[MS-PBSD]: Publication Services Data Structure

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1 Introduction

Publication Services enables computers to advertise (that is, publish) their presence and their resources as **Web services** over IP-based networks. By doing so, other computers can find (that is, discover) the Web services that have been published on the same network.

This document specifies the data, along with its structure, that computers use to describe themselves and the resources that are being offered.

Sections 1.7 and 2 of this specification are normative and can contain the terms MAY, SHOULD, MUST, MUST NOT, and SHOULD NOT as defined in RFC 2119. All other sections and examples in this specification are informative.

1.1 Glossary

The following terms are defined in [MS-GLOS]:

client device domain name endpoint NetBIOS service Web services

The following terms are specific to this document:

Publication Services: A Microsoft Windows Devices Profile for Web Services (DPWS) service that enables computers to publish resources so that those resources can be discovered by other computers on the same network.

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

References to Microsoft Open Specifications documentation do not include a publishing year because links are to the latest version of the documents, which are updated frequently. References to other documents include a publishing year when one is available.

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.

[DPWS] Chans, S., Conti, D., Schlimmer, J., et al., "Devices Profile for Web Services", February 2006, http://specs.xmlsoap.org/ws/2006/02/devprof/devicesprofile.pdf

[MSDN-PnP-X] Microsoft Corporation, "PnP X: Plug and Play Extensions for Window", http://www.microsoft.com/whdc/connect/rally/pnpx-spec.mspx

[MS-DPWSSN] Microsoft Corporation, "<u>Devices Profile for Web Services (DPWS): Size Negotiation</u> Extension".

[MS-DTYP] Microsoft Corporation, "Windows Data Types".

[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

[W3C-XSD] World Wide Web Consortium, "XML Schema Part 2: Datatypes Second Edition", October 2004, http://www.w3.org/TR/2004/REC-xmlschema-2-20041028

[WS-Discovery] Beatty, J., Kakivaya, G., Kemp D., et al., "Web Services Dynamic Discovery (WS-Discovery)", April 2005, http://specs.xmlsoap.org/ws/2005/04/discovery/ws-discovery.pdf

[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/

1.2.2 Informative References

[MSDN-DPWS] Microsoft Corporation, "Understanding Devices Profile for Web Services, WS-Discovery, and SOAP-over-UDP", http://msdn.microsoft.com/en-us/library/dd179231.aspx

[MSDN-WSD] Microsoft Corporation, "Web Services on Devices", http://msdn.microsoft.com/en-us/library/bb756908.aspx

[MS-DPWSRP] Microsoft Corporation, "<u>Devices Profile for Web Services (DPWS): Shared Resource</u> Publishing Data Structure".

[MS-GLOS] Microsoft Corporation, "Windows Protocols Master Glossary".

[MS-HGRP] Microsoft Corporation, "HomeGroup Protocol".

[WSADDR] Gudgin, M., Hadley, M., and Rogers, T., "Web Services Addressing (WS-Addressing) 1.0", W3C Recommendation, May 2006, http://www.w3.org/2005/08/addressing

1.3 Overview

The Devices Profile for Web Services (DPWS), as defined in [DPWS], specifies a well-structured messaging model that provides basic functionality such as discovery of an **endpoint** (3) [WSADDR], metadata for that endpoint, and request/response messaging. [DPWS] specifies the role of clients, devices, and services. Clients discover services and communicate with their endpoints. Devices are special **service** endpoints that can host other services. [DPWS] defines metadata for both devices and the services hosted by those devices. Clients can request this metadata and send requests to specific endpoints described in the metadata.

This model fits the requirements of a computer. Computers are often set to be discoverable and advertise metadata that describes themselves and their resources to clients on a network. Publication Services models a computer as a DPWS **device**, and the resources on a computer are modeled as Web services within the same device. The information that describes a computer and the actual data associated with the resources are stored as part of the device metadata.

The Publication Services Data Structure document defines the organization used for the information that describes how a computer and its resources are represented within the DPWS device metadata.

For additional explanatory information about DPWS, see [MSDN-DPWS]. For information about the Microsoft implementation of DPWS, which is called Web Services for Devices (WSD), see [MSDN-WSD].

1.4 Relationship to Protocols and Other Structures

The Publication Services data structure is built on [DPWS] and relies on the Microsoft implementation of DPWS. For more information, see [MSDN-WSD].

Because the number of resources on a computer and the data associated with them can increase over time, clients should also implement the Size Negotiation Extension as specified in [MS-DPWSSN] to be able to retrieve resources completely. <1>

The HomeGroup Protocol [MS-HGRP], which is used to create a trust relationship that facilitates the advertising and publishing of content between machines in a home environment, and the Shell Publishing data structure [MS-DPWSRP] use the Publication Services data structure to advertise their content and resources.

1.5 Applicability Statement

Use of this data structure is suitable for clients if:

- The **client** is a compliant DPWS implementation.
- The client requires communication with the DPWS representation of a computer and its resources.
- The client supports the Size Negotiation Extension [MS-DPWSSN] and can receive messages longer than 32767 octets ([MS-DTYP] section 2.1.5).

Use of this protocol is suitable for **service** implementations if:

- The service will represent itself as a DPWS-compliant computer on the network.
- The service supports the Size Negotiation Extension [MS-DPWSSN] and can send messages longer than 32767 octets.

