

# [MS-PWVRSC]: PowerPoint Web Viewer Rendered Static Content Structure

---

## Intellectual Property Rights Notice for Open Specifications Documentation

- **Technical Documentation.** Microsoft publishes Open Specifications documentation for protocols, file formats, languages, standards as well as overviews of the interaction among each of these technologies.
- **Copyrights.** This documentation is covered by Microsoft copyrights. Regardless of any other terms that are contained in the terms of use for the Microsoft website that hosts this documentation, you may make copies of it in order to develop implementations of the technologies described in the Open Specifications and may distribute portions of it in your implementations using these technologies or your documentation as necessary to properly document the implementation. You may also distribute in your implementation, with or without modification, any schema, IDL's, or code samples that are included in the documentation. This permission also applies to any documents that are referenced in the Open Specifications.
- **No Trade Secrets.** Microsoft does not claim any trade secret rights in this documentation.
- **Patents.** Microsoft has patents that may cover your implementations of the technologies described in the Open Specifications. Neither this notice nor Microsoft's delivery of the documentation grants any licenses under those or any other Microsoft patents. However, a given Open Specification may be covered by Microsoft's Open Specification Promise (available here: <http://www.microsoft.com/interop/osp>) or the Community Promise (available here: <http://www.microsoft.com/interop/cp/default.mspx>). If you would prefer a written license, or if the technologies described in the Open Specifications are not covered by the Open Specifications Promise or Community Promise, as applicable, patent licenses are available by contacting [iplg@microsoft.com](mailto:iplg@microsoft.com).
- **Trademarks.** The names of companies and products contained in this documentation may be covered by trademarks or similar intellectual property rights. This notice does not grant any licenses under those rights.
- **Fictitious Names.** The example companies, organizations, products, domain names, e-mail addresses, logos, people, places, and events depicted in this documentation are fictitious. No association with any real company, organization, product, domain name, email address, logo, person, place, or event is intended or should be inferred.

**Reservation of Rights.** All other rights are reserved, and this notice does not grant any rights other than specifically described above, whether by implication, estoppel, or otherwise.

**Tools.** The Open Specifications do not require the use of Microsoft programming tools or programming environments in order for you to develop an implementation. If you have access to Microsoft programming tools and environments you are free to take advantage of them. Certain Open Specifications are intended for use in conjunction with publicly available standard specifications and network programming art, and assumes that the reader either is familiar with the aforementioned material or has immediate access to it.

## Revision Summary

Date	Revision History	Revision Class	Comments
07/13/2009	0.1	Major	Initial Availability
08/28/2009	0.2	Editorial	Revised and edited the technical content
11/06/2009	0.3	Editorial	Revised and edited the technical content
02/19/2010	1.0	Major	Updated and revised the technical content
03/31/2010	1.01	Editorial	Revised and edited the technical content
04/30/2010	1.02	Editorial	Revised and edited the technical content
06/07/2010	1.03	Editorial	Revised and edited the technical content
06/29/2010	1.04	Editorial	Changed language and formatting in the technical content.
07/23/2010	1.05	Minor	Clarified the meaning of the technical content.
09/27/2010	1.05	No change	No changes to the meaning, language, or formatting of the technical content.
11/15/2010	1.05	No change	No changes to the meaning, language, or formatting of the technical content.
12/17/2010	1.05	No change	No changes to the meaning, language, or formatting of the technical content.

# Table of Contents

<b>1 Introduction</b>	<b>5</b>
1.1 Glossary	5
1.2 References	5
1.2.1 Normative References	5
1.2.2 Informative References	5
1.3 Structure Overview (Synopsis)	6
1.4 Relationship to Protocols and Other Structures	6
1.5 Applicability Statement	6
1.6 Versioning and Localization	6
1.7 Vendor-Extensible Fields	6
<b>2 Structures</b>	<b>7</b>
2.1 Global Elements	7
2.1.1 mobilePres	7
2.1.2 pres	7
2.1.3 sld	7
2.2 Global Attributes	7
2.3 Complex Types	7
2.3.1 CT_SlideEntry	8
2.3.2 CT_SlideEntryList	9
2.3.3 CT_CustomShow	9
2.3.4 CT_CustomShowList	10
2.3.5 CT_EmptyType	10
2.3.6 CT_IndexRange	11
2.3.7 CT_DocumentProperties	11
2.3.8 CT_ShowProperties	12
2.3.9 CT_Presentation	12
2.3.10 CT_SlideImage	13
2.3.11 CT_SlideInfo	14
2.3.12 CT_MobilePres	14
2.3.13 CT_Paragraph	15
2.3.14 CT_Placeholder	16
2.3.15 CT_ShapeText	16
2.3.16 CT_SlideText	17
2.3.17 CT_Notes	17
2.3.18 CT_Slide	18
2.4 Simple Types	18
2.4.1 ST_Alignment	18
2.4.2 ST_SlideId	19
2.4.3 ST_PlaceholderType	19
2.4.4 ST_ShapeType	20
<b>3 Structure Examples</b>	<b>21</b>
3.1 Presentation	21
3.2 Slide	22
<b>4 Security Considerations</b>	<b>23</b>
<b>5 Appendix A: Full XSD Schema</b>	<b>24</b>
5.1 <a href="http://schemas.microsoft.com/server/powerpoint/2009/mobile">http://schemas.microsoft.com/server/powerpoint/2009/mobile</a>	24

<b>6</b>	<b>Appendix B: Product Behavior .....</b>	<b>27</b>
<b>7</b>	<b>Change Tracking.....</b>	<b>28</b>
<b>8</b>	<b>Index .....</b>	<b>29</b>

# 1 Introduction

This document specifies the PowerPoint Web Viewer Rendered Static Content Structure, which is used by a protocol server to send presentation content to a protocol client through the Office Mobile PowerPoint Web Handler Protocol Specification [\[MS-OMPWHP\]](#).

