

DRs Regarding “View” Terminology

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DRs 12-0009, 12-0010, and 12-0011 refer to the use of terms such as *page view*, *paginated view*, *normal view*, and *web page view* in the context of various MLs, and suggest these are not defined. This paper discusses those terms and proposes changes to the standard. [While researching these issues, some editorial tweaks were made. Also, the approach used for WML, SML, and PML was made consistent. As a result, the issues addressed encompass more than what was reported.]

These (and other) document view kinds are, in fact, defined or at least alluded to; however, the words certainly can be improved.

The following changes are proposed for the WML specification:

Part 1, §17.15.1.92, “view (Document View Setting)”, pp. 1071–1072

This element specifies the manner in which the contents of this document should be displayed when opened by an application. [\[Note: Although this Standard is for a file format, occasionally, guidance is given regarding intent in dealing with things outside that file format, such as the rendering of documents to a screen or printer. end note\]](#)

If this element is omitted, then an application can view the document in any desired default state.

~~[Example: Consider a WordprocessingML document that must be displayed on the screen in the same form as that document would be printed. This requirement would be specified using the following WordprocessingML in the document settings part:~~

~~<w:view w:val="print" />~~

~~The view element's val attribute is equal to print specifying that the given WordprocessingML document must be rendered as it is printed. end example]~~

Attributes	Description
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DRs Regarding View Terminology – WG 4 N 0251

Attributes	Description
val (Document View Setting Value)	<p>Specifies the view thatwhich shall be used to render the contents of a WordprocessingML document.</p> <p>Applications can omit support for one or more of the views defined by the ST_View simple type (referenced below). If a WordprocessingML document containing an unsupported view is loaded by an application, it shall fall back to its default view (§17.18.102 equivalent to use of the enumeration value none).</p> <p>[<i>Example:</i> Consider a WordprocessingML document that is to must be rendered in a view meant to mimic how the document would look in a web browser (i.e. without a fixed page width). This requirement intent iswould be specified using the following WordprocessingML in the document settings:</p> <pre style="text-align: center;"><w:view w:val="web" /></pre> <p>The val attribute is equal to web specifying that the given WordprocessingML document must be rendered in a view mimicking web page display. end example]</p> <p>The possible values for this attribute are defined by the ST_View simple type (§17.18.102).</p>

...

Part 1, §17.18.102, “ST_View (Document View Values)”, pp. 1514–1515

~~This simple type defines the possible views which can be used to determine how WordprocessingML documents can be rendered when displayed by an application.~~ This simple type defines the kinds of view available to an application when rendering a WordprocessingML document. Those view kinds are, as follows: *default view, draft view, outline view, print layout view, and web page view.*

[*Example:* Consider a WordprocessingML document that ~~is to~~**must** be displayed on ~~a~~**the** screen in the same form as ~~that document would be~~**it is** printed. This ~~requirement intent is~~**would be** specified using the following WordprocessingML in the document settings part:

```
<w:view w:val="print" />
```

~~The view element's val attribute is equal to print specifying that the given WordprocessingML document must be rendered as it is printed. end example]~~

This simple type's contents are a restriction of the W3C XML Schema string datatype.

This simple type is restricted to the values listed in the following table:

Enumeration Value	Description
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DRs Regarding View Terminology – WG 4 N 0251