1.6 Versioning and Localization

This data structure is not versioned and it does not explicitly support localization.

1.7 Vendor-Extensible Fields

This data structure does not define any additional vendor-extensible fields.

2 Structures

2.1 Namespaces

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

Prefix	Namespace URI	Reference
pub	http://schemas.microsoft.com/windows/pub/2005/07	This document
pnpx	http://schemas.microsoft.com/windows/pnpx/2005/10 [MSDN-PnP-X]	
wsd	http://schemas.xmlsoap.org/ws/2005/04/discovery	[WS-Discovery]
wsdp	http://schemas.xmlsoap.org/ws/2006/02/devprof	[DPWS]
xs	http://www.w3.org/2001/XMLSchema	[W3C-XSD]

2.2 Computer Information

The Publication Services Data Structure advertises three pieces of information about a computer:

- A type indicating that the device represents a computer
- The NetBIOS domain name (3) for the computer
- The NetBIOS computer name

```
<xs:simpleType name="DiscoveryTypeValues">
    <xs:restriction base="xs:QName">
        <xs:enumeration value="Computer" />
        </xs:restriction>
</xs:simpleType>
<xs:element name="Computer" type="xs:string" minOccurs="0" />
```

Element	Description
wsdp:Relationship/wsdp:Host/wsdp:Types	Indicator type for a device representation of a Publication Services-enabled computer (pub:Computer).
wsdp:Relationship/wsdp:Host/pub:Computer	NetBIOS information for the computer.

NetBIOS information for the computer is formatted as follows:

• If the computer is domain joined:

```
<NetBIOS_Computer_Name>/Domain:<NetBIOS_Domain_Name>
```

• If the computer is in a workgroup:

Otherwise:

```
<NetBIOS Computer Name>\NotJoined
```

Note The pub:Computer element replaces the <any> element wildcard of the HostServiceType complex type, which is instantiated through the <Host> element of the DPWS schema.

2.3 Resource

Each resource to be advertised by a Publication Services device host as a service consists of two fields:

- Type
- Actual data

The resource type is used as the Types (wsdp:Relationship/wsdp:Hosted/wsdp:Types) implemented by a Host Service (see [WS-Discovery]).

The Publication Services Data Structure defines a new element to enclose the actual data associated with the resource as follows.

<xs:element name="Resource" type="xs:string" minOccurs="0" />

Element	Description	
wsdp:Relationship/wsdp:Hosted/pub:Resource	Resource data	
wsdp:Relationship/wsdp:Hosted/pub:Resource1	Resource data continued	
wsdp:Relationship/wsdp:Hosted/pub:ResourceN	Resource data continued	

If the data is more than 8192 octets ([MS-DTYP] section 2.1.5), it can be split into multiple Resource elements. Clients that want to retrieve the full resource data must combine the data in the order implied by the element names.

Note The pub:Resource* elements replace the <any> element wildcard of the HostServiceType complex type, which is instantiated through the <Hosted> element of the DPWS schema.

3 Structure Examples

3.1 Publication Services Data with no Listed Services

This section contains an example of the Publication Services data associated with a computer (that is, a device). The example data indicates that there are no services being advertised by the computer.

```
<?xml version="1.0" encoding="utf-8" ?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:wsx="http://schemas.xmlsoap.org/ws/2004/09/mex"
xmlns:wsdp="http://schemas.xmlsoap.org/ws/2006/02/devprof"
xmlns:pnpx="http://schemas.microsoft.com/windows/pnpx/2005/10"
xmlns:pub="http://schemas.microsoft.com/windows/pub/2005/07">
  <soap:Header>
   <wsa:To>http://schemas.xmlsoap.org/ws/2004/08/addressing/role/anonymous</wsa:To>
   <wsa:Action>http://schemas.xmlsoap.org/ws/2004/09/transfer/GetResponse</wsa:Action>
   <wsa:MessageID>urn:uuid:8a07696e-8128-456c-af85-9a5008aa0446</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:bac3eeec-5488-4a27-99c9-795d0651d914</wsa:RelatesTo>
  </soap:Header>
  <soap:Body>
    <wsx:Metadata>
      <wsx:MetadataSection</pre>
Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/ThisDevice">
        <wsdp:ThisDevice>
          <wsdp:FriendlyName>Contoso Publication Service Device Host</wsdp:FriendlyName>
          <wsdp:FirmwareVersion>1.0</wsdp:FirmwareVersion>
          <wsdp:SerialNumber>20050718</wsdp:SerialNumber>
        </wsdp:ThisDevice>
      </wsx:MetadataSection>
      <wsx:MetadataSection Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/ThisModel">
        <wsdp:ThisModel>
         <wsdp:Manufacturer>Contoso, Ltd</wsdp:Manufacturer>
         <wsdp:ManufacturerUrl>http://www.contoso.com</wsdp:ManufacturerUrl>
         <wsdp:ModelName>Contoso Publication Service</wsdp:ModelName>
         <wsdp:ModelNumber>1</wsdp:ModelNumber>
          <wsdp:ModelUrl>http://www.contoso.com</wsdp:ModelUrl>
         <wsdp:PresentationUrl>http://www.contoso.com</wsdp:PresentationUrl>
          <pnpx:DeviceCategory>Computers
        </wsdp:ThisModel>
      </wsx:MetadataSection>
      <wsx:MetadataSection</pre>
Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/Relationship">
      <wsdp:Relationship Type="http://schemas.xmlsoap.org/ws/2006/02/devprof/host">
        <wsdp:Host>
          <wsa:EndpointReference>
            <wsa:Address>urn:uuid:95ce917d-9e37-4099-aee4-db3292041ea6</wsa:Address>
         </wsa:EndpointReference>
         <wsdp:Types>pub:Computer</wsdp:Types>
         <wsdp:ServiceId>urn:uuid:95ce917d-9e37-4099-aee4-db3292041ea6</wsdp:ServiceId>
         <pub:Computer>D-HAMILTON-1/Domain:CONTOSO DOMAIN1</pub:Computer>
        </wsdp:Host>
      </wsdp:Relationship>
      </wsx:MetadataSection>
    </wsx:Metadata>
  </soap:Body>
```

```
</soap:Envelope>
```