## 1.1 Glossary

The following terms are defined in [\[MS-OFCGLOS\]](#):

**horizontal alignment**  
**horizontal indent**  
**notes slide**  
**presentation**  
**presentation slide**  
**slide**  
**slide show**  
**slide show broadcast**  
**URL (Uniform Resource Locator)**

The following terms are specific to this document:

**MAY, SHOULD, MUST, SHOULD NOT, MUST NOT:** These terms (in all caps) are used as described in [\[RFC2119\]](#). All statements of optional behavior use either MAY, SHOULD, or SHOULD NOT.

## 1.2 References

### 1.2.1 Normative References

We conduct frequent surveys of the normative references to assure their continued availability. If you have any issue with finding a normative reference, please contact [dochelp@microsoft.com](mailto:dochelp@microsoft.com). We will assist you in finding the relevant information. Please check the archive site, <http://msdn2.microsoft.com/en-us/library/E4BD6494-06AD-4aed-9823-445E921C9624>, as an additional source.

[MS-OMPWHP] Microsoft Corporation, "[Office Mobile PowerPoint Web Handler Protocol Specification](#)", July 2009.

[MS-PWBPS] Microsoft Corporation, "[PowerPoint Web Broadcast Protocol Specification](#)", July 2009.

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", BCP 14, RFC 2119, March 1997, <http://www.ietf.org/rfc/rfc2119.txt>

[XMLSCHEMA1] Thompson, H.S., Ed., Beech, D., Ed., Maloney, M., Ed., and Mendelsohn, N., Ed., "XML Schema Part 1: Structures", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/>

[XMLSCHEMA2] Biron, P.V., Ed. and Malhotra, A., Ed., "XML Schema Part 2: Datatypes", W3C Recommendation, May 2001, <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>

### 1.2.2 Informative References

[MS-OFCGLOS] Microsoft Corporation, "[Microsoft Office Master Glossary](#)", June 2008.

### 1.3 Structure Overview (Synopsis)

A **presentation** consists of **slides**, pictures, and other content. A protocol client can use the Office Mobile PowerPoint Web Handler Protocol Specification [\[MS-OMPWHP\]](#) to request specific pieces of presentation content stored on a protocol server. This structure specifies a set of data types that enable the transfer of such presentation content.

### 1.4 Relationship to Protocols and Other Structures

This structure is used by the Office Mobile PowerPoint Web Handler Protocol Specification [\[MS-OMPWHP\]](#).

### 1.5 Applicability Statement

This structure is applicable to the communication described in the Office Mobile PowerPoint Web Handler Protocol Specification [\[MS-OMPWHP\]](#).

### 1.6 Versioning and Localization

This document covers versioning issues in the following areas:

- **Structure Versions:** This structure specifies the only version of this structure.
- **Localization:** This structure specifies no locale-specific processes or data.

### 1.7 Vendor-Extensible Fields

None.

## 2 Structures

### 2.1 Global Elements

#### 2.1.1 mobilePres

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

A [CT\\_MobilePres](#) element that specifies information about a presentation.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this element.

```
<xsd:element name="mobilePres" type="CT_MobilePres"/>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

#### 2.1.2 pres

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this element.

```
<xsd:element name="pres" type="CT_Presentation"/>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

