How to Create a Device Metadata Package for Devices and Printers

March 24, 2009

Abstract

This paper provides information about how to create device metadata packages for the Windows® family of operating systems. It provides guidelines for independent hardware vendors (IHVs) and PC makers to create a device metadata package, which is used to display device-specific information in the Devices and Printers user interface (UI).

This document is intended to be used as both a tutorial and a reference guide for creating a device metadata package. It includes the structure of the metadata package, along with the definition of the XML schemas that are used to create the components of the metadata packages.

This information applies to the Windows 7 operating system.

References and resources discussed here are listed at the end of this paper.

For the latest information, see:
 <http://www.microsoft.com/whdc/device/DeviceExperience/CreateDevMetadataPkg.mspx>

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# Overview of Device Metadata Packages

Device metadata contains the information that describes a physical device, including the following:

* The vendor name.
* The model name and description of the device.
* One or more device categories.

A device metadata package consists of multiple XML documents that are stored within a .*devicemetadata-ms* file. Each document specifies various components of the device’s attributes. Beginning with Windows® 7, these XML documents provide the Devices and Printers user interface (UI) with device-specific information that appears to the user. Through these XML documents, the vendor can customize how this information appears, as well as the specific information that is included.

## Components of a Device Metadata Package

Each device metadata package consists of the following components:

* PackageInfo XML document

This document contains data that specifies the contents of the device metadata package. The operating system uses this data to install the package and reference its contents. This data is formatted based on the “[PackageInfo XML Schema](#_PackageInfo.xml)” later in this paper.

* DeviceInfo XML document

This document contains data that specifies the device’s properties, such as device category and model name. The Devices and Printers UI displays this detailed information about the device to users. This data is formatted based on the “[DeviceInfo XML Schema](#_Deviceinfo.xml)” later in this paper.

* Device icon file

This file contains a photo-realistic image that represents the device in the Devices and Printers UI. For more information, see “[Device Icon File](#_Device_Icon_File)” later in this paper.

* WindowsInfo XML document

This document contains data that specifies the display actions that Devices and Printers performs for the specified device in the device metadata package. This data is formatted based on the “[WindowsInfo XML Schema](#_WindowsInfo.xml)” later in this paper.

**Note** The XML documents must be saved by using UTF-8 encoding.

A sample device metadata package is included in the Windows 7 Windows Driver Kit (WDK). You can find the sample in the *src/general/toaster/devicemetadatapackage* subdirectory of the WDK.

## Structure of a Device Metadata Package

The components of a device metadata packages are stored in a compressed cabinet file. The file name must have a suffix of *.devicemetadata-ms*.

Before you create the *.devicemetadata-ms* file, you must first create a GUID for the metadata package. Then, you must use the following naming convention when you create the *.devicemetadata-ms* file:

*GUID*.devicemetadata-ms

**Note**Although the usual suffix of a cabinet file is *.cab*, the suffix for a device metadata package file must be *.devicemetadata-ms*. This is intended to underscore the fact that end-users must not decompress or modify these packages.

For example, if you create a GUID of {20f00-1a99-4675-8707-248ca187dfd9}, you create the following *.devicemetadata-ms* file for the device metadata package:

20f00-1a99-4675-8707-248ca187dfd9.devicemetadata-ms

Each metadata package can support only one locale. If you support more than one locale for your device, you must create separate metadata packages for each locale, with each metadata package having its own GUID.

The device metadata package must have the following structure:

*GUID*.devicemetadata-ms

 PackageInfo.xml

 [DeviceInformation]

 DeviceInfo.xml

 DeviceIcon.ico

 [WindowsInformation]

 WindowsInfo.xml

When you create a . *devicemetadata* file by using the Cabarc tool, you must create a local directory where:

* The PackageInfo XML document is at the root of the directory.
* The DeviceInfo XML document and the DeviceIcon file are in the DeviceInformation subdirectory.
* The WindowInfo XML document is in the WindowsInformation subdirectory.

#### Remarks

* The icon file can have any file name. However, the individual XML documents must be named *PackageInfo.xml*, *DeviceInfo.xml*, and *WindowsInfo.xml*, respectively.
* The . *devicemetadata* file name must specify the GUID without the ‘{‘ or ‘}’ delimiters.
* The GUID for each metadata package file name must be unique. When you create a new or revised metadata package, you must create a new GUID, even if the changes are minor.
* Windows recognizes metadata packages only if the file name suffix is “.*devicemetadata*”.
* For more details about how to create cabinet files, see the Microsoft Cabinet Software Development Kit.

#### Example

The following shows an example of how to use the Cabarc tool to create a .*devicemetadata* file. In this example, the components of the metadata file are located in a local directory that is named Packages:

.\Packages\

.\Packages\PackageInfo.xml

.\Packages\DeviceInformation\DeviceInfo.xml

.\Packages\DeviceInformation\toaster.ico

.\Packages\WindowsInformation\WindowsInfo.xml

First, a GUID {f7284001-4aeb-4653-b388-54344dc694ed} was created for the metadata package. Then, the . *devicemetadata* file was created in a local directory that is named CABFiles:

Cabarc.exe -r -p -P  .\Packages\
N .\CABFiles\ f7284001-4aeb-4653-b388-54344dc694ed.devicemetadata-ms
.\Packages\PackageInfo.xml
.\Packages\DeviceInformation\DeviceInfo.xml
.\Packages\DeviceInformation\toaster.ico
.\Packages\WindowsInformation\WindowsInfo.xml

You can find more information about this tool in “[Resources](#_Resources)” later in this paper.

# PackageInfo XML Schema

A metadata package contains one PackageInfo.xml document, which has information that the operating system uses to install the metadata package and reference its contents.

The data in the PackageInfo.xml document is formatted based on the PackageInfo XML schema, which is described in this section.

**Note** The XML document must be saved by using UTF-8 encoding.

## PackageInfo XML Schema NameSpace

The following is the namespace of the PackageInfo XML schema:

**http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11/**

## Overview of PackageInfo XML Elements

The following table describes the metadata elements of the PackageInfo XML schema.