From the example data, the following lines make use of the Computer Information structure (section 2.2):

```
<wsdp:Types>pub:Computer</wsdp:Types>
...
<pub:Computer>D-HAMILTON-1/Domain:CONTOSO_DOMAIN1</pub:Computer>
```

3.2 Publication Services Data with Listed Resources

This section contains an example of the Publication Services data associated with a computer (that is, a device) along with one service that is being advertised by that computer.

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:soap="http://www.w3.org/2003/05/soap-envelope"</pre>
xmlns:wsa="http://schemas.xmlsoap.org/ws/2004/08/addressing"
xmlns:wsx="http://schemas.xmlsoap.org/ws/2004/09/mex"
xmlns:wsdp="http://schemas.xmlsoap.org/ws/2006/02/devprof"
\verb|xmlns:pnpx="http://schemas.microsoft.com/windows/pnpx/2005/10"| \\
xmlns:pub="http://schemas.microsoft.com/windows/pub/2005/07">
  <soap:Header>
    <wsa:To>http://schemas.xmlsoap.org/ws/2004/08/addressing/role/anonymous</wsa:To>
   <wsa:Action>http://schemas.xmlsoap.org/ws/2004/09/transfer/GetResponse</wsa:Action>
   <wsa:MessageID>urn:uuid:009c39c2-5835-4660-a4bf-53c6fd9b96fd</wsa:MessageID>
    <wsa:RelatesTo>urn:uuid:fc7cdb58-30b4-4e0d-a309-5bd7db689a0c</wsa:RelatesTo>
  </soap:Header>
  <soap:Body>
    <wsx:Metadata>
      <wsx:MetadataSection</pre>
Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/ThisDevice">
       <wsdp:ThisDevice>
          <wsdp:FriendlyName>Contoso Publication Service Device Host</wsdp:FriendlyName>
          <wsdp:FirmwareVersion>1.0</wsdp:FirmwareVersion>
          <wsdp:SerialNumber>20050718</wsdp:SerialNumber>
        </wsdp:ThisDevice>
      </wsx:MetadataSection>
      <wsx:MetadataSection Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/ThisModel">
        <wsdp:ThisModel>
          <wsdp:Manufacturer>Contoso, Ltd</wsdp:Manufacturer>
          <wsdp:ManufacturerUrl>http://www.contoso.com</wsdp:ManufacturerUrl>
          <wsdp:ModelName>Contoso Publication Service</wsdp:ModelName>
          <wsdp:ModelNumber>1</wsdp:ModelNumber>
          <wsdp:ModelUrl>http://www.contoso.com</wsdp:ModelUrl>
          <wsdp:PresentationUrl>http://www.contoso.com</wsdp:PresentationUrl>
          <pnpx:DeviceCategory>Computers
        </wsdp:ThisModel>
      </wsx:MetadataSection>
      <wsx:MetadataSection</pre>
Dialect="http://schemas.xmlsoap.org/ws/2006/02/devprof/Relationship">
        <wsdp:Relationship Type="http://schemas.xmlsoap.org/ws/2006/02/devprof/host">
          <wsdp:Host>
            <wsa:EndpointReference>
              <wsa:Address>urn:uuid:95ce917d-9e37-4099-aee4-db3292041ea6</wsa:Address>
            </wsa:EndpointReference>
            <wsdp:Types>pub:Computer</wsdp:Types>
```

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<wsdp:ServiceId>fdid:Provider%5CMicrosoft.Base.Publication/Publication%5CExplorer/C692EF157F02-42E9-9FA9-D5F313749B04 S-1-5-21-738895527-329673414-497557404-1000</wsdp:ServiceId>