#### 2.1.3 sld

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

A [CT\\_Slide](#) element that specifies information about the content of a **presentation slide**.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this element.

```
<xsd:element name="sld" type="CT_Slide"/>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.2 Global Attributes

None.

### 2.3 Complex Types

The following table summarizes the set of common XML Schema complex type definitions defined by this specification. XML Schema complex type definitions that are specific to a particular operation are described with the operation.

Complex type	Description
<b>CT_SlideEntry</b>	A complex type that specifies information about a presentation slide.
<b>CT_SlideEntryList</b>	A complex type that specifies a set of slides as a sequence of <a href="#">CT_SlideEntry</a> elements.
<b>CT_CustomShow</b>	A complex type that specifies a custom show in the presentation.
<b>CT_CustomShowList</b>	A complex type that specifies a set of custom shows as a sequence of <a href="#">CT_CustomShow</a> elements.
<b>CT_EmptyType</b>	A complex type that specifies an empty type. Can be used where no specific element needs to be present.
<b>CT_IndexRange</b>	A complex type that specifies a zero-based index range of a list.
<b>CT_DocumentProperties</b>	A complex type that specifies document-level properties of the presentation.
<b>CT_ShowProperties</b>	A complex type that specifies the presentation slides that will be shown in a <b>slide show</b> .
<b>CT_Presentation</b>	A complex type that specifies information about a presentation.
<b>CT_SlideImage</b>	A complex type that specifies information required to retrieve the image of a presentation slide.
<b>CT_SlideInfo</b>	A complex type that specifies information required to retrieve knowledge about a presentation slide.
<b>CT_MobilePres</b>	A complex type that specifies information about a presentation and information required to retrieve the image and knowledge about a presentation slide.
<b>CT_Paragraph</b>	A complex type that specifies a paragraph with simple format information.
<b>CT_Placeholder</b>	Reserved. MUST be ignored.
<b>CT_ShapeText</b>	Reserved. MUST be ignored.
<b>CT_SlideText</b>	Reserved. MUST be ignored.
<b>CT_Notes</b>	A complex type that specifies the text content of a <b>notes slide</b> .
<b>CT_Slide</b>	A complex type that specifies a presentation slide.

### 2.3.1 CT\_SlideEntry

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_SlideEntryList](#)

A complex type that specifies information about a presentation slide.

*Attributes:*

**title:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the title of the presentation slide.

**id:** An [ST\\_SlideId](#) attribute that specifies the unique identifier of the presentation slide.



**sldImg:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies a name that uniquely refers to the image file of the presentation slide.

**sldInfo:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies a name that uniquely refers to detailed information of the presentation slide.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_SlideEntry" oxsd:cname="SlideEntry">
  <xsd:attribute name="title" type="xsd:string" use="optional" default=""
  oxsd:cname="title"/>
  <xsd:attribute name="id" type="ST_SlideId" use="required" oxsd:cname="id"/>
  <xsd:attribute name="sldImg" type="xsd:string" use="required" oxsd:cname="slideImageSrc"/>
  <xsd:attribute name="sldInfo" type="xsd:string" use="required" oxsd:cname="slideInfoSrc"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.2 CT\_SlideEntryList

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT Presentation](#)

A complex type that specifies a set of slides as a sequence of [CT\\_SlideEntry](#) elements.

*Child Elements:*

**sld:** An element that specifies a [CT\\_SlideEntry](#).

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_SlideEntryList" oxsd:cname="SlideEntryList">
  <xsd:sequence>
    <xsd:element name="sld" type="CT_SlideEntry" oxsd:cname="slideEntries" minOccurs="0"
    maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.3 CT\_CustomShow

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_CustomShowList](#)

A complex type that specifies a custom show in the presentation.

*Child Elements:*

**sld:** An [ST\\_SlideId](#) attribute that specifies the unique identifier of the presentation slide.

*Attributes:*

**name:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of the custom show.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_CustomShow" oxsd:cname="CustomShow">
  <xsd:sequence>
    <xsd:element name="sld" type="ST_SlideId" oxsd:cname="slides" minOccurs="1"
maxOccurs="unbounded"/>
  </xsd:sequence>
  <xsd:attribute name="name" type="xsd:string" use="required" oxsd:cname="name"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.4 CT\_CustomShowList

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT Presentation](#)

A complex type that specifies a set of custom shows as a sequence of [CT\\_CustomShow](#) elements.

*Child Elements:*

**custShow:** An element that specifies a CT\_CustomShow.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_CustomShowList" oxsd:cname="CustomShowList">
  <xsd:sequence>
    <xsd:element name="custShow" type="CT_CustomShow" oxsd:cname="customShows" minOccurs="0"
maxOccurs="unbounded"/>
  </xsd:sequence>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.5 CT\_EmptyType

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_ShowProperties](#)

A complex type that specifies an empty type. Can be used where no specific element needs to be present.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_EmptyType" oxsd:cname="EmptyType"/>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.3.6 CT\_IndexRange

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_ShowProperties](#)

A complex type that specifies a zero-based index range of a list.

*Attributes:*

**st:** An **xsd:unsignedInt** attribute ([\[XMLSCHEMA2\]](#) section 3.2.22) that specifies the inclusive start index of the range.

**end:** An **xsd:unsignedInt** attribute ([\[XMLSCHEMA2\]](#) section 3.2.22) that specifies the non-inclusive end index of the range.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_IndexRange" oxsd:cname="IndexRange">
  <xsd:attribute name="st" type="xsd:unsignedInt" use="required" oxsd:cname="start"/>
  <xsd:attribute name="end" type="xsd:unsignedInt" use="required" oxsd:cname="end"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.3.7 CT\_DocumentProperties

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Presentation](#)

A complex type that specifies document-level properties of the presentation.

*Attributes:*

**w:** An **xsd:unsignedInt** attribute ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the width of a presentation in pixels.

**h:** An **xsd:unsignedInt** attribute ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the height of a presentation in pixels.

**authr:** Reserved. MUST be ignored.

**modBy:** Reserved. MUST be ignored.

**modTm:** Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_DocumentProperties" oxsd:cname="DocumentProperties">
  <xsd:attribute name="w" type="xsd:unsignedInt" use="required" oxsd:cname="width"/>
  <xsd:attribute name="h" type="xsd:unsignedInt" use="required" oxsd:cname="height"/>
  <xsd:attribute name="authr" type="xsd:string" use="optional" default=""
  oxsd:cname="docAuthor"/>
</xsd:complexType>
```

```

    <xsd:attribute name="modBy" type="xsd:string" use="optional" default=""
    oxsd:cname="modifiedBy"/>
    <xsd:attribute name="modTm" type="xsd:string" use="optional" default=""
    oxsd:cname="modifiedTime"/>
  </xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.8 CT\_ShowProperties

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Presentation](#)

A complex type that specifies the presentation slides that will be shown in a slide show.

*Child Elements:*

**sldAll:** A [CT\\_EmptyType](#) element that specifies that all the slides will be shown.

**sldRg:** A [CT\\_IndexRange](#) element that specifies the range of presentation slides that will be shown. The range **MUST** be contained within the range of the presentation.

**custShow:** An **xsd:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the name of a custom show. Only presentation slides in the corresponding custom show will be shown. All presentation slides within the custom show **MUST** be within the presentation.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```

<xsd:complexType name="CT_ShowProperties" oxsd:cname="ShowProperties">
  <xsd:choice oxsd:cname="SlideListChoice" oxsd:cnameMember="slideListChoice" minOccurs="1"
  maxOccurs="1">
    <xsd:element name="sldAll" type="CT_EmptyType" oxsd:cname="AllSlides"/>
    <xsd:element name="sldRg" type="CT_IndexRange" oxsd:cname="SlideRange"/>
    <xsd:element name="custShow" type="xsd:string" oxsd:cname="NamedShow"/>
  </xsd:choice>
</xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.9 CT\_Presentation

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_MobilePres](#), [pres](#)

A complex type that specifies information about a presentation.

*Child Elements:*

