[MS-TMPLDISC]:

Template Discovery Web Service Protocol

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Revision Summary

Date	Revision History	Revision Class	Comments
7/13/2009	0.1	Major	Initial Availability
8/28/2009	0.2	Editorial	Revised and edited the technical content
11/6/2009	0.3	Editorial	Revised and edited the technical content
2/19/2010	1.0	Minor	Updated the technical content
3/31/2010	1.01	Editorial	Revised and edited the technical content
4/30/2010	1.02	Minor	Updated the technical content
6/7/2010	1.03	Editorial	Revised and edited the technical content
6/29/2010	1.04	Editorial	Changed language and formatting in the technical content.
7/23/2010	1.04	None	No changes to the meaning, language, or formatting of the technical content.
9/27/2010	1.04	None	No changes to the meaning, language, or formatting of the technical content.
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1/20/2012	1.5	Minor	Clarified the meaning of the technical content.
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7/16/2012	1.5	None	No changes to the meaning, language, or formatting of the technical content.
9/12/2012	1.5	None	No changes to the meaning, language, or formatting of the technical content.
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2/11/2013	1.5	None	No changes to the meaning, language, or formatting of the technical content.
7/30/2013	1.5	None	No changes to the meaning, language, or formatting of the technical content.
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Date	Revision History	Revision Class	Comments
4/30/2014	1.5	None	No changes to the meaning, language, or formatting of the technical content.
7/31/2014	1.6	Minor	Clarified the meaning of the technical content.
10/30/2014	1.6	None	No changes to the meaning, language, or formatting of the technical content.
3/16/2015	2.0	Major	Significantly changed the technical content.
2/26/2016	3.0	Major	Significantly changed the technical content.
7/15/2016	3.0	None	No changes to the meaning, language, or formatting of the technical content.

Table of Contents

1   Introduction

This document specifies the Template Discovery Web Service Protocol. It enables a protocol client to retrieve links to the **document templates** associated with a **document library** on a protocol server.

Sections 1.5, 1.8, 1.9, 2, and 3 of this specification are normative. All other sections and examples in this specification are informative.

1.1   Glossary

This document uses the following terms:

absolute URL: The full Internet address of a page or other World Wide Web resource. The absolute URL includes a protocol, such as "http," a network location, and an optional path and file name — for example, http://www.treyresearch.net/.

document library: A type of list that is a container for documents and folders.

document template: A file that serves as the basis for new documents.

Hypertext Transfer Protocol (HTTP): An application-level protocol for distributed, collaborative, hypermedia information systems (text, graphic images, sound, video, and other multimedia files) on the World Wide Web.

Hypertext Transfer Protocol Secure (HTTPS): An extension of HTTP that securely encrypts and decrypts web page requests. In some older protocols, "Hypertext Transfer Protocol over Secure Sockets Layer" is still used (Secure Sockets Layer has been deprecated). For more information, see [SSL3] and [RFC5246].

language code identifier (LCID): A 32-bit number that identifies the user interface human language dialect or variation that is supported by an application or a client computer.

root folder: The folder at the top of a hierarchy of folders in a list.

site-relative URL: A URL that is relative to the site that contains a resource and does not begin with a leading slash (/).

XML namespace: A collection of names that is used to identify elements, types, and attributes in XML documents identified in a URI reference [RFC3986]. A combination of XML namespace and local name allows XML documents to use elements, types, and attributes that have the same names but come from different sources. For more information, see [XMLNS-2ED].

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

1.2   References

Links to a document in the Microsoft Open Specifications library point to the correct section in the most recently published version of the referenced document. However, because individual documents in the library are not updated at the same time, the section numbers in the documents may not match. You can confirm the correct section numbering by checking the Errata.

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. We will assist you in finding the relevant information.

[RFC1123] Braden, R., "Requirements for Internet Hosts - Application and Support", RFC 1123, October 1989, http://www.ietf.org/rfc/rfc1123.txt

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

[RFC2616] Fielding, R., Gettys, J., Mogul, J., et al., "Hypertext Transfer Protocol -- HTTP/1.1", RFC 2616, June 1999, http://www.rfc-editor.org/rfc/rfc2616.txt

[XMLNS] Bray, T., Hollander, D., Layman, A., et al., Eds., "Namespaces in XML 1.0 (Third Edition)", W3C Recommendation, December 2009, http://www.w3.org/TR/2009/REC-xml-names-20091208/

[XMLSCHEMA1] Thompson, H., Beech, D., Maloney, M., and Mendelsohn, N., Eds., "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-PLSP] Microsoft Corporation, "Published Links Web Service Protocol".