<pub:Resource>m9CAAwzP41GbgYXZyNXav5WPiEjLwICI152YvRWaudWPiUFVG1C0i8jPNoAPwlmPNoAIgwTdzVmczZU 5YUO50CR1Y0MxMzN0kjowozXT1SMtUTLyETL3MDO4kTN1IzNtMjM5YzNzOTM00CN5cTN1cDNwOTLxADMwICIv4TDKACIq ACPpxmPNoAIgACIgACPp5TDKACIgACIgACI8AnPcV1clJ3ccd2br1WZuxVQwBHRhRXYcJ1bh1WaudGXN12Yy92cvZGdcd VauR2b3NHXMlmYyFmcpV2ccR0bjVXb15Gdz5CbpJmchJXet02c88Cc+0qCqACIqACIqACPzxmPNJUQBFURBZ0QBFUQBFU QBFERBFUQBFUQB11anFUQEJ0ZBFUQBF0YwgUbYJmb3NWQwZWYvg0KL1UTIF1T0MzLoZ3QEpnQ4QzRBFUQBFUQBFkQBFUQ FcO12Y250Mi1mUIhFWs1mYrljMkpHeGRFcK12YopEWhxmTIhVR5ITWxEzVaVnUzMWd3dVYppEWZ1HbYxEdOhUQU9UQBF0 $\tt dBFUQBtkRBhjQX50bCx0dIlmdR5URpd3TzoFOiVzN4MGTBFUQRNXQzdjcUVnevFUUBFUQBFUQBBzQBFUQR1EVCFTV65UV$ xUOZ1kN1YzctNUOBF0ZDFUOBFUO4IUOBFUOEFUOBFESCdHVBNXRB5kORJVO0UUOJJ0dVFUVFFUTCdmUBFUOBFUOWM RIFFejhXMSBFdVR1R1U0UUZVRUdEeWZ1eW12Y6JUUUBnTtNmdONjYtJFSJ9kVHR2M502YyJUQBNUQBVVQFRUQBFUQBF0b ${\tt FUQBFkbCdnYBN3RBRnQRpVQ0cUQBF0ZGFUSGFEeBFUQBFUQBt0NEZXbKJUQCJESjVkRHRGaCFEUBdWQBVUQ3dzKxNHU1E}$ QBFUQBF0ZzBldzYURB1UMihWMXFWdkdUQ4EUQDFUUBFkd3IXersmcat0NUVXbwNUQBF0ZrFUQBFUQBFUQBFUQBFUQ NUQRFUQ2djc5tyayp1V3QF0482QBFUQ3tWQBFUQBF0ZBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQDJUUhFUTHFUeCdnYB1ESBZ nQnpVQRhUQBFUQHFUSGFEeBFUQBFUQBt0NE1XbCJUQYxWbitWOyQmeCFEUBdWQBVUQ3dzKxNHU1EWb5tyZzpVcBFUQBF1 ${\tt FEVBt2RB1mQnNWQFdUQ5JUUhFUVHFkeCFUQBdmQBF2Qn1UQ4QzRBF0ZxsSSQB1ZBFkUQ5UVW5kVrZGe0MEVKpURBFENIF} \\$ ${\tt USBFkQBhTd2t0NqdXbaRHU5pnaLFUQBFUN1NVQBFUQBNUQBFUQBFUQBFUQBFUQBFUQBFUQBFVRBZnQ31VQVhuQ0JUUaFE}$ NHFEMCd3YBRzQBNnQRFWQJdUQ5JUUZFUSIFUNCFFTBBzRBpnQBFUQBVUQ6JUQhFUVHF0cCFkYB1ERB1XQnxUQRdUQzJUQ $\verb|if0dDFedBdXTBFFRBFTQ35UQVRUQBFUQIFUQBF0SPFUQBtWQBFUQxZGRBFUQ41kRVRlS11WWaVkdNhmeRdTevUEVhNUb0| \\$ VzYIFUQBF0QBFUQBFUQTFUQBFEVHZ0TuZESNh0QFhmZkx0VrRlSuZzVwEUQBdXQBFUQBFURCVUQBdXTEFUQBVVQ3hUUCt IFEbCd2YB1ESBFUQBFVQNhUQvJUUaF0dHF0cCdXTB1ERBVXQBpVQ3dUQzJUQMFEMDFUeBFVTBdGRBhXQ31UQBFUQVFUQV FUREFUQBFUQB92cQNkYHVUQjJjYyFzVaVnQBFkNBF0QBFVQBZ3Nyl3KrJnWLdja31GcDFUQBdGaBFUQBFUQDFUQBFUQBFU BFUQXF0ZVFUREFUQBFUQBd2cQZ3MGVUQJFjYoFzVhVHZHFEOBF0QBFVQBZ3Ny13KrJnWLdDV11GcDFUQBd2aBFUQBFUQn FUQB1FdQ1neUVUQ3V1UDpkVRNVNY1UQBFUUBdWQBVUQ3dzKxNHUDJWbxsSSQBVcBFUQBFFMFFUQBFUQNFUQBFUQBFUQBF UQBFUQBFUQBFUQBRVQrdUQpJ0ZjFURHFUeCFVYBV1RBpnQBFUQnJUQhN0ZNFEOOcUQBdWMrkEUQdWQBJFUOV1VOZ1amhH NDR1SKVUQBRDSB1UQBJUQ4UndLdja31mW0BVe6p2SBFUQBVTdTFUQBFUQDFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBVUQ2J0d ZFUVIFEdCFlWBrzrBBjQ3NWQ0MUQzJUUhFUSHFUeCFVWBlESBVjQRxUQwcUQ6JUQBFUQFFkeCFUYBV1RBNnQBJWQNRUQ5 Oh9WRmVXWU5WahNGSvJ1LI1WNzUXcTFGROpENSBjSn1GSCNkdUVnZBFUQBFUQ88ycs5TDKACIqACIqwzLp5TDKACIqACI $\tt JXalNHXQl2Y0VnclNnLslmYyFmc51SbzxzLw5TDKACIgACIgACI8MHb+0kQBFUQFFkRDFUQBFUQBFUQBFUQBFUQBFUWrd$ WOBRKOnFUOBFUV00WWthlYud3YBJXMFlUSrsUTNh0dSF20DlmdDRkeCVFNHFUOBFUOBFUOBFUOBFUOBFUOBFUOBFU QBFUQzluQBFUQIFUQBFUQBFUQBFUQBFUQBFUQjFUQBFUUFFUQBF0SBFUQBNUQBFUQRJUQBFUQBFUQBFUQBdWQBdnR YhUOwMlTWtGVJ5kVS1kWFhlVOZlUT5kRB5WOyEGdW1mYjZURjdnUVlFMGdEWTlzVZRHbtJmb4ZFVw5UbjZnTzIWbShEWY $x \verb|WbitWOyQme4ZEVwpUbjhmSYFGbOhEWRxmMZBjVuNGbO5GTzxWbZlnRtNWNxMlY6JUUrRuQBFUTBFUQnNlQBZ2ZWRUY3Nlooper and the property of t$ EOORDTVREaJNnekd0LXtyTQNzQBFUQFxUQ3siNrdTTLFURBFUQBFUQBRXQBFUQFpXVR5UMjRkV1N0KPVlcQZVS1AHe0hm enBnYSFUQBF0cBFUQBFUQMFUQBFEOv8SQBFUQBFUQBZkQBFUQFpXVR5kRNhHW5Rndmt2RRVVY4MUQHpWZ19kcwFUQBF0b BFUQBFUQmFUQBF0dBFUQBdnUBhTRBxkQRRVQVVUQPJUQTFUTGFkRCFEVBlVRBFUQBFUQ0FUQBFUR6VVU0x2Trjjcz $\verb|oxz| 6 d G R G V T N F h G C y A X V 1 E n U B F U Q B F U$ ${\tt GMVZEerJ1YWFzYsp0MjFEMVFmaKNjY61TbaBjQpRFbSNDZ2p0MhFUQnFUQBZUQ4FUQBFUQBF0S3o2dtJkQB5W0yEGdW1mgpf0S3o2dtJkQBf0W1mgpf0S3o2dtJkQBf0W1mgpf0S3o2dtJkQBf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtJkQf0W1mgpf0S3o2dtf0W1mgpf0S3o2dtf0W1mgpf0S3o2dtf0W1mgpf0S3o2df0W1mgpf0S3o2df0W1mgpf0S3o2df0W1mgpf0S3o2df0W1mgpf0S3o2df0W1mgpf0S3o2df0W$ VdUQ1JUQBFUWCF0UCFVTBFUQBFUQn13K3JnWTFUURdnQIJFaShVWBdHRB1UQBJUQ4UndLdDV11GczBF0h12SBFUQBJ1QB ${\tt FUQBFUQDFUQBFUQBFUQBFUQBFUQBFUQGFVUQ3JUQ1FUUFFEaCFEZBV0RBFUQnZUQJZUQ4FUQBFUQBFUS3o3NkJkQBN}$ RBhmQRJWQrdUQ1J0daFUQBF0VBF0VBVERBFUQBFUQZRHU4pHRGFEMVNFRKFDVUVDWNFUQBFVQnFUQFF0d3sSczBVNh1WMFDQBFVQnFUQFF0d3sSczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMFQF0d5sczBVNh1WMPQF0d5sczBVNh1WMPQF0d5sczBVNh1WMUQBFUQBFUQBFUQBFUQjZUQwJ0ZiFUUHFkdCdHZB1ESBFUQnZUQnZUQ4FUQBFUQBF0V3oG04UkQB1EbrF1UGtWVrYERBFU QFFUSBFkQBhTd2t0NqdXbaRHU5pnaLFUQBFUROJUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBGUQBGUQBDQn1VQJhUQoJ0Z jF0aHFEbCd3YBFUQB1VQB1WQJRUQGVnQBFUW0BVe6RUSBFkVTRkUWZ1U1gVT1dXVTNkQBFEOCF0QBFVQBZ3Nyl3KJNnWX dja4qzbDFUQBF1ZUFUQBFUQBJUQBFUQBFUQBFUQBFUQBFUQBFQQBFQQBF1QRFWQNdUQwIUUkFUSIFEbCd3YBRZQBNnQRFWQJd $\tt UQ5JUUZFUSIFUNCFFTBBzRBpnQBFUQBVUQ6JUQhFUVHF0cCFkYB1ERBlXQnxUQRdUQzJUQiF0dDFEdBdXTBFFRBFTQR9USSPREAM and the statement of the statement of$ BFEVHZ0TuZESNh0QFhmZkx0VrRlSuZzVwEUQBdXQBFUQBFURCVUQBFVTEFUQBVVQ3hUUCtCVRRUa2YzaHVUap50QBN3QN QvJUUaF0dHF0cCdXTB1ERBVXQBpVQ3dUQzJUQMFEMDFUeBFVTBdGRBhXQ31UQBFUQVFUQVFUREFUQBFUQB92cQNkYHVUQ BFUQBN1Q3JWQFdUQ0JUUhFENHFkbCFUQB11QB11QR1UQBFUQBF0ZxsSRQBVVBFFVK50aVB1TsZGeBFUQBJUQDFUUBFkd3 UQBF0RB1kRBhXQBFUQBFUQLdDR51mQCFEWs1mYr1jMkpnQBBVQnFUQFF0d3sSczBVNh1Werc2caFXQBFUQRPUQBFUQBFU SBFUQBFUQBFUQBFUQBFUQBFUQBF0dWF0aHFUdCFkWBhzRBNjQ3NWQBFUQXFUQXFUREFUQBFUQB1FdQlneUVUQ3V1UDpkV Q3dUQwJ0ZZFUSIFEaCd2YBtGSBRXQRJWQNhUQBFUQRFUTIF0bCF1WBd3RBNnQ31UQJRUQ1FUQaF0dHF0cCFETBBZQBpXQ FUQBFUQBFUaDBjcoNF01kmTktUc4R2ZH1jZZ12Z3E3Sw5EMrdGSS5WQhVWRJhzT1sCavFUOh9WRmVXWU5WahNGSvJ1LI1mS0UXcTFGROpENSBjSn1</pub:Resource>

y NHXN 92 atVmbcFEcwRUY 0 FGXS 9 WYtlmbnxVTpNmcvN3bmRHXXlmbk 92 dzxFTpJmchJXalNHXNV3cpNmLslmYyFmc51SbzxzLw5TDKACIqACIqACI8MHb+0kQBFUQFFkRDFUQBFUQBFUQBFUQBFUQBFUWrdWQBRkQnFUQBFENpl1athlYud3YBpmVGJ QBFUQBFUQjFUQBFUUFFUQBF0SBFUQBNUQBFUQRJUQBFUQBFUQBFUQBFUQBGUQBdnRYhUOwMlTWtGVJ5kVS1kWFhlVOZlUT5kR B5WOyEGdW1mYjZURjdnUV1FMGdEWT1zVZRHbtJmb4ZFVw5UbjZnTzIWbShEWYxWbitWOyQme4ZEVwpUbjhmSYFGbOhEWO ${\tt Z1MjBnTtx0cs1WW5ZUbjVTMTJmeCFVaEFUQB1UQBF0ZTJUQmdmVEF2dDhDa0wUVEhWSzpHZH9yVr8EUzMUQBFURMF0NrY} \\$ QBFUQGJUQBFUR6VVUOZUT4hVe0ZnZrdUUVFGODF0RqVWdPJHcBFUQB9WQBFUQBFkZBFUQBdXQBFUQ3JVQ4UUQMJUUUFUV FF0TCF0UB1kRBZkQBRVQZVUQBFUQBFUQBFEdBFUQBVkeVFlTs90ayI3M6VmenRkR1UTRoBnMwVVNxJVQBFUQNFUQBFUQB