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Element type | Required/ optional | Description |
| [**ModelIDList**](#_ModelIDList_and_ModelID) | GUID | Optional1 | Specifies the one or more model IDs for the device. |
| [**HardwareIDList**](#_HardwareIDList_and_HardwareID) | tns:HardwareIDListType | Optional1 | Specifies one or more hardware IDs for the device. |
| [**Locale**](#_Locale_Element) | xs:String | Required | Specifies the locale of the device metadata package. A device metadata package must specify a single locale.  |
| [**LastModifiedDate**](#_LastModifiedDate_Element) | xs:dateTime | Required | Specifies the timestamp on which the device metadata package was last changed. |
| [**Metadata**](#_Metadata_Elements) | tns:MetadataType | Required | Specifies the XML schemas, which are referenced through the device metadata package. |
| [**ExperienceID**](#_ExperienceID_Element) | GUID | Optional | Specifies the Device Stage of the device metadata package.**Note**Winqual manages this element. |
| [**LanguageNeutralIdentifier**](#_LanguageNeutralIdentifier_Element) | GUID | Optional | Specifies a GUID, which identifies the device metadata package independent of its locale. |
| [**MetadataBuilderInformation**](#_MetadataBuilderInformation_Element) | tns:MetadataBuilderInformationType | Optional | Specifies an application, which created the device metadata package. |

1Either **HardwareIDList** or **ModelIDList** must be specified.

## PackageInfo XML Schema Metadata

The following is the PackageInfo XML schema metadata:

<?xml version="1.0" encoding="UTF-8"?>

<xs:schema targetNamespace="http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11/" xmlns:tns="http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11/" xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" blockDefault="#all">

 <xs:element name="PackageInfo" type="tns:PackageInfoType" />

 <xs:complexType name="PackageInfoType">

 <xs:sequence>

 <xs:element name="MetadataKey" type="tns:MetadataKeyType" />

 <xs:element name="PackageStructure" type="tns:PackageStructureType" />

 <xs:element name="Relationships" type="tns:RelationshipsType" minOccurs="0" />

 <xs:element name="MetadataBuilderInformation"

 type="tns:MetadataBuilderInformationType" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0"

 maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="MetadataKeyType">

 <xs:sequence>

 <xs:choice maxOccurs="2">

 <xs:element name="HardwareIDList" type="tns:HardwareIDListType" />

 <xs:element name="ModelIDList" type="tns:ModelIDListType" />

 </xs:choice>

 <xs:element name="Locale" type="tns:LocaleType" />

 <xs:element name="LastModifiedDate" type="xs:dateTime" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0"

 maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="ModelIDListType">

 <xs:sequence>

 <xs:element name="ModelID" type="tns:GUIDType" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="GUIDType">

 <xs:restriction base="xs:string">

 <xs:pattern value=

 "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" />

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="HardwareIDListType">

 <xs:sequence>

 <xs:element name="HardwareID" type="tns:HardwareIDType" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="HardwareIDType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="207" />

 </xs:restriction>

 </xs:simpleType>

 <xs:complexType name="LocaleType">

 <xs:simpleContent>

 <xs:extension base="xs:string">

 <xs:attribute name="default" type="xs:boolean" use="required" />

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="PackageStructureType">

 <xs:sequence>

 <xs:element name="Metadata" type="tns:MetadataType" minOccurs="2"

 maxOccurs="unbounded" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0"

 maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="MetadataType">

 <xs:simpleContent>

 <xs:extension base="xs:string">

 <xs:attribute name="MetadataID" type="xs:anyURI" use="required" />

 </xs:extension>

 </xs:simpleContent>

 </xs:complexType>

 <xs:complexType name="RelationshipsType">

 <xs:sequence>

 <xs:element name="ExperienceID" type="tns:GUIDType" minOccurs="0" />

 <xs:element name="LanguageNeutralIdentifier" type="tns:GUIDType" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="MetadataBuilderInformationType">

 <xs:sequence> <xs:element name="Application" type="tns:ApplicationType" />

 <xs:element name="Version" type="tns:VersionType" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0"

 maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="ApplicationType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="256" />

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="VersionType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="256" />

 </xs:restriction>

 </xs:simpleType>

</xs:schema>

## PackageInfo XML Schema Reference

The PackageInfo XML schema defines the following elements:

* **PackageInfo**
	+ **MetadataKey**
		- **ModelIDList**
			* **Model ID**
		- **HardwareIDList**
			* **HardwareID**
		- **Locale**
		- **LastModifiedDate**
	+ **PackageStructure**
		- **MetaData**
	+ **Relationships**
		- **ExperienceID**
		- **LanguageNeutralIdentifier**
	+ **MetadataBuilderInformation**
		- **Application**
		- **Version**

### **ModelIDList** and **ModelID** Elements

The **ModelIDList** element specifies the GUID of each function that is supported by the device that is specified in the metadata package. Based on this information, the operating system selects and loads the most appropriate device metadata package:

<xs:element name="ModelIDList" type="tns:ModelIDListType" />

<xs:complexType name="ModelIDListType">

 <xs:sequence>

 <xs:element name="ModelID" type="tns:GUIDType" maxOccurs="unbounded" />

 </xs:sequence>

</xs:complexType>

<xs:simpleType name="GUIDType">

 <xs:restriction base="xs:string">

 <xs:pattern value=

 "[0-9a-fA-F]{8}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{4}-[0-9a-fA-F]{12}" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

The **ModelID** element specifies a model ID for a hardware model supported by a device. Each model ID is specified through a globally unique identifier (GUID).

Model IDs are based on the business definition or SKU of the physical device. Each model ID must be unique for all makes and models of the physical device.