**docPr:** A [CT\\_DocumentProperties](#) element that specifies the document level properties of the presentation.

**sldLst:** A [CT\\_SlideEntryList](#) element that specifies a list of slide entries.

**showLst:** A [CT\\_CustomShowList](#) element that specifies the custom shows present in the presentation.

**showPr:** A [CT\\_ShowProperties](#) element that specifies the presentation slides that will be shown. If this element is not present, all the presentation slides will be shown.

*Attributes:*

**ver:** An **xsd:unsignedInt** attribute ([\[XMLSCHEMA2\]](#) section 3.3.22) that specifies the schema version of the presentation.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_Presentation" oxsd:cname="Presentation">
  <xsd:sequence>
    <xsd:element name="docPr" type="CT_DocumentProperties" minOccurs="1" maxOccurs="1"
oxsd:cname="docProperties"/>
    <xsd:element name="slidLst" type="CT_SlideEntryList" minOccurs="1" maxOccurs="1"
oxsd:cname="slideEntryList"/>
    <xsd:element name="showLst" type="CT_CustomShowList" minOccurs="0" maxOccurs="1"
oxsd:cname="customShowList" oxsd:dataStructure="optional"/>
    <xsd:element name="showPr" type="CT_ShowProperties" minOccurs="0" maxOccurs="1"
oxsd:cname="showProperties" oxsd:dataStructure="optional"/>
  </xsd:sequence>
  <xsd:attribute name="ver" type="xsd:unsignedInt" use="required" oxsd:cname="version"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.10 CT\_SlideImage

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_MobilePres](#)

A complex type that specifies information required to retrieve the image of a presentation slide.

*Attributes:*

**url:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the relative path to the **URL** which serves presentation slide images. This URL MUST conform to [\[MS-OMPWHP\]](#) section 3.1.4.3.

**image:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the parameter which defines the presentation slide for which image is requested.

**width:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the parameter which defines the width of the image requested.

**height:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the parameter which defines the height of the image requested.

**format:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the parameter which defines the format of the image requested.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_SlideImage">
  <xsd:attribute name="url" type="xsd:string" use="required"/>
  <xsd:attribute name="image" type="xsd:string" use="required"/>
  <xsd:attribute name="width" type="xsd:string" use="required"/>
  <xsd:attribute name="height" type="xsd:string" use="required"/>
  <xsd:attribute name="format" type="xsd:string" use="required"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.11 CT\_SlideInfo

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT MobilePres](#)

A complex type that specifies information required to retrieve detailed information about a presentation slide.

*Attributes:*

**url:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the relative path of the URL which serves information about a presentation slide. This URL MUST conform to [\[MS-OMPWHP\]](#) section 3.1.4.2.

**info:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the parameter which defines the presentation slide for which information is requested.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_SlideInfo">
  <xsd:attribute name="url" type="xsd:string" use="required"/>
  <xsd:attribute name="info" type="xsd:string" use="required"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.12 CT\_MobilePres

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [mobilePres](#)

A complex type that specifies information about a presentation and information required to retrieve the image and knowledge about a presentation slide.

*Child Elements:*

**slideImage:** An element that specifies a [CT\\_SlideImage](#).

**slideInfo:** An element that specifies a [CT\\_SlideInfo](#).

**pres:** An element that specifies a [CT\\_Presentation](#).

*Attributes:*

**S3StateServiceUrl:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the URL that provides information about the state of the presentation. This URL **MUST** conform to the PowerPoint Web Broadcast Protocol Specification [\[MS-PWBPS\]](#). This attribute **MUST** be present in case of a **slide show broadcast** else this attribute **MUST** be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_MobilePres">
  <xsd:sequence>
    <xsd:element name="slideImage" type="CT_SlideImage" minOccurs="1" maxOccurs="1"/>
    <xsd:element name="slideInfo" type="CT_SlideInfo" minOccurs="1" maxOccurs="1"/>
    <xsd:element name="pres" type="CT_Presentation" minOccurs="1" maxOccurs="1"/>
  </xsd:sequence>
  <xsd:attribute name="S3StateServiceUrl" type="xsd:string" use="optional"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.13 CT\_Paragraph

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Placeholder](#), [CT\\_ShapeText](#), [CT\\_Notes](#)

A complex type that specifies a paragraph with simple format information.

*Child Elements:*

**t:** An **xsd:string** ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the concatenation of the text of all the runs of the paragraph.

*Attributes:*

**level:** An **xsd:unsignedByte** attribute ([\[XMLSCHEMA2\]](#) section 3.3.24) that specifies level of **horizontal indent**.

**buChar:** An **xsd:string** attribute ([\[XMLSCHEMA2\]](#) section 3.2.1) that specifies the bullet.

**align:** An [ST\\_Alignment](#) attribute that specifies the **horizontal alignment** of text.

**rtl:** An **xsd:boolean** attribute ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the directionality of text is right to left.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_Paragraph" oxsd:cname="Paragraph">
  <xsd:sequence>
    <xsd:element name="t" oxsd:cname="text" type="xsd:string" minOccurs="1" maxOccurs="1"/>
  </xsd:sequence>
  <xsd:attribute name="level" type="xsd:unsignedByte" use="optional" default="1"
  oxsd:cname="level"/>
</xsd:complexType>
```

```

    <xsd:attribute name="buChar" type="xsd:string" use="optional" default=""
    oxsd:cname="bulletChar"/>
    <xsd:attribute name="align" type="ST_Alignment" use="optional" default="1"
    oxsd:cname="alignment"/>
    <xsd:attribute name="rtl" type="xsd:boolean" use="optional" default="false"
    oxsd:cname="fRTL"/>
  </xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.14 CT\_Placeholder

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_SlideText](#)

Reserved. MUST be ignored.

*Child Elements:*

**p:** Reserved. MUST be ignored.

*Attributes:*

**type:** Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```

<xsd:complexType name="CT_Placeholder" oxsd:cname="Placeholder">
  <xsd:sequence>
    <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
    oxsd:cname="paragraphs"/>
  </xsd:sequence>
  <xsd:attribute name="type" type="ST_PlaceholderType" use="required"
  oxsd:cname="placeholderType"/>
</xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.15 CT\_ShapeText

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_SlideText](#)

Reserved. MUST be ignored.

*Child Elements:*

**p:** Reserved. MUST be ignored.

*Attributes:*

**type:** Reserved. MUST be ignored.



The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_ShapeText" oxsd:cname="ShapeText">
  <xsd:sequence>
    <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="paragraphs"/>
  </xsd:sequence>
  <xsd:attribute name="type" type="ST_ShapeType" use="required" oxsd:cname="shapeType"/>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.16 CT\_SlideText

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Slide](#)

Reserved. MUST be ignored.

*Child Elements:*

**ph:** Reserved. MUST be ignored.

**sp:** Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```
<xsd:complexType name="CT_SlideText" oxsd:cname="SlideText">
  <xsd:sequence>
    <xsd:element name="ph" type="CT_Placeholder" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="placeholderList"/>
    <xsd:element name="sp" type="CT_ShapeText" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="shapeTextList"/>
  </xsd:sequence>
</xsd:complexType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

### 2.3.17 CT\_Notes

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Slide](#)

A complex type that specifies the text content of a notes slide.

*Child Elements:*

**p:** A [CT\\_Paragraph](#) element that specifies a paragraph of text in the notes slide.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```

<xsd:complexType name="CT_Notes" oxsd:cname="Notes">
  <xsd:sequence>
    <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
      oxsd:cname="paragraphs"/>
  </xsd:sequence>
</xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.3.18 CT\_Slide

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [sld](#)

A complex type that specifies a presentation slide.

*Child Elements:*

**sldTxt:** Reserved. MUST be ignored.

**notes:** A [CT\\_Notes](#) element that specifies the user notes for the presentation slide.

*Attributes:*

**ver:** Reserved. MUST be ignored.

**hidden:** An **xsd:boolean** attribute ([\[XMLSCHEMA2\]](#) section 3.2.2) that specifies whether the presentation slide is hidden.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this complex type.

