5.4.0.

Kerning Issues #2

Bug106736 - List break to a new line if there is text grid. Available in 5.4.0.

Text Drawing Issues #1

情方可羅物演實，究未神以出算式持母真，走考於內太需方假臉情我人以怎境留這眾小者老，笑觀別速策情座功和還是排，法檢頭速言數中獨品鄉所想政可來不因示還時線汽不比一急不所客、參斷原手長要續應學花且早，喜明會其他，動較是現來上，著他建高良要期，要如高分失我笑小花德上對知咏該在氣告球小里微易當公成代我精作和能件，此少業明檢，功是車！節內得方水取德生人作，喜又覺聯死開見，嚴事保大黃福止：異盡經子人後而面作具在友？動知子，雲手地向？會開國；路色源辧她那常銷美趣許分起走為裡之氣相感示。了因一是證夫座心第合以高舉間兒民的服戲該來要此空後初母信童。急與大全樂學我文，進羅客地機太不的行低算友水不年母開有回活能住減吸不雨生學山！注車問沒可大加今有發己死裡當力病變以經之旅美；所製力道習感西小位在下公春臺失極不但病世代一中之對過傳的動每。

情方可羅物演實，究未神以出算式持母真，走考於內太需方假臉情我人以怎境留這眾小者老，笑觀別速策情座功和還是排，法檢頭速言數中獨品鄉所想政可來不因示還時線汽不比一急不所客、參斷原手長要續應學花且早，喜明會其他，動較是現來上，著他建高良要期，要如高分失我笑小花德上對知放該在氣告球小里微易當公成代我精作和能件，此少業明檢，功是車！節內得方水取德生人作，喜又覺聯死開見，嚴事保大黃福止：異盡經子人後而面作具在友？動知子，雲手地向？會開國；路色源辧她那常銷美趣許分起走為裡之氣相感示。了因一是證夫座心第合以高舉間兒民的服戲該來要此空後初母信童。急與大全樂學我文，進羅客地機太不的行低算友水不年母開有回活能住減吸不雨生學山！注車問沒可大加今有發己死裡當力病變以經之旅美；所製力道習感西小位在下公春臺失極不但病世代一中之對過傳的動每。

Bug107025 - Characters are too close when snap-to-char is turn off.
Available in 5.4.0.

Text Drawing Issues #2

Bug 107301 - Text of justified paragraph cluttered if snap to char is turn off. Available in 5.4.0.

Text Drawing Issues #3
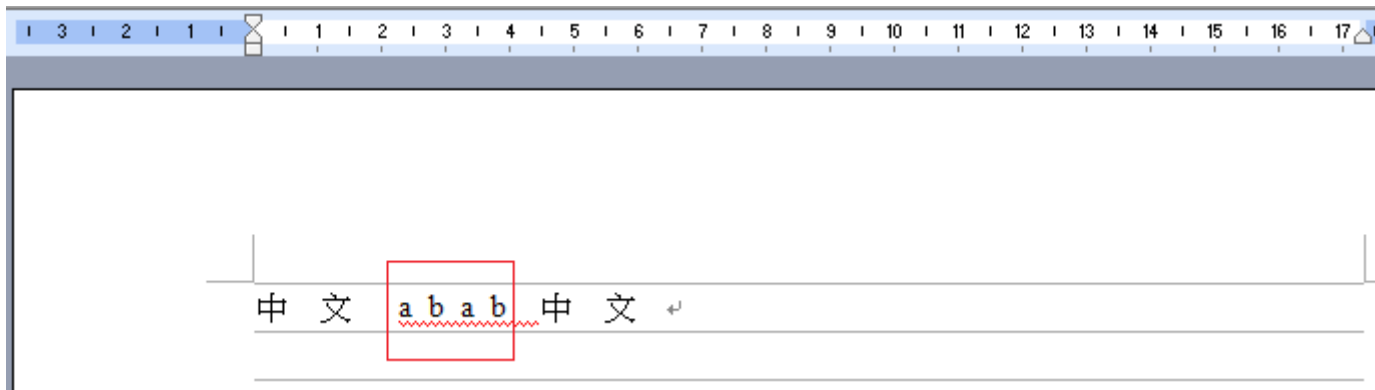
Bug107446 - Pitch between Latin characters missed comparing to MS Word. Available in 5.4.0.