[RFC2818] Rescorla, E., "HTTP Over TLS", RFC 2818, May 2000, http://www.rfc-editor.org/rfc/rfc2818.txt

1.3   Protocol Overview (Synopsis)

This protocol enables a protocol client to retrieve links to the document templates associated with a document library on the protocol server. Once retrieved, these links can be used by the client to offer the document templates to the user as the basis for new documents suitable for storage in the document library.

1.4   Relationship to Other Protocols

This protocol uses **Hypertext Transfer Protocol (HTTP)**, as described in [RFC2616], or **Hypertext Transfer Protocol over Secure Sockets Layer (HTTPS)**, as described in [RFC2818].

The following diagram shows the underlying messaging and transport stack used by the protocol:
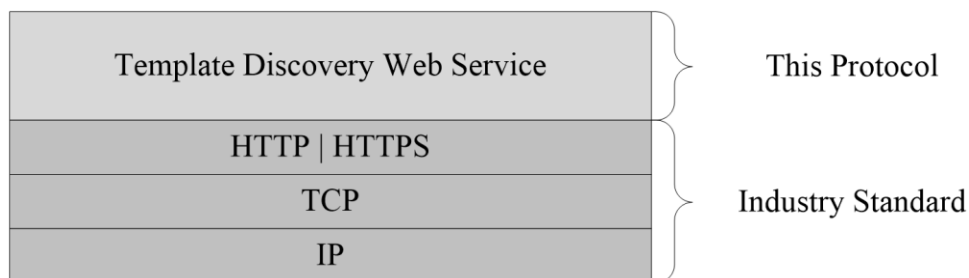
Figure 1: This protocol in relation to other protocols

The Template Discovery Web Service can be used after the Published Links Web Service Protocol [MS-PLSP] has finished. A protocol client can use the Published Links Web Service Protocol to acquire URLs to document libraries that offer document templates. The client can then use the Template Discovery Web Service protocol to retrieve links to the templates from these document libraries.

1.5   Prerequisites/Preconditions

This protocol operates against a site that is identified by a URL that is known by the protocol client. The protocol server endpoint is formed by appending "/_layouts/GetSpotlight.ashx" to the URL of the site. For example, given the following site URL:

▪   http://www.contoso.com/Repository

The server endpoint would be:

▪   http://www.contoso.com/Repository/_layouts/GetSpotlight.ashx

In addition, to use this web service, the protocol client needs to have the name of a document library on the site. The Published Links Web Service Protocol [MS-PLSP] can be used to obtain this information.

1.6   Applicability Statement

This protocol is applicable for retrieving links to the document templates associated with a document library.

1.7   Versioning and Capability Negotiation

None.

1.8   Vendor-Extensible Fields

None.

1.9   Standards Assignments

None.

2   Messages

2.1   Transport

This protocol uses HTTP version 1.1 (as specified in [RFC2616]) as transport for the GET methods. Protocol servers SHOULD additionally support HTTPS for securing communication with clients.

2.2   Common Message Syntax

This section contains common definitions used by this protocol. The syntax of the definitions uses **XML Schema** as defined in [XMLSCHEMA1] and [XMLSCHEMA2].

2.2.1   Namespaces

This specification defines and references various **XML namespaces** using the mechanisms specified in [XMLNS]. Although this specification associates a specific prefix for each XML namespace that is used, the choice of any particular prefix is implementation-specific and not significant for interoperability.

Prefix	Namespace URI	Reference
o	urn:schemas-microsoft-com:office:office	
xs	http://www.w3.org/2001/XMLSchema	[XMLSCHEMA1] [XMLSCHEMA2]

2.2.2   Messages

None.

2.2.3   Elements

This specification does not define any common XML Schema element definitions.

2.2.4   Complex Types

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

Complex Type	Description
ApplicationType	A set of templates of a particular class.
FeaturedContentType	A set of **ApplicationType** elements whose described templates are designed for a common **LCID**.
FeaturedTemplatesType	A set of **FeaturedTemplateType** elements.
FeaturedTemplateType	A specification of the properties and location of a single template.