The following list describes the differences between hardware and model IDs for a physical device:

* Hardware IDs, specified through the **HardwareID** element, identify a hardware function based on a bus-specific value. Hardware IDs could be used to map device drivers to device instances. For example, two devices with the same hardware ID share a functional interface that is used by the same driver.
* Model IDs, specified through the **ModelID** element, allow the original equipment manufacturer (OEM) or independent hardware vendor (IHV) to uniquely identify the physical device independent of bus or interface technologies. For example, two devices with different model IDs might have the same hardware IDs for their components.
* Hardware IDs are used to map device metadata packages to device instances on a specific bus or interface.
* Model IDs are used to map device metadata packages to physical devices, regardless of how the device is connected to the computer.

The **ModelIDList** element is required only if the **HardwareIDList** element is not specified in the PackageInfo XML data. If it is specified, the **ModelIDList** element must contain one or more **ModelID** elements to specify the unique model ID for each function that the device supports.

If the PackageInfo XML data contains the **HardwareIDList** and **ModelIDList** elements, the operating system uses the following rules when you determine whether a device is specified by a device metadata package:

* If the device has a model ID, the operating system does not search for a match in the **HardwareIDList** element.
* Otherwise, the operating system searches the **HardwareIDList** element for a match of the device’s hardware ID.

To specify more than one model ID, use a separate **ModelID** for each ID.

The following is an example of a **ModeIDList** element that has multiple **ModelID** elements:

<ModelIDList>

 <ModelID>825AAB98-18EE-4FE2-9472-197D1D00FE31</ModelID>

 <ModelID>23F64715-AC4A-4DC4-B554-C8D56E43FE8B</ModelID>

</ModelIDList>

### **HardwareIDList** and **HardwareID** Elements

The **HardwareIDList** element specifies one or more hardware identification strings for the device. Each string is specified by a **HardwareID** element. The operating system uses this information to select and load the most appropriate device metadata package:

<xs:element name="HardwareIDList" type="tns:HardwareIDListType" />

<xs:complexType name="HardwareIDListType">

 <xs:sequence>

 <xs:element name="HardwareID" type="tns:HardwareIDType"

 maxOccurs="unbounded" />

 </xs:sequence>

</xs:complexType>

<xs:simpleType name="HardwareIDType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="207" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

The **HardwareIDList** element is required only if the **ModelIDList** element is not specified in the PackageInfo XML data.

If the PackageInfo XML data contains the **HardwareIDList** and **ModelIDList** elements, the operating system uses the following rules when you determine whether a device is specified by a device metadata package:

* If the device has a model ID, the operating system does not search for a match in the **HardwareIDList** element. For more information about model IDs, see “[ModelIDList and ModelID Elements](#_ModelID_Element)” earlier in this paper.
* Otherwise, the operating system searches the **HardwareIDList** element for a match of the device’s hardware ID.

Each **HardwareID** value must be a device identification string that is unique to the device. You must not use the compatible ID, such as USB Class ID, ‘HID\_DEVICE’, or ‘HID\_DEVICE\_SYSTEM\_KEYBOARD’.

For more information about device identification strings, see the “Device Identification String”WDK documentation on the MSDN® Web site.

More than one **HardwareID** element can be used to specify a device.

For example, consider a single-function USB printer from the company Contoso, Ltd. The following **HardwareID** elements can be used to define the device:

<HardwareIDList>

..<HardwareID>DOID:USB\VID\_1234&PID\_1234&REV\_0000</HardwareID>

..<HardwareID>DOID:USB\VID\_1234&PID\_1234</HardwareID>

..<HardwareID>DOID:USBPRINT\Contoso\_Ltd\_Co9999/HardwareID>

</HardwareIDList>

To specify that the hardware ID is for a device container, add the prefix ‘DOID’ in front of the hardware ID string.

To specify that the hardware ID is for a single-function device container, add the prefix ‘SFDOID’ in front of the hardware ID.

**Note** SFDOID is not supported in Windows 7, but is reserved for later versions of Windows.

The following table shows an example of the use of device containers.

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Representative of the device  | Device container | Prefix with the hardware ID |
| **Multi- Function Device** | Piece of plastic | Device container | DOID:USB\VID\_XXXX&PID\_YYYY |
| Each function of the device | Single- function device container | SFDOID:USB\VID\_XXXX&PID\_YYYY |
| **Single- Function Device** | Piece of plastic | Device container | DOID:USB\VID\_AAAA&PID\_BBBB |

**Note for Computer Device Container**

In Devices and Printers, a computer is also recognized as a device container. All rules are applied to the device container for the computer.

Unlike hardware IDs for other device containers, the hardware IDs for the computer must be produced by the ComputerHardwareIds tool (*ComputerHardwareIDs.exe)*, which is included in the Windows 7 WDK. You can find the tool in the *\tools\Other\i386* subdirectory of the WDK.

As shown in the following table, the ComputerHardwareIds tool creates hardware IDs for the computer that are based on information from the fields in the system’s System Management BIOS (SMBIOS):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Field name | Structure name and type | SMBIOS specifi-cation version | Offset | Length | Value | Description |
| **Manufacturer** | System Information (Type 1)  | 2.0+ | 04h | BYTE | STRING | The index of a null-terminated string within the *dmiStrucBuffer* array. This string specifies the name of the computer manufacturer. |
| **Family** | System Information (Type 1) | 2.4+ | 1Ah | BYTE | STRING | The index of a null-terminated string within the *dmiStrucBuffer* array. This string specifies the family to which a particular computer belongs.A family refers to a set of computers that are similar but not identical from a hardware or software point of view.Typically a family is composed of different computer models, which have different configurations and pricing points. Computers in the same family often have similar branding and cosmetic features. |
| **Product Name** | System Information (Type 1) | 2.0+ | 05h | BYTE | STRING | The index of a null-terminated string within the *dmiStrucBuffer* array. This string specifies the product name of the computer. |
| **Vendor** | BIOS Information (Type 0) | 2.0 | 04h | BYTE | STRING | The index of a null-terminated string within the *dmiStrucBuffer* array. This string specifies the name of the BIOS vendor. |
| **BIOS Version** | BIOS Information (Type 0)  | 2.0 | 05h | BYTE | STRING | The index of a null-terminated string within the *dmiStrucBuffer* array. This string can contain information about the processor core and OEM version. |
| **System BIOS Major Release** | BIOS Information (Type 0) | 2.4 | 14h | BYTE | Varies. | The major release of the system BIOS. |
| **System BIOS Minor Release** | BIOS Information (Type 0) | 2.4 | 15h | BYTE | Varies | The minor release of the system BIOS. |