Enumeration Value	Description
masterPages (Master Document View)	<p>Specifies that a given WordprocessingML document shall <u>should</u> be rendered in a view optimized for outlining or creating long documents. <u>manner that allows a (possibly) long document to be viewed, navigated, or edited in an outline form, possibly based on the headings in that document, showing the relationships among master documents and subdocuments (see §17.17.1).</u></p> <p><i>[Note: This setting can be interpreted as functionally equivalent to the outline setting, as it only remains separate to support legacy applications. end note]</i></p>
none (Default View)	<p>Specifies that a given WordprocessingML document should<u>shall</u> be rendered in the default view of the application.</p>
normal (Draft View)	<p>Specifies that a given WordprocessingML document should<u>shall</u> be rendered in a view optimized for outlining or creating long documents.<u>manner that allows a (possibly) long document to be viewed, navigated, or edited.</u></p>
outline (Outline View)	<p>Specifies that a given WordprocessingML document should<u>shall</u> be rendered in a view optimized for outlining or creating long documents.<u>manner that allows a (possibly) long document to be viewed, navigated, or edited in an outline form, possibly based on the headings in that document.</u></p>
print (Print Layout View)	<p>Specifies that this a given WordprocessingML document should<u>shall</u> be opened in a view that displays the document as it prints<u>rendered in a view mimicking the way that document would be printed.</u></p>
web (Web Page View)	<p>Specifies that a given WordprocessingML document should<u>shall</u> be rendered in a view mimicking the way this that document would be displayed as in a web page.</p>

...

Part 1, §17.3.1.14, “keepLines (Keep All Lines On One Page), p. 227

This element specifies that ~~when rendering this document in a page view,~~ all lines of this paragraph are maintained on a single page whenever possible.

...

DRs Regarding View Terminology – WG 4 N 0251

Part 1, §17.3.1.15, “keepNext (Keep Paragraph With Next Paragraph)”, pp. 228–229

This element specifies that ~~when rendering this document in a paginated view,~~ the contents of this paragraph are at least partly rendered on the same page as the following paragraph whenever possible.

...

Part 1, §17.3.1.23, “pageBreakBefore (Start Paragraph on Next Page)”, p. 239

This element specifies that ~~when rendering this document in a paginated view,~~ the contents of this paragraph are rendered on the start of a new page ~~in the document.~~

...

Part 1, §17.3.2.44, “webHidden (Web Hidden Text)”, pp. 317–318

This element specifies whether the contents of this run shall be hidden from display at display time in a document when the document is being displayed in a web page view ([§17.18.102](#)). [Note: The setting should affect the normal display of text in a web page view, but an application can have settings to force hidden text to be displayed. *end note*] ~~As well, this setting should not affect a normal paginated view of the document.~~

If this element is not present, the default value is to leave the formatting applied at previous level in the *style hierarchy*. If this element is never applied in the style hierarchy, ~~then~~ this text shall not be hidden when displayed in a document in a web page view.

[Example: Consider a run of text which must have the hidden text property turned on for the contents of the run. This constraint is specified using the following WordprocessingML:

```
<w:rPr>  
  <w:webHidden />  
</w:rPr>
```

~~This run declares that the webHidden property is set for the contents of this run, so the contents of this run is hidden when the document contents are displayed in a web page view. end example]~~

This element’s content model is defined by the common boolean property definition in [§Error! Reference source not found.](#)

Part 1, §17.15.1.26 displayBackgroundShape (Display Background Objects When Displaying Document), pp. 1004–1005

This element specifies whether the images and colors defined in the document's background using the background element (§17.2.1) shall be displayed when the document is displayed in print layout view ([§17.18.102](#)) as specified in the view element (§17.15.1.92).

If this element is omitted, then background shapes shall not be displayed when the document is displayed in print layout view.

DRs Regarding View Terminology – WG 4 N 0251

...

Part 1, §17.15.1.35, “doNotDisplayPageBoundaries (Do Not Display Visual Boundary For Header/Footer or Between Pages)”, pp. 1016–1018

This element specifies whether applications displaying this document should display the contents of the header and footer when displaying the document in print layout view ([§17.18.102](#))~~(§9)~~ or should collapse those areas as well as the whitespace on all displayed pages so that the text extents are directly following one another.

[*Rationale*: Collapsing the ends of pages makes it easier to read the contents of the document, since the text flows between pages without whitespace, while maintaining the WYSIWYG functionality of print layout view for the document's main content. *end rationale*]

If this element is omitted, then all pages should be shown at their full size (including whitespace and headers/footers) when they are displayed in print layout view.