2.2.4.1 ApplicationType

Specifies a set of templates of a particular class.

```
<xs:complexType name="ApplicationType">
  <xs:sequence>
    <xs:element name="featuredtemplates" type="o:FeaturedTemplatesType"/>
  </xs:sequence>
  <xs:attribute name="id" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="3"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:complexType>
```

featuredtemplates: A set of one or more templates belonging to the same class.

id: The class of the templates.<1>

2.2.4.2 FeaturedContentType

Specifies a set of **ApplicationType** elements whose described templates are designed for a common LCID.

```
<xs:complexType name="FeaturedContentType">
  <xs:sequence>
    <xs:element minOccurs="0" maxOccurs="unbounded" name="application"
type="o:ApplicationType"/>
  </xs:sequence>
  <xs:attribute name="lcid" type="xs:int" use="required"/>
</xs:complexType>
```

application: A single **ApplicationType** element.

lcid: The LCID of the set.

2.2.4.3 FeaturedTemplatesType

Specifies a set of templates.

```
<xs:complexType name="FeaturedTemplatesType">
  <xs:sequence>
    <xs:element maxOccurs="unbounded" name="featuredtemplate" type="o:FeaturedTemplateType"/>
  </xs:sequence>
  <xs:attribute name="startdate" type="xs:date" use="required"/>
  <xs:attribute name="enddate" type="xs:date" use="required"/>
</xs:complexType>
```

featuredtemplate: A single template.

startdate: Date when this set of templates takes effect. Value MUST be set to the string "1901-01-01".

enddate: Date when this set of templates expires. Value MUST be set to the string "2201-01-01".

2.2.4.4 FeaturedTemplateType

Specifies the properties and location of a single template.

```
<xs:complexType name="FeaturedTemplateType">
  <xs:attribute name="source" type="xs:string" use="required"/>
  <xs:attribute name="lmod" type="xs:string" use="required"/>
  <xs:attribute name="savelocation" type="xs:string" use="required"/>
  <xs:attribute name="title" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="255"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
  <xs:attribute name="filename" use="required">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:minLength value="1"/>
        <xs:maxLength value="128"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:complexType>
```

source: The **absolute URL** of the template on the server.

lmod: Last modification date and time of the template (GMT), in the format defined by [RFC1123] section 5.2.14.

savelocation: The absolute URL of the document library on the server into which the server recommends that new documents created from this template be saved.

title: The title of the template.

filename: The file name of the template, including the file extension.

2.2.5 Simple Types

This specification does not define any common XML Schema simple type definitions.

2.2.6 Attributes

This specification does not define any common XML Schema attribute definitions.

2.2.7 Groups

This specification does not define any common XML Schema group definitions.

2.2.8 Attribute Groups

This specification does not define any common XML Schema attribute group definitions.

3   Protocol Details

The client side of this protocol is simply a pass-through. That is, no additional timers or other state is required on the client side of this protocol. Calls made by the higher-layer protocol or application are passed directly to the transport, and the results returned by the transport are passed directly back to the higher-layer protocol or application.

3.1   Server Details

All operations consist of a basic HTTP request-response pair and the protocol server treats each request as an independent transaction, unrelated to any previous request.

3.1.1   Abstract Data Model

This section describes a conceptual model of possible data organization that an implementation maintains to participate in this protocol. The described organization is provided to facilitate the explanation of how the protocol behaves. This document does not mandate that implementations adhere to this model as long as their external behavior is consistent with that described in this document.

The protocol server MUST maintain a mapping from document libraries to templates such that, for any document library, the server can retrieve the properties of all templates associated with the document library.

3.1.2   Timers

None.

3.1.3   Initialization

None.

3.1.4   Message Processing Events and Sequencing Rules

This protocol includes a single operation:

Operation	Description
GetSpotlight	Gets an XML document describing document templates that can be used by client applications for creating new documents in the specified document library.

3.1.4.1   GetSpotlight

The methods in this section are supported by GetSpotlight.

3.1.4.1.1 GetSpotlight

This method gets an XML document describing document templates that can be used by client applications for creating new documents in the specified document library.

URL query parameters sent through the GET request:

Parameter	Value
ListName	**Site-relative URL** of the **root folder** of the document library.
app	The class of templates being requested. This parameter is optional. If specified, the protocol server MUST return information about all templates of the matching class and MUST NOT return information about templates belonging to other classes. When not specified, the protocol server SHOULD return information about all templates regardless of class.<2> If app is specified by an invalid class name that the server does not support, the server SHOULD return the status code 200 with an empty featuredContentType element in the XML document returned.
lidhelp	The LCID of the requested template language as a four-character hexadecimal string. The protocol server MUST return information only about templates designed for the specified LCID. When not specified the server SHOULD use the current culture LCID instead. If lidhelp is specified by an invalid LCID, the server SHOULD return status code 200 with an HTML web page reporting error, instead of the XML document.
liduser	The LCID of the client operating system as a four-character hexadecimal string. The protocol client MAY choose to specify this parameter but the protocol server MUST ignore it.
lidui	The LCID of the client application as a four-character hexadecimal string. The protocol client MAY choose to specify this parameter but the protocol server MUST ignore it.