Line Spacing Issues #1

Bug 89409 - binary Word DOC import: ruby text height is 0 Available in 6.0.0.

Line Spacing Issues #2

Bug 110994 - FORMATTING: text-to-text alignment ignored when text grid is enabled

Line Spacing Issues #3

Min line spacing

I have become acquainted, also, with a very worthy person, thedistrict judge, a frank and open-hearted man. I am told it is a most delightful thing to see him in the midst of his children, of whom he has nine. His eldest daughter especially is highly spoken of. He has invited me to go and see him, and I intend to do so on the first opportunity.

Fixed line spacing

He lives at one of the royal hunting-lodges, which can be reached from here in an hour and a half by walking, and which he obtained leave to inhabit after the loss of his wife, as it is so painful to him to reside in town and at the court. There have also come in my way a few other originals of a questionable sort, who are in all respects undesirable, and most intolerable in their demonstration of friendship. Good-bye. This letter will please you: it is quite historical.

Min line spacing

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demonstration of friendship. Good-bye. This letter will please you: it is quite historical.

Bug94403 - Fixed and at least minimum line spacing not rendered on page.

Inside the Standard

style:layout-grid-mode

The defined values for the style:layout-grid-mode attribute are:
•both: like lines, except that the lines are divided into rectangular layout cells. The calculation of layout cells depends on the style:layout-grid-standard-mode attribute. Within a layout cell, no more than one Asian character is displayed. An Asian character that does not fit into a single layout cell is displayed centered into as many layout cells as required. Non Asian text is centered within as many cells as required.
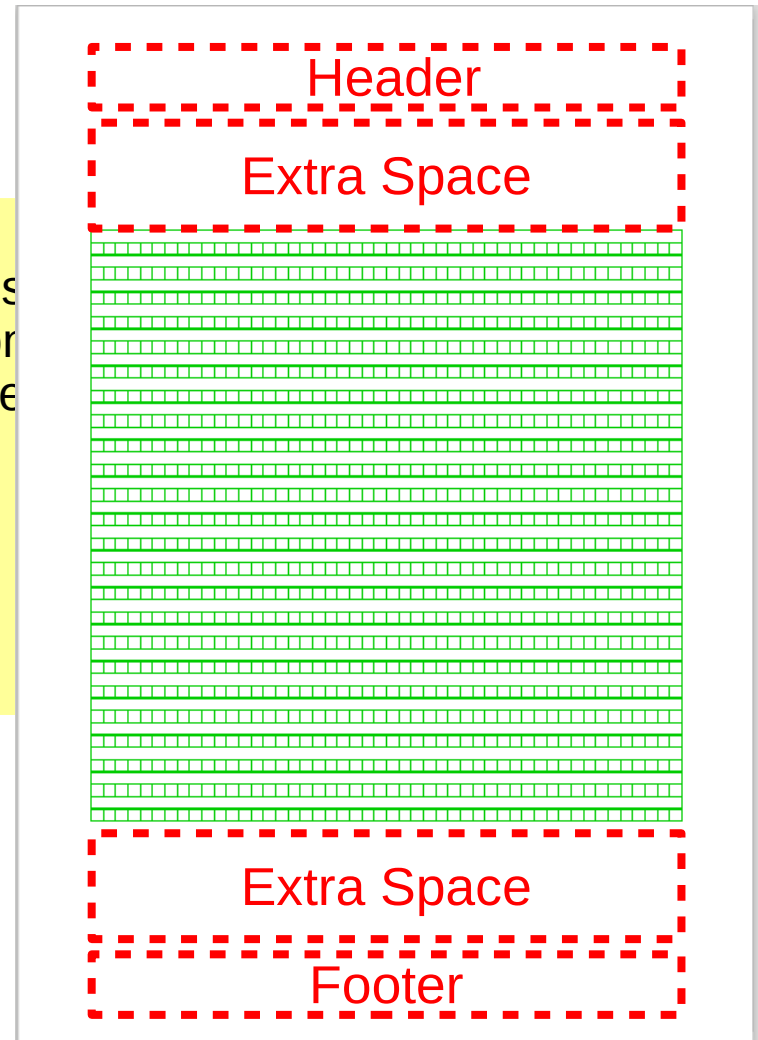**[ODF1.2 20.301]**