...

Part 1, §17.16.5.68, “TOC”, pp. 1247–1249

...

Switches: Zero or more of the following *field-specific-switches*.

<code>\a</code> <i>field-argument</i>	...
...	...
<code>\z</code>	Hides tab leader and page numbers in web page view Web layout view (§17.18.102).

...

Part 1, §17.18.4, “ST_BrType (Break Types)”, p. 1355–1356

...

This simple type is restricted to the values listed in the following table:

Enumeration Value	Description
column (Column Break)	Specifies that the current break shall restart itself on the next column available on the current page when the document is displayed in page view.
	...

DRs Regarding View Terminology – WG 4 N 0251

Enumeration Value	Description
page (Page Break)	<p>Specifies that the current break shall restart itself on the next page of the document when the document is displayed in page view.</p> <p>Page breaks shall be ignored when present in frames unless the showBreaksInFrames element (Part 4, §9.7.3.36) is present in the document's compatibility settings.</p>
textWrapping (Line Break)	<p>Specifies that the current break shall restart itself on the next line in the document when the document is displayed in page view.</p> <p>The determination of the next line shall be done subject to the value of the clear attribute on the specified break character.</p>

...

[Part 4, §14.12.x, “ST BrType \(Break Types\)”, new subclause](#)

The enumeration value row for this type is replaced by the following:

Enumeration Value	Description
page (Page Break)	<p>Specifies that the current break shall restart itself on the next page of the document.</p> <p>[Note: For information on the interaction of page breaks in frames and the showBreaksInFrames element, see §14.7.3.36. end note.]</p>

The following changes are proposed for the SML specification:

Part 1, §18.18.69, “ST_SheetViewType (Sheet View Type)”, pp. 2476–2477

~~Defines the view setting of the sheet.~~ [This simple type defines the kinds of view available to an application when rendering a SpreadsheetML document. Those view kinds are, as follows: *normal view*, *page break preview*, and *page layout view*.](#)

This simple type's contents are a restriction of the W3C XML Schema string datatype.

This simple type is restricted to the values listed in the following table:

Enumeration Value	Description
normal (Normal View)	<p>Normal view Specifies that the worksheet should be displayed without regard to pagination.</p> <p>[Note: The worksheet might be displayed as a continuous grid of cells, for example. <i>end note</i>]</p>
pageBreakPreview (Page Break Preview)	<p>Page break preview Specifies that the worksheet should be displayed showing where pages would break if it were printed.</p> <p>[Note: The worksheet might be displayed as a continuous grid of cells with lines overlaid, indicating page breaks, for example. <i>end note</i>]</p>
pageLayout (Page Layout View)	<p>Page Layout View Specifies that the worksheet should be displayed mimicking how it would look if printed.</p> <p>[Note: The worksheet might be displayed as a set of printed pages, showing a discontinuous grid of cells with page borders and margins, for example. <i>end note</i>]</p>

...

Part 1, §18.3.1.3, “brk (Break)”, p. 1589

~~Individual~~ [A row or column break to use when paginating a worksheet. \[Note: See §18.18.69 for more information on worksheet views. *end note*\]](#)

...

Part 1, §18.3.1.14, “colBreaks (Vertical Page Breaks)”, p. 1599

~~Vertical page break information used for print layout view, page layout view, drawing print breaks in normal view, and for printing the worksheet.~~ [A collection of column breaks \(§18.3.1.3\).](#)

...

DRs Regarding View Terminology – WG 4 N 0251

Part 1, §18.3.1.25, “customSheetView (Custom Sheet View)”, p.

Attributes	Description
showRuler (Show Ruler)	Flag indicating whether to show the ruler in this custom view. Only applicable if this Custom View is in Page Layout View page layout view (§18.18.69)

...