For more information about the dmiStrucBuffer array and the SMBIOS fields, refer to the *System Management BIOS (SMBIOS) Specification,* which is listed in “[Resources](#_Resources)” later in this paper

When the ComputerHardwareIds tool runs, it creates three unique hardware IDs from the SMBIOS information. Each hardware ID is a GUID and is created in the following way:

* One string (*HardwareID-1*) is created by concatenating the values from the following SMBIOS fields:

**Manufacturer** + **Family** + **Product Name** + **Vendor** + **BIOS Version** + **System BIOS Major Release** + **System BIOS Minor Release**

**Note**This string is generated only if the SMBIOS provides values for the **Manufacturer**, **Product Name**, **Vendor**, and **BIOS Version** fields.

* One string (*HardwareID-2*) is created by concatenating the values from the following SMBIOS fields:

**Manufacturer** + **Family** + **Product Name**

**Note**This string is generated only if the SMBIOS provides values for the **Manufacturer** and **Product Name** fields.

* One string (*HardwareID-3)* is created by concatenating the values from the following SMBIOS values:

**Manufacturer** + **Family**

**Note**This string is generated only if the SMBIOS provides values for the **Manufacturer** and **Family** fields.

* Each string is then converted into a GUID by using the SHA-1 hashing algorithm.

We highly recommend that vendors use *HardwareID-2* as the first choice for the computer’s hardware ID and use *HardwareID-3* as the second choice. When selecting a string, please use the following guidelines:

* Use *HardwareID-2* if the device metadata package matches a computer that has a specific make, family, and model. This allows a metadata package to match the specified computer, which provides the most precise metadata for the computer.
* Use *HardwareID-3* if the device metadata package covers the entire family of computers. In this case, the computer family is unique and is not branded with more than one product line.

**Note**We strongly recommend that vendors not use *HardwareID-1* for the computer’s hardware ID. *Hardware ID-1* is reserved for future use.

To specify that the hardware ID is for a computer device container, use the following rules:

* Delimit the hardware ID string with ‘{‘ and ‘}’ characters.
* Add the prefix ‘ComputerMetadata\’ in front of the hardware ID string.

The following is an example of a **HardwareID** element for the computer:

DOID:ComputerMetadata\{c20d5449-511e-4cb5-902a-a541239322aa}

**Note for Bluetooth Device Container**

To specify hardware IDs for a Bluetooth device, the device must support the Device Identification (DID) Profile. Otherwise, the operating system cannot select and load the most appropriate device metadata package for the Bluetooth device. We highly recommend that all Bluetooth devices support the DID profile.

For more information about the DID Profile, see “Device Identification Profile Specification,” which is available on the Bluetooth SIG Web page.

### **Locale** Element

The **Locale** element specifies the locale of the device metadata package. A device metadata package must specify a single locale. To support multiple locales, separate metadata packages must be created for the same device:

<xs:element name="Locale" type="tns:LocaleType" />

<xs:complexType name="LocaleType">

 <xs:simpleContent>

 <xs:extension base="xs:string">

 <xs:attribute name="default" type="xs:boolean" use="required" />

 </xs:extension>

 </xs:simpleContent>

</xs:complexType>

#### Remarks

The **Locale** element can be <Language>-<Region> (such as EN-US) or <Language> (such as EN). If the <Language> is set, the package applies to all <Language> locales. For example, EN applies to EN-US and EN-BR.

For more information about locale names, see “Locale Identifier Constants and Strings” on the MSDN Web site.

To specify the metadata package as the default for the current locale of the computer, set the **default** attribute to **true** (1).

**Note**Only one metadata package for a device should set the **default** attribute to **true**(1). Otherwise, the operating system randomly selects a metadata package for the device.

When the operating system installs a device, it uses the **Locale** element to select a metadata package in the following way:

1. The operating system first retrieves a list of preferred user locales on the computer.

2. If the **Locale** element of a device’s metadata package matches an entry in the list of preferred user locales, the operating system selects the package to install the device.

3. If none of the device’s metadata package has a **Locale** element that matches an entry in the list of preferred user locales, the operating system does one of the following:

* If one of the device’s metadata packages has the **default** attribute set to **true** (1), the operating system selects that package to install the device.
* If none of the device’s metadata packages has the **default** attribute set to **true** (1), the operating system does not install the device by using any device metadata package.

### **LastModifiedDate** Element

The **LastModifiedDate** element specifies the timestamp on which the device metadata package was last changed. Based on this information, the operating system selects and loads the most recent device metadata package version.

The timestamp value is represented in the Universal Time Coordinated (UTC) format.

**Important**  The value of the **LastModifiedDate** element must represent the actual time that the metadata package was last changed:

<xs:element name="LastModifiedDate" type="xs:dateTime" />

### **Metadata** Element

The **Metadata** element specifies the namespaces of the XML schemas that are referenced in the device metadata package. This element is under the **PackageStructure** element:

<xs:element name="PackageStructure" type="tns:PackageStructureType" />

<xs:complexType name="PackageStructureType">

 <xs:sequence>

 <xs:element name="Metadata" type="tns:MetadataType" minOccurs="3"

 maxOccurs="unbounded" />

 </xs:sequence>

</xs:complexType>

<xs:complexType name="MetadataType">

 <xs:simpleContent>

 <xs:extension base="xs:string">

 <xs:attribute name="MetadataID" type="xs:anyURI" use="required" />

 </xs:extension>

 </xs:simpleContent>

</xs:complexType>

#### Remarks

In the **Metadata** element, a minimum of three instances of the **MetadataID** element must be specified. Each instance must specify the namespace of one of the following required XML schemas that are used to create a device metadata package:

* PackageInfo XML Schema
* DeviceInfo XML Schema
* WindowsInfo XML Schema

The following is an example of the **Metadata** element:

<PackageStructure>

 <Metadata MetadataID="http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11">PackageInfo.xml</Metadata>

 <Metadata MetadataID="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/">DeviceInformation</Metadata>

 <Metadata MetadataID="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/">WindowsInformation</Metadata>

</PackageStructure>

### **ExperienceID** Element

The **ExperienceID** element specifies a GUID, which identifies the Device Stage of the device metadata package:

<xs:element name="ExperienceID" type="tns:GUIDType" minOccurs="0" />

#### Remarks

The **ExperienceID** element is managed by Winqual. When you submit the device metadata package to the Web site, Winqual creates a GUID and updates the **ExperienceID** element in the metadata package. Winqual then digitally signs the metadata package before it returns the package to you.