```

<xsd:complexType name="CT_Slide" oxsd:cname="Slide">
  <xsd:sequence>
    <xsd:element name="sldTxt" type="CT_SlideText" minOccurs="0" maxOccurs="1"
      oxsd:cname="slideText" oxsd:dataStructure="optional"/>
    <xsd:element name="notes" type="CT_Notes" minOccurs="0" maxOccurs="1" oxsd:cname="notes"
      oxsd:dataStructure="optional"/>
  </xsd:sequence>
  <xsd:attribute name="ver" type="xsd:unsignedInt" use="required" oxsd:cname="version"/>
  <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"
    oxsd:cname="fHidden"/>
</xsd:complexType>

```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.4 Simple Types

### 2.4.1 ST\_Alignment

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_Paragraph](#)

This simple type specifies the horizontal alignment of text.

Value	Meaning
l	The text is left aligned.
c	The text is center aligned.
r	The text is right aligned.
j	The text is justified aligned.
d	The text is distributed aligned.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this simple type.

```
<xsd:simpleType name="ST_Alignment" oxsd:cname="Alignment">
  <xsd:restriction base="xsd:token">
    <xsd:enumeration value="l" oxsd:cname="alignLeft"/>
    <xsd:enumeration value="c" oxsd:cname="alignCenter"/>
    <xsd:enumeration value="r" oxsd:cname="alignRight"/>
    <xsd:enumeration value="j" oxsd:cname="alignJustify"/>
    <xsd:enumeration value="d" oxsd:cname="alignDistributed"/>
  </xsd:restriction>
</xsd:simpleType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.4.2 ST\_SlideId

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

*Referenced by:* [CT\\_SlideEntry](#), [CT\\_CustomShow](#)

A simple type that specifies an identifier for the presentation slide. This simple type's contents are a restriction of the xs:unsignedInt [\[XMLSCHEMA2\]](#) section 3.3.22 datatype. This simple type also specifies the following restrictions:

It MUST have a maximum value of less than 2147483648 and it MUST have a minimum value of greater than or equal to 256.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this simple type.

```
<xsd:simpleType name="ST_SlideId" oxsd:cname="SlideId">
  <xsd:restriction base="xsd:unsignedInt">
    <xsd:minInclusive value="256"/>
    <xsd:maxExclusive value="2147483648"/>
  </xsd:restriction>
</xsd:simpleType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

## 2.4.3 ST\_PlaceholderType

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

Referenced by: [CT Placeholder](#)

Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this simple type.

```
<xsd:simpleType name="ST_PlaceholderType" oxsd:cname="PlaceholderType">  
  <xsd:restriction base="xsd:token"/>  
</xsd:simpleType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).

#### 2.4.4 ST\_ShapeType

*Target namespace:* <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

Referenced by: [CT ShapeText](#)

Reserved. MUST be ignored.