QB1VSBFUQBFUQJFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQGPUQGPUU1FUVHFUdCFUQB11QBN1QR1UQBFUQBF0Z5tydyp1U y a y p V c B F U Q B F U Q B F U Q B F U Q B F U Q B F U Q B F U Q B F U Q D F U Q D U U I F 0 a H F U Q C A N W B F U Q B A V Q F R U Q B F U Q BBFUQBFUQBFUQBFFVBt2RBpmQnNWQ4cUQ6J0diFUWHFEMCFUQBdmQBN1QR1UQBFUQBF0Z5tyZzpVUBdnVwVzRaZHZzMWQ3 WQNhUQBF0ZGF0ZGFEeBFUQBFUQBd1NqhD0FJUQNx2aRN1RrV1KGRUQBFURB1UQBJUQ4UndLdja31mW0BVe6p2SBFUQBVk ${\tt TCFUQBFUQEFUQBFUQBFUQBFUQBFUQBFUQBFUQ3VUQwJ0ZZFUSIFEaCd2YBt2RBxmQ3NWQBFUQZFUQrFUSEFEOzJUQB1Fdc}$ QlneElUQwUlVUxGMRtiRqxUTstWUBlFSBlUQBJUQ4UndLdja31mW0BVe6p2SBFUQBp2TCFUQBFUQGFUQBFUQBFUQBFUQBFUQBFU $05 \forall 01 \\ \text{TERHT} \\ \text{VQVT} \\ \text{wpuWy0mekFUQBFUSBFUQBFUQJJUQBFUTaVFN} \\ \text{d} \\ 1 \\ \text{Y3NWSRV0K} \\ \text{XQXWS9EbjFnYQRUQBFERBFUQBFUUFFVQ} \\ \text{for the proposition of t$ hXQBFUQBFUQLdjaTBnRCFkVOhlW55ESBdmQBNUQRFUQ2dDT5tyawV1S3o2UwB3QBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFU UQBJTQBFUQBFUQWJ0djFUVHFUeCd3YBFUQBFkQ3NWQndUQsJUQiF0dHFkeBdWTBRzQBtmQBJWQ3dUQzFUUMFUSEFEeBF0 N2dSVVWwY0RBhTQBNUQRFUQ2djc5tyayp1S3QkdtB3QBFUQRtWQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQCJUQjF ${\tt UQIFURCFVWBFFSBhmQBFUQZJUQTJUUNFUQBFUQBFUergTZYFVQnVldGdlywVjMaF0dEFUSBFkQBhTd2t0NUVXbwNHU1EW} \\$ FUQBFUQBFEMFFEcCdXWBlESBZnQ3NWQ4cUQtJUQkFUQBFUWBdWVBVERBFUQBFUQvNHUJJ2RFF0YWFWdSJjYz4ESBhTQBN UQRFUQ2djc5tyayp1S3QUetB3QBFUQBxWQBFUQBF0QBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQYJUUhFENHF0aCdnYBNGSBpn QBFUQZJUQZJUUNFUQBFUQBdWMrkEUQJVQBR1SKtWVCpEbmhXQBFUQCF0QBFVQBZ3Ny13KJNnWXdja4gzbDFUQBFkUUFUQ BFUQ3FUQBFUQBFUQBFUQBFUQBFUQBFUQB1kQRFWQJdUQ5JUUZFUSIFEcCF1WB1ESBFUQBdUQBpUQ5FUQQJWQBF0V3oG04 ${\tt E0QB5kVxu1SOtmZ4RzQUpkSFFkMCF0QBFVQBZ3Ny13KJNnWXdja4gzbDFUQBd3bUFUQBFUQRJUQBFUQBFUQBFUQBFUTCF} \\$ $\verb|UQBFUQB5kQRRWQNhUQwJ0dZFENDF0cCFVYB10RBlnQR1VQJhUQ1IUUMFEMHFkeCFUQBFURBpnQBFWQVdUQzJUQiFUTEFU|\\$ $\verb|ebdGTBF1RBNnQBJWQ3NUQ0F0dNFUUEFUMBF0TBFFRBFUQndUQBFUQBFUQBFUQBFUQBFUQBFUQFERBFUQn1mRBFUQn1$ BFUQBFUQuljMhRnVtJ2bOhlWzp1RBFUQBFUQn9WQ5E2bFZWdZRlbpF2Y19mUvgUbaRTdxNVYE5kS01FMKdWbIJ0Q2RVdm184bUpF2WdM184bUpF2WdM184b10SRZ3RLhnbMJDMw92RzIUYw8CaadUdyF3ayEFVDVWRkN0b1I1Z3dza3gUQBFUQBxzLzxmPNoAIgACIqACPvkmPNoAIgA CIqACPp5TDKACIqACIqACI8AnPcV1clJ3ccd2br1WZuxVQwBHRhRXYcJ1bh1WaudGXNl2Yy92cvZGdcdVauR2b3NHXMlm YyFmcpV2ccZVakV2bz5CbpJmchJXet02c88Cc+0qCqACIqACPzxmPNJUQBFURBZ0QBFUQBFUQBFUQBFUQBFUQBFUB11a ${\tt EWIIDMT5kVrRVSOZlUNpVRYZ1TWJ1UOZUQuljMhRnVtJ2YGV0Y3JVVZBjRHh1U5cVW0xWbi5GeWRFcO12Y250Mi1mUlhFiled and the statement of the control of th$ Ws1mYrljMkpHeGRFcK12YopEWhxmTIh1VsdkWsljMjV3dXFWaKhVW5xGWMRnTIFkTPFUQBdXQBFUQLZUQ4I0VO9mQMdHS pZXUOVUa390MahjY1cDojxUQBFUUzF0c3IHV1p3bBFVQBFUQBFUQBFUUNR1QxU1eOVVNLRzNRR3KVh2aud0MH9ERt VnRCFUQBd3QBFUQBF0cBFUQBd3LvQUQBFUQBFUQVVUQBFUUNR1QxU1dFZmSzsyKSFWQSBHeMFUWNZTN2MXbDFUQBd2QBF UQBFEOCFUQBFERBFUQBhkQ3RVQzVUQOJUUSFENFFUSCdXVBVVRB1kQnJVQBFUQBFEUQBFEMDFUQBFVTUJUMVZTUhZXZQdj WVEVHhnVWpnVtNmeCFFVw5UbjZnTzIWbShUSPZ1RkNTOtNmcCFUQDFUQVFUREFUQBFUQB92cQNkYHVUQjJjYyFzVaVnQB