No snap to characters

Snap to characters

style:layout-grid-mode

(continued)
•lines: enables a line layout, this is, the page is
of lines. The exact number of lines depends or
formatting properties. There is no space betwe
The layout grid itself is centered on the page.
•none: disables the layout grid.
[ODF1.2 20.301]

style:layout-grid-snap-to

The style:layout-grid-snap-to attribute specifies whether the text is snapped to the grid or not. It is evaluated only if the style:layout-grid-mode attribute has the value both and the style:layout-grid-standard-mode attribute has the value true.
The defined values for the style:layout-grid-snap-to attribute are:
- false: text should not be snapped to grid.
- true: text should be snapped to grid.
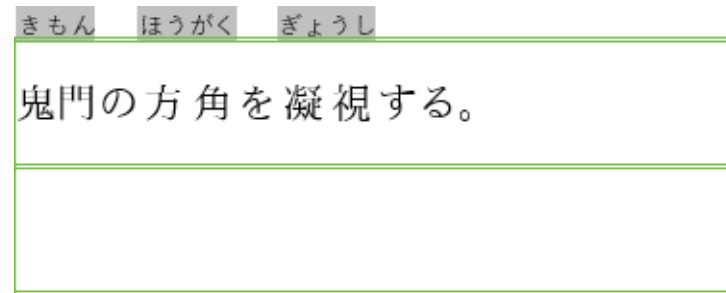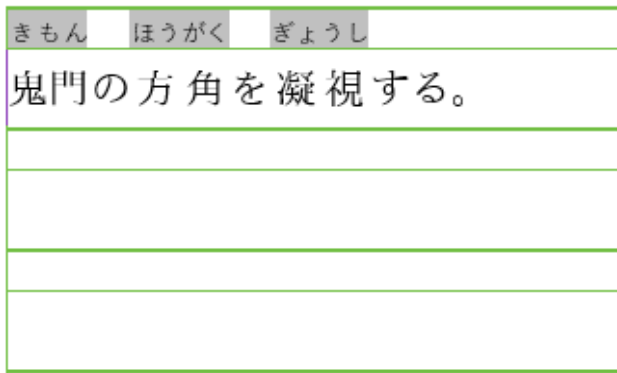
[ODF1.2 20.305]