### **LanguageNeutralIdentifier** Element

The **LanguageNeutralIdentifier** element specifies a GUID, which identifies the device metadata package independent of its locale. The **LanguageNeutralIdentifier** element lets the same GUID be used to identify one or more localized versions of a device metadata package for the same device. For example, localized versions of the device metadata package for the same device have the same GUID value for the **LanguageNeutralIdentifier** element but have location-specific values for the **Locale** element:

<xs:element name="LanguageNeutralIdentifier" type="tns:GUIDType" minOccurs="0" />

**Note**The **LanguageNeutralIdentifier** element is not used by any component of the operating system. It is reserved for use by the OEM, IHV, and independent software vendor (ISV).

#### Example

If you are releasing a device for three locales (such as EN-US, JA-JP, and AR-SA), you create three metadata packages per locale for the device. By using a common GUID for the **LanguageNeutralIdentifier** elements in these packages, you can easily tell which metadata package is for the device by your application or by browsing the PackageInfo.xml document.

### **MetadataBuilderInformation** Element

The **MetadataBuilderInformation** element specifies the application that created the device metadata package. The **Application** element and **Version** element are used to specify this information. A string of up to 256 printable characters can be used in **Application** element and Version **element**:

<xs:element name="MetadataBuilderInformation"

 type="tns:MetadataBuilderInformationType" minOccurs="0" />

<xs:complexType name="MetadataBuilderInformationType">

 <xs:sequence> <xs:element name="Application" type="tns:ApplicationType" />

 <xs:element name="Version" type="tns:VersionType" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0"

 maxOccurs="unbounded" />

 </xs:sequence>

</xs:complexType>

<xs:simpleType name="ApplicationType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="256" />

 </xs:restriction>

 </xs:simpleType>

<xs:simpleType name="VersionType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="256" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

The **MetadataBuilderInformation** element is not used by the Windows 7 operating system.

**Note**The **MetadataBuilderInformation** element is not used by any component of the operating system. It is reserved for use by the OEM, IHV, and ISV.

#### Example

The following is an example of the **MetadataBuilderInformation** element:

<MetadataBuilderInformation>

 <Application>Microsoft Metadata Sample</Application>

 <Version>0.8</Version>

</MetadataBuilderInformation>

## PackageInfo XML Example

The following XML document uses the PackageInfo XML schema to specify the components of a vendor’s metadata package.

The package is for a device with the following hardware ID:

USB\VID\_XXXX&PID\_YYYY&REV\_0000

and the following model ID:

21c70dea-acb5-431f-b1d3-74b0ad4f6475

The package is also for the EN-US locale, which the document sets as the default locale for the components of the metadata package:

<?xml version="1.0" encoding ="UTF-8" ?>

<PackageInfo xmlns="http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11/">

 <MetadataKey>

 <HardwareIDList>

 <HardwareID>DOID:USB\VID\_XXXX&PID\_YYYY&REV\_0000</HardwareID>

 <HardwareID>DOID:USB\VID\_XXXX&PID\_YYYY</HardwareID>

 </HardwareIDList>

 <ModelIDList>

 <ModelID>21c70dea-acb5-431f-b1d3-74b0ad4f6475</ModelID>

 </ModelIDList>

 <Locale default="true">EN-US</Locale>

 <LastModifiedDate>2008-01-24T00:00:00Z</LastModifiedDate>

 </MetadataKey>

 <PackageStructure>

 <Metadata MetadataID="http://schemas.microsoft.com/windows/DeviceMetadata/PackageInfo/2007/11">PackageInfo.xml</Metadata>

 <Metadata MetadataID="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/">DeviceInformation</Metadata>

 <Metadata MetadataID=”http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/”>WindowsInformation</Metadata>

 </PackageStructure>

</PackageInfo>

# DeviceInfo XML Schema

A metadata package contains one DeviceInfo.xml document, which contains detailed information about the device that the Devices and Printers UI displays to the user.

**Note**The XML file must be saved by using UTF-8 encoding.

## DeviceInfo XML Schema NameSpace

The following is the namespace of the DeviceInfo XML schema:

**http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/**

## Overview of DeviceInfo XML Elements

The following table shows the metadata elements in DeviceInfo.xml:

| **Element** | **Element type** | **Required/ optional** | **Description** |
| --- | --- | --- | --- |
| [**DeviceCategoryList**](#_DeviceCategoryList_and_DeviceCatego) | tns:DeviceCategoryListType | Required | Specifies one or more functional categories that apply to the device. |
| [**ModelName**](#_ModelName_Element) | tns:GenericNameType | Required | Specifies the model name of the device. |
| [**ModelNumber**](#_ModelNumber_Element) | tns:GenericNameType | Optional | Specifies the model or part number of the device as the manufacturer defines it. |
| [**Manufacturer**](#_Manufacturer_Element) | tns:GenericNameType | Required | Specifies the name of the device manufacturer. |
| [**DeviceDescription1**](#_DeviceDescription1_Element) | tns:DeviceDescriptionType | Optional | Specifies descriptive information about the device. |
| [**DeviceDescription2**](#_DeviceDescription2_Element) | tns:DeviceDescriptionType | Optional | Specifies additional descriptive information about the device. |
| [**DeviceIconFile**](#_DeviceIconFile_Element) | tns:DeviceIconFileType | Optional | Specifies the name of the device icon file in the device metadata package. |