FkNBF0QBFVQBZ3Nyl3KrJnWLdja31GcDFUQBdGaBFUQBFUQnFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBSmQ3JWQzdUQ0JUUaF $\tt dUQ0JUUhFENHFkbCFUQB11QB11QR1UQBFUQBF0ZxsSRQBVVBFFVK50aVB1TsZGeBFUQBJUQDFUUBFkd3IXersmcad1NUhgerspectrum and the state of the state$ QBFUQBFUQLdDR51mQCFEWs1mYrljMkpnQBBVQnFUQFF0d3sSczBVNh1Werc2caFXQBFUQBFUQBFUQBFUQBFUQBFUQBFUQ $\verb|dwQBVUQ3dzKxNHUDJWbxsSSQBVcBFUQBFFMFFUQBFUQNFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBRVQrdUQpJ0ZjFURHFUeCF| \\$ VYBV1RBpnQBFUQnJUQVN0ZNFUWxcUQBdWMrkEUQdWQnZ1SSV1UQ5EbmhHNDR1SKVUQBdGSB1UQBJUQ4UndLdja31mW0BV ${\tt e6p2SBFUQB12TCFUQBFUQHFUQBFUQBFUQBFUQBRTRBFUQBFUQZZUQwJUQaFUVHFkdCd3YBRzQBNnQRFWQJdUQ5JUUZFUS}$ IFUNCFFTBBzRBpnQBFUQBVUQ6JUQhFUVHF0cCFkYB1ERBlXQnxUQRdUQzJUQiF0dDFEdBdXTBFFRBJTQn1UQBRUQBFUQI ESNh0QFhmZkx0VrRlSuZzRwEUQBdXQBFUQBFURCVUQBFFTEFUQBVVQ3hUUCtCVRRUa2YzaHVUap50QBN3QNdHMadUQ4kX $\tt U2cnRBFUQBFUQBFUQBFUQBFUQBFUQBFUQBBjQR1UQBFUQBF0Z5tybVFmUBF1V6ZVbjpnQB1VQnFUQFF0d3sSazB1WSpream and the contraction of the$ F0cCdXTB1ERBVXQBpVQ3duQzJUQMFEMDFUeBFVTBdGRBhXQ31UQBFUQVFUQVFUREFUQBFUQB92cQNkYHVUQjJjjyyFzVaV nQBFkNBF0QBFVQBZ3Nyl3KrJnWLdja31GcDFUQBdGaBFUQBFUQnFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBSmQ3JWQzdUQ0JU ${\tt WQFdUQ0JUUhFENHFkbCFUQBl1QBl1QR1UQBFUQBF0ZxsSRQBVVBFFVK50aVBlTsZGeBFUQBJUQDFUUBFkd3IXersmcad1}$ UUBdWQBVUQ3dzKxNHUDJWbxsSSQBVcBFUQBFFMFFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBRVQrdUQpJ0ZjFURHFU eCFVYBV1RBpnQBFUQnJUQVN0ZNFUWxcUQBdWMrkEUQdWQnZ1SSV1UQ5EbmhHNDR1SKVUQBdGSB1UQBJUQ4UndLdja31mW 0BVe6p2SBFUQB12TCFUQBFUQHFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQBFUQZZUQwJUQaFUVHFkdCd3YBRzQBNnQRFWQJdUQ5JUUZ RmVXWU5WahNGSvJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S45GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S4GTyADcvd0MCFGMvgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S4GTyADcvd0MCFGMVgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVnZJtUU2d0S4GTyADcvd0MCFGMVgmWLVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEZAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEXAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEXAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEXAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEXAMANGSVJ1Li1Gc0UXcTFGROpENSBjSn1GSCNkdUVncxtmMRR1Q1VEXAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGROpt0VAMANGSVJ1Li1Gc0UXcTFGD9WNSd2d3s2NIFUQBFUQ88ycs5TDKACIgACIgwzLp5TDKACIgACPvkGb+0gCgACPvU3clJ3cGlGblNHRlN3YylGc012bu 5TDKwzLwlmPAEAAA0gjq6BIHKuQ9MtcAQzek05xoILdb7aP6FqXQcO1Wcn9/+pzK9YEARQtdmy2jY5AQUV7eI17MG6h7i m54HXW7C+OqS2F3cOn0Cx1414TZXL3ldB9j8jpYTcnw1QQufPVgzKk/piBoC/qwRRQqjmtUkxcGEvq5ZBIh88rLUHEVHy 1EyG4k8XYLqP6fA3oWIAy</pub:Resource1>

<pub:Resource2>WCfU3BofYTXgsXNr3ikT3JZcccgdhbCNEYS/CuMIHi5cKGLCIPDcsg7P3VRyx1VzDOW170YhGD7Pa+
NJDFeuGO73NiEaCtTljULnyYlqtQokSdeYJJJGqs6g6nd8iLGQ0857nG/PMxvCzdirzSa1hxK</pub:Resource2>

</wsdp:Hosted>
</wsdp:Relationship>

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```
</wsx:MetadataSection>
</wsx:Metadata>
</soap:Body>
</soap:Envelope>
```