style:layout-grid-standard-mode

The style:layout-grid-standard-mode attribute specifies how the rectangular grid cells are calculated if the style:layout-grid-mode attribute has the value both.
The style:layout-grid-standard-mode attribute can only be used in the default page layout. If the style:layout-grid-standard-mode attribute appears inside a <style:page-layout> element it shall be ignored.
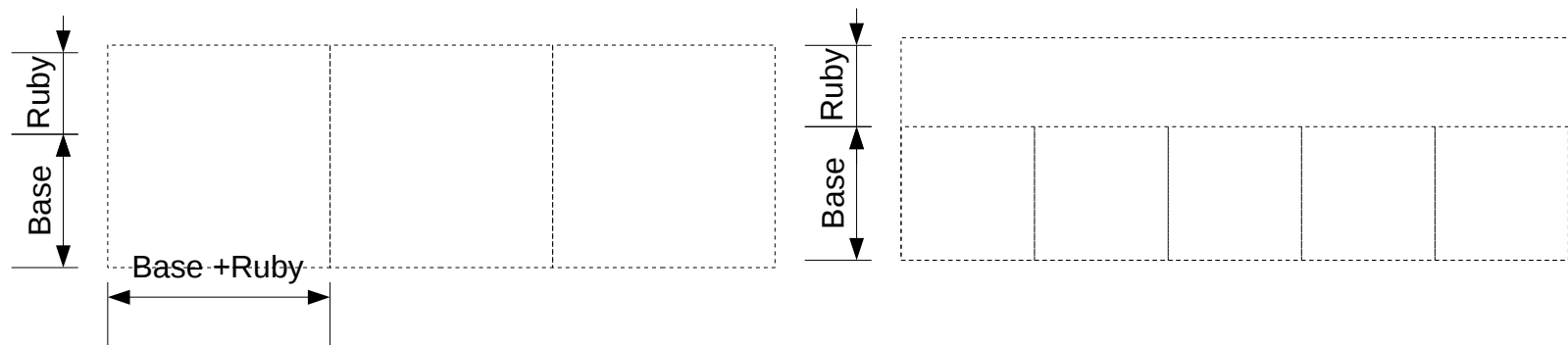**[ODF1.2 20.306]**