3.1.4.1.1.1   Return Values

On success, an XML document described by the following schema is returned:

```
<?xml version="1.0" encoding="utf-8"?>
<xs:schema xmlns:o="urn:schemas-microsoft-com:office:office"
           attributeFormDefault="unqualified"
           elementFormDefault="qualified"
           targetNamespace="urn:schemas-microsoft-com:office:office"
           xmlns:xs="http://www.w3.org/2001/XMLSchema">
    <xs:element name="featuredcontent" type="o:FeaturedContentType">
    </xs:element>
</xs:schema>
```

featuredcontent: A **FeaturedContentType** element describing templates that are designed for the language specified by the **lidhelp** parameter in the request.

The returned HTTP status code MUST be one of the following:

Value	Description
200	Success.
400	Invalid or missing parameters.
401	Security not validated. The credentials supplied by the user are not valid.
500	Any other error.

3.1.5 Timer Events

None.

3.1.6 Other Local Events

None.

4 Protocol Examples

4.1 GetSpotlight

A protocol client could issue the following command to request a list of all templates from the "Routing Target" document library that were designed for LCID 0x0409 (en-US) and that were classed as "WD" templates:

http://site/dc/_layouts/GetSpotlight.ashx?lidhelp=0409&ListName=Routing%20Target&app=WD

The following example is sample XML that might be returned for this request. This XML specifies a single template located at "http://site/dc/Routing Target/Forms/template.dotx" whose preferred save location for new documents is "http://site/dc/Routing Target".

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Office Server generated Spotlight XML-->
<o:featuredcontent lcid="1033" xmlns:o="urn:schemas-microsoft-com:office:office">
  <o:application id="WD">
    <o:featuredtemplates startdate="1901-01-01" enddate="2201-01-01">
      <o:featuredtemplate source="http://site/dc/Routing Target/Forms/template.dotx"
lmod="Mon, 27 Apr 2009 21:11:03 GMT" savelocation="http://site/dc/Routing Target"
title="Document" filename="template.dotx">
      </o:featuredtemplate>
    </o:featuredtemplates>
  </o:application>


</o:featuredcontent>
```

5 Security

5.1 Security Considerations for Implementers

None.

5.2 Index of Security Parameters

None.

6   Appendix A: Full WSDL

7   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 Office 97

- Microsoft Office 2000

- Microsoft Office XP

- Microsoft Office 2003

- The 2007 Microsoft Office system

- Microsoft Office 2010 suites

- Microsoft Office 2013

- Microsoft SharePoint Server 2010

- Microsoft SharePoint Server 2013

- Microsoft Visio 2010

- Microsoft Visio 2013

- Microsoft Office 2016

- Microsoft Visio 2016

- Microsoft SharePoint Server 2016

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.

<1> Section 2.2.4.1: SharePoint Server 2010 and SharePoint Server 2013 classify all Microsoft Word 97, Microsoft Word 2000, Microsoft Word 2002, Microsoft Office Word 2003, Microsoft Office Word 2007, Microsoft Word 2010 and Microsoft Word 2013 templates as "WD", all Microsoft Excel 97, Microsoft Excel 2000, Microsoft Excel 2002, Microsoft Office Excel 2003, Microsoft Office Excel 2007, Microsoft Excel 2010 and Microsoft Excel 2013 templates as "XL", all Microsoft PowerPoint 97, Microsoft PowerPoint 2000, Microsoft PowerPoint 2002, Microsoft Office PowerPoint 2003, Microsoft Office PowerPoint 2007, Microsoft PowerPoint 2010 and Microsoft PowerPoint 2013 templates as "PP", and all Visio 2010 and Visio 2013 templates as "VO". They do not return any information about templates that do not belong to one of these four classes.

<2> Section 3.1.4.1.1: The SharePoint Server 2010 and SharePoint Server 2013 only returns information about templates classed as "WD", "XL", "PP", or "VO".

8 Change Tracking

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

9   Index