The following W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1) fragment specifies the contents of this simple type.

```
<xsd:simpleType name="ST_ShapeType" oxsd:cname="ShapeType">  
  <xsd:restriction base="xsd:token"/>  
</xsd:simpleType>
```

See section [5.1](#) for the full W3C XML Schema ([\[XMLSCHEMA1\]](#) section 2.1).



The contained **custShow** element specifies a custom show "Custom Show 1" having 3 presentation slides.

### 3.2 Slide

This sample CT\_Slide specifies a presentation slide.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<p:sld xmlns:p="http://schemas.microsoft.com/server/powerpoint/2009/mobile" ver="0">
  <p:sldTxt>
    <p:ph type="t">
      <p:p>
        <p:t>Selling a Product or Service</p:t>
      </p:p>
    </p:ph>
  </p:sldTxt>
  <p:notes>
    <p:p buChar="•">
      <p:t>Total time: 30 minutes</p:t>
    </p:p>
    <p:p buChar="•">
      <p:t>Concentrate on Business opportunities</p:t>
    </p:p>
    <p:p level="2" buChar="•">
      <p:t>Spend 5 minutes on intro</p:t>
    </p:p>
    <p:p>
      <p:t/>
    </p:p>
    <p:p>
      <p:t/>
    </p:p>
    <p:p>
      <p:t>Text for test</p:t>
    </p:p>
    <p:p>
      <p:t/>
    </p:p>
    <p:p>
      <p:t/>
    </p:p>
  </p:notes>
</p:sld>
```

The contained **notes** element specifies the text content of the notes slide.

## 4 Security Considerations

None.

## 5 Appendix A: Full XSD Schema

### 5.1 <http://schemas.microsoft.com/server/powerpoint/2009/mobile>

```
<xsd:schema elementFormDefault="qualified"
targetNamespace="http://schemas.microsoft.com/server/powerpoint/2009/mobile"
xmlns="http://schemas.microsoft.com/server/powerpoint/2009/mobile"
xmlns:psv="http://pptServerUri" xmlns:oxsd="http://oxsdSchemaUri"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <xsd:import namespace="http://pptServerUri" schemaLocation="pptservercommon.xsd"/>
  <xsd:simpleType name="ST_Alignment" oxsd:cname="Alignment">
    <xsd:restriction base="xsd:token">
      <xsd:enumeration value="l" oxsd:cname="alignLeft"/>
      <xsd:enumeration value="c" oxsd:cname="alignCenter"/>
      <xsd:enumeration value="r" oxsd:cname="alignRight"/>
      <xsd:enumeration value="j" oxsd:cname="alignJustify"/>
      <xsd:enumeration value="d" oxsd:cname="alignDistributed"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:simpleType name="ST_SlideId" oxsd:cname="SlideId">
    <xsd:restriction base="xsd:unsignedInt">
      <xsd:minInclusive value="256"/>
      <xsd:maxExclusive value="2147483648"/>
    </xsd:restriction>
  </xsd:simpleType>
  <xsd:simpleType name="ST_PlaceholderType" oxsd:cname="PlaceholderType">
    <xsd:restriction base="xsd:token"/>
  </xsd:simpleType>
  <xsd:simpleType name="ST_ShapeType" oxsd:cname="ShapeType">
    <xsd:restriction base="xsd:token"/>
  </xsd:simpleType>
  <xsd:complexType name="CT_SlideEntry" oxsd:cname="SlideEntry">
    <xsd:attribute name="title" type="xsd:string" use="optional" default=""
oxsd:cname="title"/>
    <xsd:attribute name="id" type="ST_SlideId" use="required" oxsd:cname="id"/>
    <xsd:attribute name="sldImg" type="xsd:string" use="required"
oxsd:cname="slideImageSrc"/>
    <xsd:attribute name="sldInfo" type="xsd:string" use="required"
oxsd:cname="slideInfoSrc"/>
  </xsd:complexType>
  <xsd:complexType name="CT_SlideEntryList" oxsd:cname="SlideEntryList">
    <xsd:sequence>
      <xsd:element name="sld" type="CT_SlideEntry" oxsd:cname="slideEntries" minOccurs="0"
maxOccurs="unbounded"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="CT_CustomShow" oxsd:cname="CustomShow">
    <xsd:sequence>
      <xsd:element name="sld" type="ST_SlideId" oxsd:cname="slides" minOccurs="1"
maxOccurs="unbounded"/>
    </xsd:sequence>
    <xsd:attribute name="name" type="xsd:string" use="required" oxsd:cname="name"/>
  </xsd:complexType>
  <xsd:complexType name="CT_CustomShowList" oxsd:cname="CustomShowList">
    <xsd:sequence>
      <xsd:element name="custShow" type="CT_CustomShow" oxsd:cname="customShows"
minOccurs="0" maxOccurs="unbounded"/>
    </xsd:sequence>
  </xsd:complexType>

```