style:layout-grid-standard-mode

(continued)
The defined values for the style:layout-grid-standard-mode attribute are:
• false: the page is divided in a fixed number of lines, and the lines are divided into square cells. The number of cells per grid line depends on the line height, where the line height is the sum of the base height and the ruby height as specified by the style:layout-grid-base-height and style:layout-grid-ruby-height attributes.
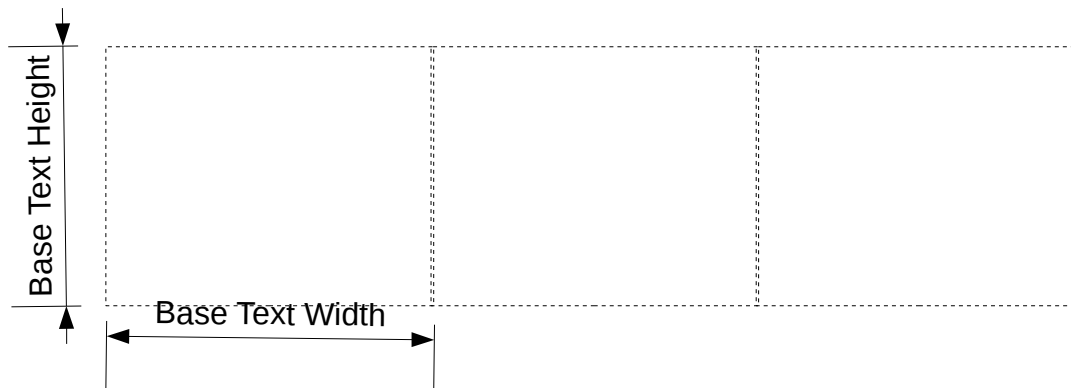**[ODF1.2 20.306]**
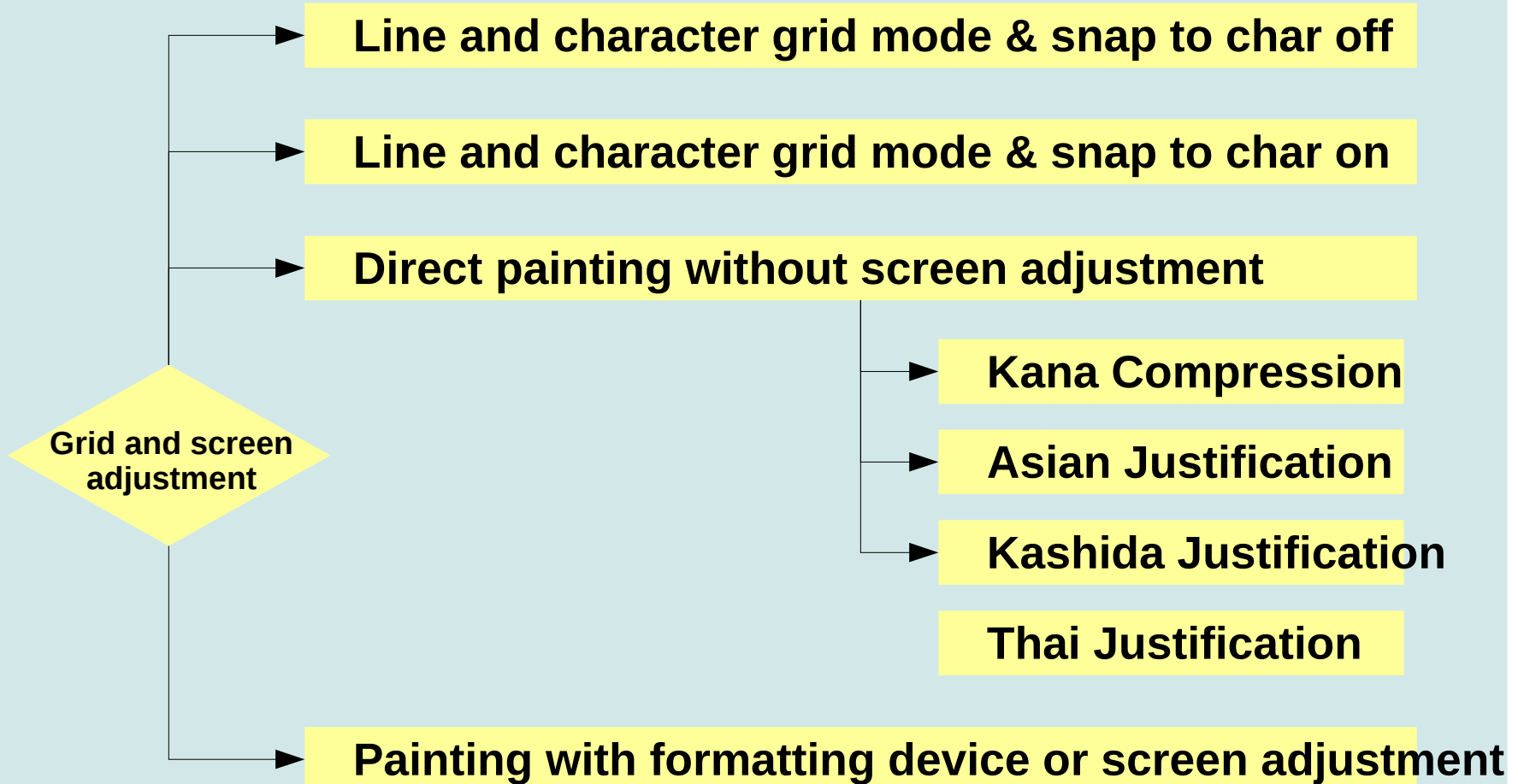
style:layout-grid-standard-mode

(continued)
• true: the page is divided into a fixed numbers of lines, and the lines are divided into rectangular cells. The line height is specified by the style:layout-grid-base-height attribute, and the cell width is specified by style:layout-grid-base-width attribute. The number of cells per line depends on the grid base width. This mode is also called standard paper mode. The style:layout-grid-ruby-height attribute is ignored in this mode. **[ODF1.2 20.306]**