Part 1, §18.3.1.74, “rowBreaks (Horizontal Page Breaks (Row))”, p. 1675

~~Horizontal page break information used for print layout view, page layout view, drawing print breaks in normal view, and for printing the worksheet.~~[A collection of row breaks \(§18.3.1.3\)](#).

...

Part 1, §18.3.1.87, “sheetView (Worksheet View), pp. 1692–1695

...

Attributes	Description
showRuler (Show Ruler)	Show the ruler in Page Layout View page layout view (§18.18.69) . The possible values for this attribute are defined by the W3C XML Schema boolean datatype.
showWhiteSpace (Show White Space)	Flag indicating whether page layout view (§18.18.69) shall display margins. False means do not display left, right, top (header), and bottom (footer) margins (even when there is data in the header or footer). ...
...	...
view (View Type)	Indicates the view type. [Note: Although this Standard is for a file format, occasionally, guidance is given regarding intent in dealing with things outside that file format, such as the rendering of documents to a screen or printer. end note] The possible values for this attribute are defined by the ST_SheetViewType simple type (§18.18.69).
...	...

DRs Regarding View Terminology – WG 4 N 0251

Attributes	Description
zoomScale (Zoom Scale)	<p>...</p> <p>The current view can be Normal, Page Layout, or Page Break Preview normal view, page break preview, or page layout view (§18.18.69).</p> <p>...</p>
zoomScaleNormal (Zoom Scale Normal View)	<p>Zoom magnification to use when in normal view (§18.18.69), representing percent values. This attribute is restricted to values ranging from 10 to 400. Horizontal & Vertical scale together.</p> <p>...</p>
zoomScalePageLayoutView (Zoom Scale Page Layout View)	<p>Zoom magnification to use when in page layout view (§18.18.69), representing percent values. This attribute is restricted to values ranging from 10 to 400. Horizontal & Vertical scale together.</p> <p>...</p>
zoomScaleSheetLayoutView (Zoom Scale Page Break Preview)	<p>Zoom magnification to use when in page break preview (§18.18.69), representing percent values. This attribute is restricted to values ranging from 10 to 400. Horizontal & Vertical scale together.</p> <p>...</p>

...

The following changes are proposed for the PML specification:

Part 1, §19.7.55, “ST_ViewType (List of View Types)”, p. 2710

~~This simple type specifies the kind of view that should be used when displaying the presentation document to the user.~~ This simple type defines the kinds of view available to an application when rendering a PresentationML document. Those view kinds are, as follows: *handout view*, *normal slide view*, *notes master view*, *notes view*, *outline view*, *slide master view*, *slide sorter view*, and *slide thumbnail view*. [Note: Although this Standard is for a file format, occasionally, guidance is given regarding intent in dealing with things outside that file format, such as the rendering of documents to a screen or printer. end note]

This simple type's contents are a restriction of the W3C XML Schema token datatype.

This simple type is restricted to the values listed in the following table:

Enumeration Value	Description
handoutView (Handout Master View)	Handout View mode should be used. <u>Specifies that a given PresentationML document should be rendered using some sort of template that is intended to facilitate the changing of the design and layout of printed handouts.</u>
notesMasterView (Notes Master View)	Notes Master View mode should be used. <u>Specifies that a given PresentationML document should be rendered using some sort of template that is intended to facilitate the changing of the design and layout of notes slides.</u>
notesView (Notes View)	Notes View mode should be used. <u>Specifies that a given PresentationML document should be rendered using some sort of template that is intended to facilitate the viewing or editing of notes.</u>
outlineView (Outline View)	Outline View mode should be used. <u>Specifies that a given PresentationML document should be rendered in a view that is intended to facilitate the viewing of slides in some outline form.</u>
sldMasterView (Slide Master View)	Slide Master View mode should be used. <u>Specifies that a given PresentationML document should be rendered using some sort of template that is intended to facilitate the changing of the design and layout of master slides.</u>
sldSorterView (Slide Sorter View)	Slide Sorter View mode should be used. <u>Specifies that a given PresentationML document should be rendered in a view that is intended to facilitate the rearrangement of slides.</u>
sldThumbnailView (Slide Thumbnail View)	Slide Thumbnail View mode should be used. <u>Specifies that a given PresentationML document should be rendered in a view that shows slides in some thumbnail form.</u>