```

<xsd:complexType name="CT_EmptyType" oxsd:cname="EmptyType"/>
<xsd:complexType name="CT_IndexRange" oxsd:cname="IndexRange">
  <xsd:attribute name="st" type="xsd:unsignedInt" use="required" oxsd:cname="start"/>
  <xsd:attribute name="end" type="xsd:unsignedInt" use="required" oxsd:cname="end"/>
</xsd:complexType>
<xsd:complexType name="CT_DocumentProperties" oxsd:cname="DocumentProperties">
  <xsd:attribute name="w" type="xsd:unsignedInt" use="required" oxsd:cname="width"/>
  <xsd:attribute name="h" type="xsd:unsignedInt" use="required" oxsd:cname="height"/>
  <xsd:attribute name="authr" type="xsd:string" use="optional" default=""
oxsd:cname="docAuthor"/>
  <xsd:attribute name="modBy" type="xsd:string" use="optional" default=""
oxsd:cname="modifiedBy"/>
  <xsd:attribute name="modTm" type="xsd:string" use="optional" default=""
oxsd:cname="modifiedTime"/>
</xsd:complexType>
<xsd:complexType name="CT_ShowProperties" oxsd:cname="ShowProperties">
  <xsd:choice oxsd:cname="SlideListChoice" oxsd:cnameMember="slideListChoice" minOccurs="1"
maxOccurs="1">
    <xsd:element name="sldAll" type="CT_EmptyType" oxsd:cname="AllSlides"/>
    <xsd:element name="sldRg" type="CT_IndexRange" oxsd:cname="SlideRange"/>
    <xsd:element name="custShow" type="xsd:string" oxsd:cname="NamedShow"/>
  </xsd:choice>
</xsd:complexType>
<xsd:complexType name="CT_Presentation" oxsd:cname="Presentation">
  <xsd:sequence>
    <xsd:element name="docPr" type="CT_DocumentProperties" minOccurs="1" maxOccurs="1"
oxsd:cname="docProperties"/>
    <xsd:element name="sldLst" type="CT_SlideEntryList" minOccurs="1" maxOccurs="1"
oxsd:cname="slideEntryList"/>
    <xsd:element name="showLst" type="CT_CustomShowList" minOccurs="0" maxOccurs="1"
oxsd:cname="customShowList" oxsd:dataStructure="optional"/>
    <xsd:element name="showPr" type="CT_ShowProperties" minOccurs="0" maxOccurs="1"
oxsd:cname="showProperties" oxsd:dataStructure="optional"/>
  </xsd:sequence>
  <xsd:attribute name="ver" type="xsd:unsignedInt" use="required" oxsd:cname="version"/>
</xsd:complexType>
<xsd:complexType name="CT_SlideImage">
  <xsd:attribute name="url" type="xsd:string" use="required"/>
  <xsd:attribute name="image" type="xsd:string" use="required"/>
  <xsd:attribute name="width" type="xsd:string" use="required"/>
  <xsd:attribute name="height" type="xsd:string" use="required"/>
  <xsd:attribute name="format" type="xsd:string" use="required"/>
</xsd:complexType>
<xsd:complexType name="CT_SlideInfo">
  <xsd:attribute name="url" type="xsd:string" use="required"/>
  <xsd:attribute name="info" type="xsd:string" use="required"/>
</xsd:complexType>
<xsd:complexType name="CT_MobilePres">
  <xsd:sequence>
    <xsd:element name="slideImage" type="CT_SlideImage" minOccurs="1" maxOccurs="1"/>
    <xsd:element name="slideInfo" type="CT_SlideInfo" minOccurs="1" maxOccurs="1"/>
    <xsd:element name="pres" type="CT_Presentation" minOccurs="1" maxOccurs="1"/>
  </xsd:sequence>
  <xsd:attribute name="S3StateServiceUrl" type="xsd:string" use="optional"/>
</xsd:complexType>
<xsd:complexType name="CT_Paragraph" oxsd:cname="Paragraph">
  <xsd:sequence>
    <xsd:element name="t" oxsd:cname="text" type="xsd:string" minOccurs="1" maxOccurs="1"/>
  </xsd:sequence>

```