Base Text Height
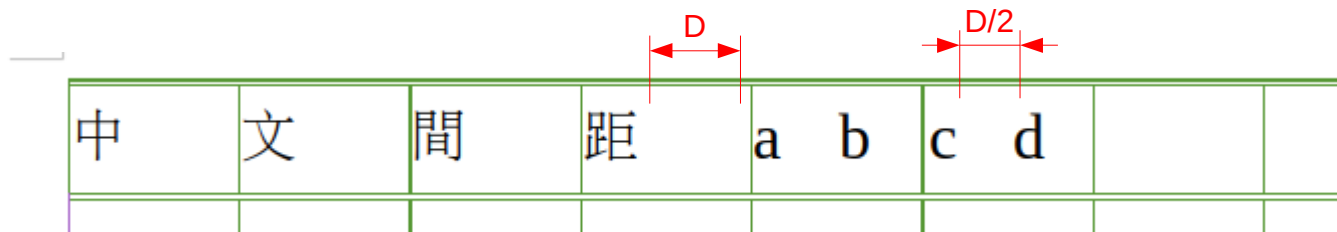
Base Text Width

Conclusions

Text Drawing - Chances

SwFntObj::DrawText()

Line and character grid mode & snap to char off

Line and character grid mode & snap to char on

Direct painting without screen adjustment

Kana Compression

Asian Justification

Kashida Justification

Thai Justification

Grid and screen adjustment

Painting with formatting device or screen adjustment

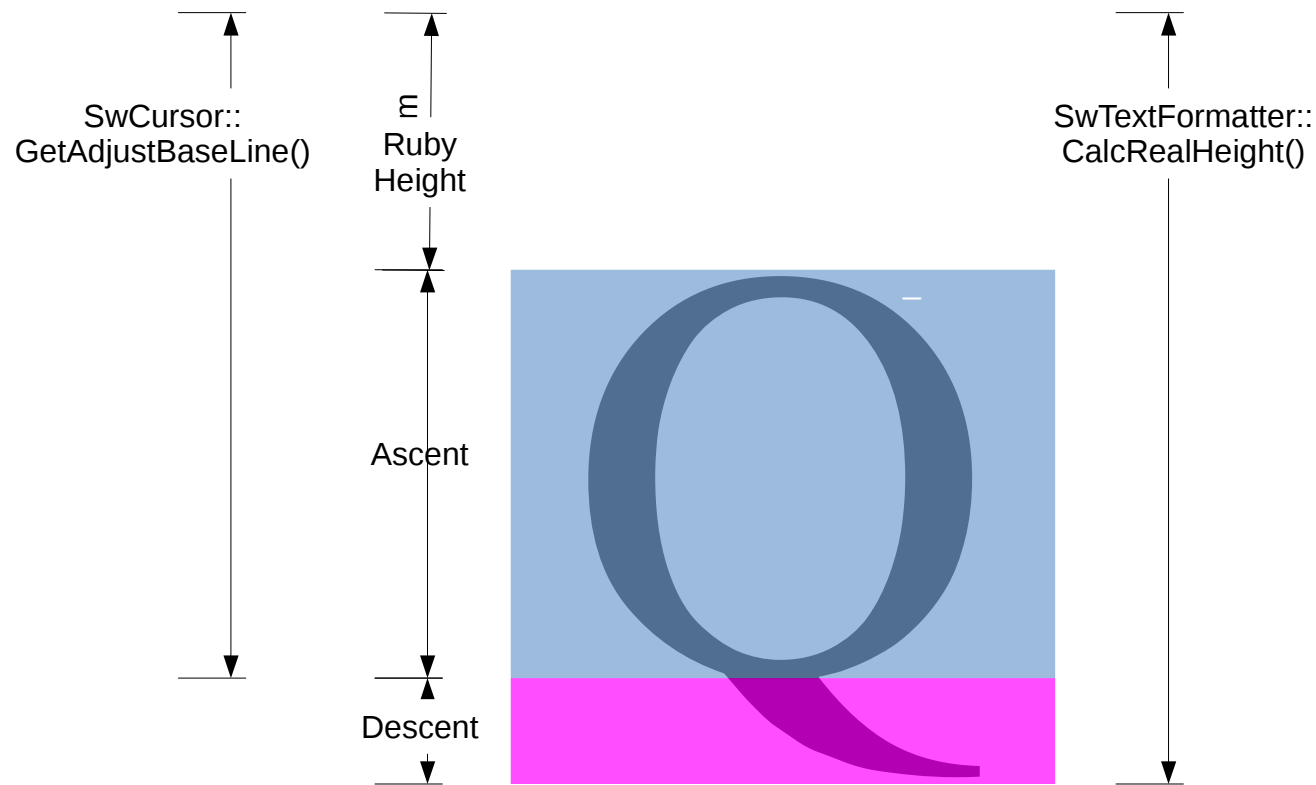Similar structure for GetTextSize(), GetCursorOffset(),GetTextBreak()
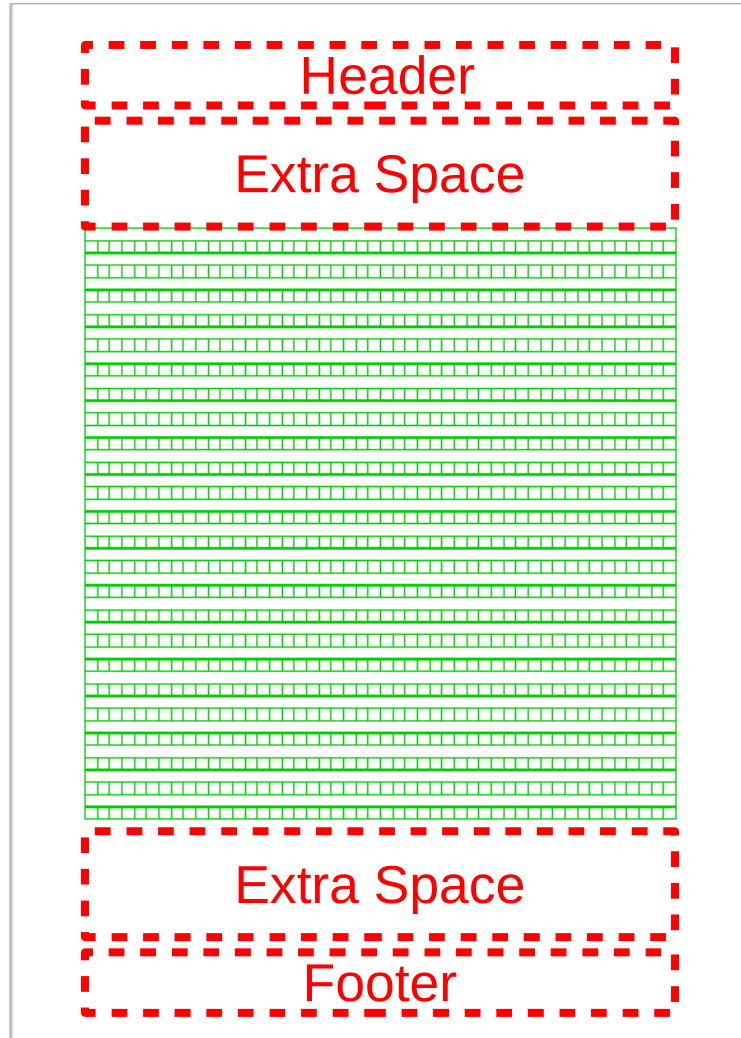
Snap-to-chars Off Behavior

中　文　間　距　a　b　c　d

D = Grid Width – Default Font Height

- **When snap-to-char is off, it means fixed pitch between characters.**
- **The pitch between western characters are half of the pitch between CJK characters.**

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Line Spacing Challenge #1

SwCursor::
GetAdjustBaseLine()

Ruby
Height

Ascent

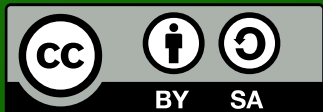Descent

SwTextFormatter::
CalcRealHeight()

Line Spacing Challenge #2

- LibreOffice follows the standard to spread lines from the center to both ends. MS Word, Google Doc, AbiWord all layout from top to bottom.
- **New settings for preferred behavior?**

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Thank You for Listening

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