## DeviceInfo XML Schema Metadata for Beta (Build 7000 and lower)

The following is the DeviceInfo XML schema metadata for the Windows 7 Beta release:

<?xml version="1.0" encoding ="UTF-8" ?>

<xs:schema targetNamespace="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/" xmlns:tns="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/" xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" blockDefault="#all">

 <xs:element name="DeviceInfo" type="tns:DeviceInfoType" />

 <xs:complexType name="DeviceInfoType">

 <xs:sequence>

 <xs:element name="DeviceCategoryList" type="tns:DeviceCategoryListType" />

 <xs:element name="ModelName" type="tns:GenericNameType" />

 <xs:element name="DeviceDescription1" type="tns:DeviceDescriptionType" minOccurs="0" />

 <xs:element name="DeviceDescription2" type="tns:DeviceDescriptionType" minOccurs="0" />

 <xs:element name="ModelNumber" type ="tns:GenericNameType" minOccurs="0" />

 <xs:element name="Manufacturer" type="tns:GenericNameType" />

 <xs:element name="DeviceIconFile" type="tns:DeviceIconFileType" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="DeviceCategoryListType">

 <xs:sequence>

 <xs:element name="DeviceCategory" type="tns:DeviceCategoryType" maxOccurs="unbounded" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="DeviceCategoryType">

 <xs:union memberTypes="tns:DeviceCategoryTypeEnumeration xs:string" />

 </xs:simpleType>

 <xs:simpleType name="DeviceCategoryTypeEnumeration">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Audio" />