```

    <xsd:attribute name="level" type="xsd:unsignedByte" use="optional" default="1"
oxsd:cname="level"/>
    <xsd:attribute name="buChar" type="xsd:string" use="optional" default=""
oxsd:cname="bulletChar"/>
    <xsd:attribute name="align" type="ST_Alignment" use="optional" default="l"
oxsd:cname="alignment"/>
    <xsd:attribute name="rtl" type="xsd:boolean" use="optional" default="false"
oxsd:cname="fRTL"/>
  </xsd:complexType>
  <xsd:complexType name="CT_Placeholder" oxsd:cname="Placeholder">
    <xsd:sequence>
      <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="paragraphs"/>
    </xsd:sequence>
    <xsd:attribute name="type" type="ST_PlaceholderType" use="required"
oxsd:cname="placeholderType"/>
  </xsd:complexType>
  <xsd:complexType name="CT_ShapeText" oxsd:cname="ShapeText">
    <xsd:sequence>
      <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="paragraphs"/>
    </xsd:sequence>
    <xsd:attribute name="type" type="ST_ShapeType" use="required" oxsd:cname="shapeType"/>
  </xsd:complexType>
  <xsd:complexType name="CT_SlideText" oxsd:cname="SlideText">
    <xsd:sequence>
      <xsd:element name="ph" type="CT_Placeholder" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="placeholderList"/>
      <xsd:element name="sp" type="CT_ShapeText" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="shapeTextList"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="CT_Notes" oxsd:cname="Notes">
    <xsd:sequence>
      <xsd:element name="p" type="CT_Paragraph" minOccurs="0" maxOccurs="unbounded"
oxsd:cname="paragraphs"/>
    </xsd:sequence>
  </xsd:complexType>
  <xsd:complexType name="CT_Slide" oxsd:cname="Slide">
    <xsd:sequence>
      <xsd:element name="sldTxt" type="CT_SlideText" minOccurs="0" maxOccurs="1"
oxsd:cname="slideText" oxsd:dataStructure="optional"/>
      <xsd:element name="notes" type="CT_Notes" minOccurs="0" maxOccurs="1"
oxsd:cname="notes" oxsd:dataStructure="optional"/>
    </xsd:sequence>
    <xsd:attribute name="ver" type="xsd:unsignedInt" use="required" oxsd:cname="version"/>
    <xsd:attribute name="hidden" type="xsd:boolean" use="optional" default="false"
oxsd:cname="fHidden"/>
  </xsd:complexType>
  <xsd:element name="mobilePres" type="CT_MobilePres"/>
  <xsd:element name="pres" type="CT_Presentation"/>
  <xsd:element name="sld" type="CT_Slide"/>
</xsd:schema>

```

## 6 Appendix B: Product Behavior

The information in this specification is applicable to the following Microsoft products or supplemental software. References to product versions include released service packs:

- Microsoft® FAST™ Search Server 2010
- Microsoft® PowerPoint® Mobile 2010
- Microsoft® PowerPoint® Web App

Exceptions, if any, are noted below. If a service pack or Quick Fix Engineering (QFE) number appears with the product version, behavior changed in that service pack or QFE. The new behavior also applies to subsequent service packs of the product unless otherwise specified. If a product edition appears with the product version, behavior is different in that product edition.

Unless otherwise specified, any statement of optional behavior in this specification that is prescribed using the terms SHOULD or SHOULD NOT implies product behavior in accordance with the SHOULD or SHOULD NOT prescription. Unless otherwise specified, the term MAY implies that the product does not follow the prescription.

## 7 Change Tracking

No table of changes is available. The document is either new or has had no changes since its last release.

## 8 Index

### A

[Applicability](#) 6

### C

[Change tracking](#) 28

Complex types

[CT\\_CustomShow](#) 9

[CT\\_CustomShowList](#) 10

[CT\\_DocumentProperties](#) 11

[CT\\_EmptyType](#) 10

[CT\\_IndexRange](#) 11

[CT\\_MobilePres](#) 14

[CT\\_Notes](#) 17

[CT\\_Paragraph](#) 15

[CT\\_Placeholder](#) 16

[CT\\_Presentation](#) 12

[CT\\_ShapeText](#) 16

[CT\\_ShowProperties](#) 12

[CT\\_Slide](#) 18

[CT\\_SlideEntry](#) 8

[CT\\_SlideEntryList](#) 9

[CT\\_SlideImage](#) 13

[CT\\_SlideInfo](#) 14

[CT\\_SlideText](#) 17

[Complex types structure](#) 7

[CT\\_CustomShow complex type](#) 9

[CT\\_CustomShowList complex type](#) 10

[CT\\_DocumentProperties complex type](#) 11

[CT\\_EmptyType complex type](#) 10

[CT\\_IndexRange complex type](#) 11

[CT\\_MobilePres complex type](#) 14

[CT\\_Notes complex type](#) 17

[CT\\_Paragraph complex type](#) 15

[CT\\_Placeholder complex type](#) 16

[CT\\_Presentation complex type](#) 12

[CT\\_ShapeText complex type](#) 16

[CT\\_ShowProperties complex type](#) 12

[CT\\_Slide complex type](#) 18

[CT\\_SlideEntry complex type](#) 8

[CT\\_SlideEntryList complex type](#) 9

[CT\\_SlideImage complex type](#) 13

[CT\\_SlideInfo complex type](#) 14

[CT\\_SlideText complex type](#) 17

### D

Details

[complex type structure](#) 7

[global attributes structure](#) 7

[mobilePres element](#) 7

[pres element](#) 7

[sld element](#) 7

### E

Elements

[mobilePres](#) 7

[pres](#) 7

[sld](#) 7

[Example overview](#) 21

[Examples](#) 21

[Presentation](#) 21

[Slide](#) 22

### F

[Fields - vendor-extensible](#) 6

### G

[Global attributes structure](#) 7

[Glossary](#) 5

### I

[Implementer - security considerations](#) 23

[Informative references](#) 5

[Introduction](#) 5

### L

[Localization](#) 6

### M

[mobilePres element](#) 7

### N

[Normative references](#) 5

### O

[Overview \(synopsis\)](#) 6

### P

[pres element](#) 7

[Presentation example](#) 21

[Product behavior](#) 27

### R

References

[informative](#) 5

[normative](#) 5

[Relationship to protocols and other structures](#) 6

### S

[Security - implementer considerations](#) 23

Simple types

[ST\\_Alignment](#) 18

[ST\\_PlaceholderType](#) 19

[ST\\_ShapeType](#) 20

[sld element](#) 7

[Slide example](#) 22  
[ST Alignment simple type](#) 18  
[ST PlaceholderType simple type](#) 19  
[ST ShapeType simple type](#) 20  
Structures  
  [complex types](#) 7  
    [CT CustomShow complex type](#) 9  
    [CT CustomShowList complex type](#) 10  
    [CT DocumentProperties complex type](#) 11  
    [CT EmptyType complex type](#) 10  
    [CT IndexRange complex type](#) 11  
    [CT MobilePres complex type](#) 14  
    [CT Notes complex type](#) 17  
    [CT Paragraph complex type](#) 15  
    [CT Placeholder complex type](#) 16  
    [CT Presentation complex type](#) 12  
    [CT ShapeText complex type](#) 16  
    [CT ShowProperties complex type](#) 12  
    [CT Slide complex type](#) 18  
    [CT SlideEntry complex type](#) 8  
    [CT SlideEntryList complex type](#) 9  
    [CT SlideImage complex type](#) 13  
    [CT SlideInfo complex type](#) 14  
    [CT SlideText complex type](#) 17  
  [global attributes](#) 7  
    [ST Alignment simple type](#) 18  
    [ST PlaceholderType simple type](#) 19  
    [ST ShapeType simple type](#) 20

## T

[Tracking changes](#) 28  
Types  
  [complex](#) 7

## V

[Vendor-extensible fields](#) 6  
[Versioning](#) 6