From the example data, the following lines make use of the Computer Information structure (section 2.2):

Also from the example data, the Resource structure (section 2.3) is demonstrated in the lines that start with "<pub:Resource>", "<pub:Resource1>", and "<pub:Resource2>".

4 Security

4.1 Security Considerations for Implementers

Publication Services does not provide any security to protect the data that is being advertised or to ensure its authenticity. Applications that need to secure their advertised resources typically implement their security policy on top of Publication Service data structures.

4.2 Index Of Security Fields

None.

5 Appendix A: Full XML Schema

For ease of implementation, the following is the full XML schema for this protocol.

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  targetNamespace="http://schemas.microsoft.com/windows/pub/2005/07"
  xmlns:pub="http://schemas.microsoft.com/windows/pub/2005/07"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified"
  blockDefault="#all" >

  <xs:simpleType name="DiscoveryTypeValues">
        <xs:restriction base="xs:QName">
        <xs:restriction value="pub:Computer"/>
        </xs:restriction>
  </xs:simpleType>

  <xs:element name="Computer" type="xs:string" minOccurs="0" />
  <xs:element name="Resource" type="xs:string" minOccurs="0" />
  </xs: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:

- Windows Vista operating system
- Windows Server 2008 operating system
- Windows 7 operating system
- Windows Server 2008 R2 operating system
- Windows 8 operating system
- Windows Server 2012 operating system
- Windows 8.1 operating system
- Windows Server 2012 R2 operating system

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 1.4: On Windows Vista and Windows Server 2008, the maximum metadata size that the device representation of a computer can be is 32767 octets ([MS-DTYP] section 2.1.5). This is because the extension that is documented in [MS-DPWSSN] is not supported on these operating systems.

7 Change Tracking

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

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