 <xs:enumeration value="Audio.Headphone" />

 <xs:enumeration value="Audio.Microphone" />

 <xs:enumeration value="Audio.Speakers" />

 <xs:enumeration value="Audio.Speakers.Wireless" />

 <xs:enumeration value="Audio.Speakers.USB" />

 <xs:enumeration value="Communication" />

 <xs:enumeration value="Communication.Headset" />

 <xs:enumeration value="Communication.Headset.Bluetooth" />

 <xs:enumeration value="Communication.Phone" />

 <xs:enumeration value="Communication.Phone.Cell" />

 <xs:enumeration value="Communication.Phone.IP" />

 <xs:enumeration value="Computer" />

 <xs:enumeration value="Computer.AllInOne" />

 <xs:enumeration value="Computer.Desktop" />

 <xs:enumeration value="Computer.Desktop.LowProfile" />

 <xs:enumeration value="Computer.Desktop.Pizzabox" />

 <xs:enumeration value="Computer.Handheld" />

 <xs:enumeration value="Computer.Handheld.Windows" />

 <xs:enumeration value="Computer.Laptop" />

 <xs:enumeration value="Computer.Lunchbox" />

 <xs:enumeration value="Computer.Netbook" />

 <xs:enumeration value="Computer.Notebook" />

 <xs:enumeration value="Computer.Notebook.Sub" />

 <xs:enumeration value="Computer.Portable" />

 <xs:enumeration value="Computer.Rackmount" />

 <xs:enumeration value="Computer.Sealed" />

 <xs:enumeration value="Computer.Server" />

 <xs:enumeration value="Computer.SpaceSaving" />

 <xs:enumeration value="Computer.Tablet" />

 <xs:enumeration value="Computer.ThinClient" />

 <xs:enumeration value="Computer.Tower" />

 <xs:enumeration value="Computer.Tower.Mini" />

 <xs:enumeration value="Display" />

 <xs:enumeration value="Display.Monitor" />

 <xs:enumeration value="Display.Monitor.CRT" />

 <xs:enumeration value="Display.Monitor.LCD" />

 <xs:enumeration value="Display.Monitor.Plasma" />

 <xs:enumeration value="Display.PictureFrame" />

 <xs:enumeration value="Display.Projector" />

 <xs:enumeration value="Display.SideShow" />

 <xs:enumeration value="Display.TV" />

 <xs:enumeration value="Display.TV.CRT" />

 <xs:enumeration value="Display.TV.LCD" />

 <xs:enumeration value="Display.TV.Plasma" />

 <xs:enumeration value="Display.TV.DLP" />

 <xs:enumeration value="Component" />

 <xs:enumeration value="Component.AudioAdapter" />

 <xs:enumeration value="Component.Battery" />

 <xs:enumeration value="Component.Bridge" />

 <xs:enumeration value="Component.Bridge.Network" />

 <xs:enumeration value="Component.Bridge.Storage" />

 <xs:enumeration value="Component.Cable" />

 <xs:enumeration value="Component.Cable.Transfer" />

 <xs:enumeration value="Component.Cable.Transfer.USB" />

 <xs:enumeration value="Component.Capture" />

 <xs:enumeration value="Component.Capture.Video" />

 <xs:enumeration value="Component.Controller" />

 <xs:enumeration value="Component.Controller.1394" />

 <xs:enumeration value="Component.Controller.Bluetooth" />

 <xs:enumeration value="Component.Controller.CardBus" />

 <xs:enumeration value="Component.Controller.IR" />

 <xs:enumeration value="Component.Controller.IR.MCE" />

 <xs:enumeration value="Component.Controller.SDH" />

 <xs:enumeration value="Component.Controller.Serial" />

 <xs:enumeration value="Component.Controller.Storage" />

 <xs:enumeration value="Component.Controller.Storage.IDE" />

 <xs:enumeration value="Component.Controller.Storage.iSCSI" />

 <xs:enumeration value="Component.Controller.Storage.SATA" />

 <xs:enumeration value="Component.Controller.Storage.SCSI" />

 <xs:enumeration value="Component.Controller.Storage.Raid" />

 <xs:enumeration value="Component.Controller.USB" />

 <xs:enumeration value="Component.Controller.WUSB" />

 <xs:enumeration value="Component.GraphicsCard" />

 <xs:enumeration value="Component.Hub" />

 <xs:enumeration value="Component.Hub.1394" />

 <xs:enumeration value="Component.Hub.USB" />

 <xs:enumeration value="Component.KVM" />

 <xs:enumeration value="Component.SmartCardReader" />

 <xs:enumeration value="Component.System" />

 <xs:enumeration value="Component.System.Board" />

 <xs:enumeration value="Component.System.Memory" />

 <xs:enumeration value="Component.System.Processor" />

 <xs:enumeration value="Component.Tuner" />

 <xs:enumeration value="Component.Tuner.TV" />

 <xs:enumeration value="Component.Tuner.TV.ATSC" />

 <xs:enumeration value="Component.Tuner.TV.DCB-S" />

 <xs:enumeration value="Component.Tuner.TV.DVB-C" />

 <xs:enumeration value="Component.Tuner.TV.DVB-T" />

 <xs:enumeration value="Component.Tuner.TV.ISDB-T" />

 <xs:enumeration value="Component.Tuner.TV.NTSC" />

 <xs:enumeration value="Component.Tuner.TV.NTSCMJ" />

 <xs:enumeration value="Component.Tuner.TV.OpenCable" />

 <xs:enumeration value="Component.Tuner.TV.PAL" />

 <xs:enumeration value="Component.Tuner.TV.Proprietry" />

 <xs:enumeration value="Component.Tuner.TV.QAM" />

 <xs:enumeration value="Component.Tuner.TV.SECAM" />

 <xs:enumeration value="Component.Tuner.Radio" />

 <xs:enumeration value="Input" />

 <xs:enumeration value="Input.Digitizer" />

 <xs:enumeration value="Input.Digitizer.Multitouch" />

 <xs:enumeration value="Input.Digitizer.Pen" />

 <xs:enumeration value="Input.Digitizer.Touchpad" />

 <xs:enumeration value="Input.Digitizer.Touchscreen" />

 <xs:enumeration value="Input.Gaming" />

 <xs:enumeration value="Input.Gaming.Generic" />

 <xs:enumeration value="Input.Gaming.Common" />

 <xs:enumeration value="Input.Keyboard" />

 <xs:enumeration value="Input.KVM" />

 <xs:enumeration value="Input.Mouse" />

 <xs:enumeration value="Input.Trackball" />

 <xs:enumeration value="Input.Remote" />

 <xs:enumeration value="Input.Remote.MCE" />

 <xs:enumeration value="Health" />

 <xs:enumeration value="Health.BloodGlucose" />

 <xs:enumeration value="Health.BloodPressure" />

 <xs:enumeration value="Health.HeartRate" />

 <xs:enumeration value="Health.Pedometer" />

 <xs:enumeration value="Media" />

 <xs:enumeration value="Media.SmartCard" />

 <xs:enumeration value="Media.Storage" />

 <xs:enumeration value="Media.Storage.Flash" />

 <xs:enumeration value="Media.Storage.Flash.CompactFlash" />

 <xs:enumeration value="Media.Storage.Flash.MemoryStick" />

 <xs:enumeration value="Media.Storage.Flash.SD" />

 <xs:enumeration value="Media.Storage.Optical" />

 <xs:enumeration value="Media.Storage.Optical.CD" />

 <xs:enumeration value="Media.Storage.Optical.DVD" />

 <xs:enumeration value="Media.Storage.Optical.BluRay" />

 <xs:enumeration value="Multimedia" />

 <xs:enumeration value="Multimedia.DMC" />

 <xs:enumeration value="Multimedia.DMP" />

 <xs:enumeration value="Multimedia.DMR" />

 <xs:enumeration value="Multimedia.DMR.MCE" />

 <xs:enumeration value="Multimedia.DMS" />

 <xs:enumeration value="Multimedia.DVR" />

 <xs:enumeration value="Multimedia.GameConsole" />

 <xs:enumeration value="Multimedia.PMP" />

 <xs:enumeration value="Multimedia.VoiceRecorder" />

 <xs:enumeration value="Network" />

 <xs:enumeration value="Network.AccessPoint" />

 <xs:enumeration value="Network.Bluetooth" />

 <xs:enumeration value="Network.Bridge" />

 <xs:enumeration value="Network.Bridge.Wifi2Ether" />

 <xs:enumeration value="Network.HomeAutomation" />

 <xs:enumeration value="Network.MobileBroadband" />

 <xs:enumeration value="Network.Modem" />

 <xs:enumeration value="Network.NIC" />