DRs Regarding View Terminology – WG 4 N 0251

Enumeration Value	Description
sldView (Normal Slide View)	Normal Slide View mode should be used. Specifies that a given PresentationML document should be rendered in a view that allows slides to be viewed or edited.

...

Part 1, §19.2.2.6, “normalViewPr (Normal View Properties)”, pp. 2546–2547

This element specifies the view properties associated with the normal [slide](#) view ([§19.7.55](#)) mode. The normal [slide](#) view consists of three content regions: the slide itself, a side content region, and a bottom content region.

...

Attributes	Description
horzBarState (State of the Horizontal Splitter Bar)	Specifies the state that the horizontal splitter bar should be in when in normal slide view mode (§19.7.55). The region to be maximized or minimized is the side content region. ...
preferSingleView (Prefer Single View)	Specifies whether the user prefers to see a full-window single-content region over the standard -normal slide view (§19.7.55) with three content regions. If enabled, the application can choose to display one of the content regions in the entire window. ...
showOutlineIcons (Show Outline Icons in Normal View)	Specifies whether the application should show icons if displaying outline content in any of the content regions of normal slide view mode (§19.7.55). ...
...	...
vertBarState (State of the Vertical Splitter Bar)	Specifies the state that the vertical splitter bar should be in when in normal slide view mode (§19.7.55). The region to be maximized or minimized is the primary slide content region.

...

Part 1, §19.2.2.10, “outlineViewPr (Outline View Properties), p. 2548

This element functions as a parent element within which all view properties associated with the outline view ([§19.7.55](#)) mode are contained. All properties are defined within the child elements.

...

Part 1, §19.2.2.11, “restoredLeft (Normal View Restored Left Properties)”, pp. 2548–2549

This element specifies the sizing of the side content region of the normal [slide](#) view ([§19.7.55](#)), when the region is of a variable restored size (neither minimized nor maximized).

...

DRs Regarding View Terminology – WG 4 N 0251

Part 1, §19.2.2.12, “restoredTop (Normal View Restored Top Properties)”, p. 2549

This element specifies the sizing of the top slide region of the normal [slide](#) view ([§19.7.55](#)), when the region is of a variable restored size (neither minimized nor maximized).

...

Part 1, §19.2.2.14, “sld (Presentation Slide)”, pp. 2549–2550

This element specifies a presentation slide and properties specific to the slide's appearance in outline view ([§19.7.55](#)).

...

Part 1, §19.2.2.17, “sorterViewPr (Slide Sorter View Properties), p. 2551

This element functions as a parent element within which all view properties associated with the slide sorter view ([§19.7.55](#)) mode are contained. All properties are defined within the child elements.

...

Part 1, §L.3.1.4.4, “View Properties”, p. 4772

The View Properties part defines the properties on all of the views found in the implementation.

PresentationML ~~currently~~ supports the following views ([§19.7.55](#)):

- [handout view](#)
- [normal slide view](#)
- [notes master view](#)
- [notes view](#)
- [outline view](#)
- [slide master view](#)
- [slide sorter view](#)
- [slide thumbnail view](#)
- ~~Slide View~~
- ~~Slide Master View~~
- ~~Notes View~~
- ~~Handout View~~
- ~~Notes Master View~~
- ~~Outline View~~
- ~~Slide Sorter View~~

Additionally, ~~t~~he default view, [normal slide view](#)~~Normal View~~, is a composite view that pulls from three multiple view property sets. ...