 <xs:enumeration value="Network.NIC.Ethernet" />

 <xs:enumeration value="Network.NIC.IR" />

 <xs:enumeration value="Network.NIC.PLC" />

 <xs:enumeration value="Network.NIC.Wireless" />

 <xs:enumeration value="Network.PrintServer" />

 <xs:enumeration value="Network.Router" />

 <xs:enumeration value="Network.Router.Wireless" />

 <xs:enumeration value="Network.Switch" />

 <xs:enumeration value="Network.UWB" />

 <xs:enumeration value="Network.WUSB" />

 <xs:enumeration value="Network.WUSB.DWA" />

 <xs:enumeration value="PrintFax" />

 <xs:enumeration value="PrintFax.FAX" />

 <xs:enumeration value="PrintFax.MFP" />

 <xs:enumeration value="PrintFax.Printer" />

 <xs:enumeration value="PrintFax.Printer.Inkjet" />

 <xs:enumeration value="PrintFax.Printer.Laser" />

 <xs:enumeration value="Sensor" />

 <xs:enumeration value="Sensor.Biometric" />

 <xs:enumeration value="Sensor.Biometric.Face" />

 <xs:enumeration value="Sensor.Biometric.Finger" />

 <xs:enumeration value="Sensor.Biometric.Retinal" />

 <xs:enumeration value="Sensor.Electrical" />

 <xs:enumeration value="Sensor.Enviromental" />

 <xs:enumeration value="Sensor.Enviromental.Temp" />

 <xs:enumeration value="Sensor.Light" />

 <xs:enumeration value="Sensor.Location" />

 <xs:enumeration value="Sensor.Location.GPS" />

 <xs:enumeration value="Sensor.Mechanical" />

 <xs:enumeration value="Sensor.Motion" />

 <xs:enumeration value="Sensor.Orientation" />

 <xs:enumeration value="Sensor.Proximity" />

 <xs:enumeration value="Sensor.Proximity.NFC" />

 <xs:enumeration value="Sensor.Proximity.RFID" />

 <xs:enumeration value="Storage" />

 <xs:enumeration value="Storage.CardReader" />

 <xs:enumeration value="Storage.CardReader.Combo" />

 <xs:enumeration value="Storage.Changer" />

 <xs:enumeration value="Storage.Changer.Optical" />

 <xs:enumeration value="Storage.FDD" />

 <xs:enumeration value="Storage.HDD" />

 <xs:enumeration value="Storage.HDD.SolidState" />

 <xs:enumeration value="Storage.Network" />

 <xs:enumeration value="Storage.Network.Wireless" />

 <xs:enumeration value="Storage.Optical" />

 <xs:enumeration value="Storage.Optical.Bluray" />

 <xs:enumeration value="Storage.Optical.CD" />

 <xs:enumeration value="Storage.Optical.DVD" />

 <xs:enumeration value="Storage.Tape" />

 <xs:enumeration value="Storage.UFD" />

 <xs:enumeration value="Imaging" />

 <xs:enumeration value="Imaging.Camcorder" />

 <xs:enumeration value="Imaging.Camera" />

 <xs:enumeration value="Imaging.Scanner" />

 <xs:enumeration value="Imaging.Webcam" />

 <xs:enumeration value="Other" />

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="GenericNameType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="200" />

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="DeviceDescriptionType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="1024" />

 </xs:restriction>

 </xs:simpleType>

 <xs:simpleType name="DeviceIconFileType">

 <xs:restriction base="xs:string">

 <xs:pattern value=".+(\.ico|\.dll,-\d+)" />

 </xs:restriction>

 </xs:simpleType>

</xs:schema>

## DeviceInfo XML Schema Metadata for RC (Build 7001 and greater)

The following is the DeviceInfo XML schema metadata for the Windows 7 RC release.

**Note** The only revision to the RC version of the DeviceInfo XML schema was in the **DeviceCategoryTypeEnumeration** XML simple type, which was extended to add more device categories. This change does not prevent device metadata packages from working, and device metadata packages that were developed for the Windows 7 Beta will continue to work in the Windows 7 RC release:

<?xml version="1.0" encoding ="UTF-8" ?>

<xs:schema targetNamespace="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/" xmlns:tns="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/" xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" blockDefault="#all">

 <xs:element name="DeviceInfo" type="tns:DeviceInfoType" />

 <xs:complexType name="DeviceInfoType">

 <xs:sequence>

 <xs:element name="DeviceCategoryList" type="tns:DeviceCategoryListType" />

 <xs:element name="ModelName" type="tns:GenericNameType" />

 <xs:element name="DeviceDescription1" type="tns:DeviceDescriptionType" minOccurs="0" />

 <xs:element name="DeviceDescription2" type="tns:DeviceDescriptionType" minOccurs="0" />

 <xs:element name="ModelNumber" type ="tns:GenericNameType" minOccurs="0" />

 <xs:element name="Manufacturer" type="tns:GenericNameType" />

 <xs:element name="DeviceIconFile" type="tns:DeviceIconFileType" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:complexType name="DeviceCategoryListType">

 <xs:sequence>

 <xs:element name="DeviceCategory" type="tns:DeviceCategoryType" maxOccurs="unbounded" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

 <xs:simpleType name="DeviceCategoryType">

 <xs:union memberTypes="tns:DeviceCategoryTypeEnumeration xs:string" />

 </xs:simpleType>

<xs:simpleType name="DeviceCategoryTypeEnumeration">

 <xs:restriction base="xs:string">

 <xs:enumeration value="Audio" />

 <xs:enumeration value="Audio.Adapter" />

 <xs:enumeration value="Audio.Headphone" />

 <xs:enumeration value="Audio.Microphone" />

 <xs:enumeration value="Audio.Speakerphone" />

 <xs:enumeration value="Audio.Speakers" />

 <xs:enumeration value="Audio.Speakers.USB" />

 <xs:enumeration value="Audio.Speakers.Wireless" />

 <xs:enumeration value="Communication" />

 <xs:enumeration value="Communication.Headset" />

 <xs:enumeration value="Communication.Headset.Bluetooth" />

 <xs:enumeration value="Communication.Phone" />

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</xs:schema>

## DeviceInfo XML Schema Reference

The DeviceInfo XML schema defines the following elements:

* **DeviceInfo**
	+ **DeviceInfoType**
		- **DeviceCategoryList**
			* **DeviceCategory**
		- **ModelName**
		- **DeviceDescription1**
		- **DeviceDescription2**
		- **ModelNumber**
		- **Manufacturer**
		- **DeviceIconFile**

### **DeviceCategoryList** and **DeviceCategory** Elements

The **DeviceCategoryList** element specifies one or more functional categories that apply to the device. Each functional category is specified through a **DeviceCategory** element.

For more information about device categories, see “[Appendix. Device Categories](#_Appendix_–_Device)” later in this paper.

**Note**This XML element was revised in the Windows 7 RC release. Only the **DeviceCategoryTypeEnumeration** XML simple type was revised to add additional device categories. This change does not prevent device metadata packages from working, and device metadata packages that were developed for Windows 7 Beta will continue to work in the Windows 7 RC release.

**Windows 7 Beta (Build 7000 and lower)**

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**Windows 7 RC (Build 7001 and greater)**

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 <xs:enumeration value="Component.Controller.Serial" />

 <xs:enumeration value="Component.Controller.Storage" />

 <xs:enumeration value="Component.Controller.Storage.IDE" />

 <xs:enumeration value="Component.Controller.Storage.iSCSI" />

 <xs:enumeration value="Component.Controller.Storage.Raid" />

 <xs:enumeration value="Component.Controller.Storage.SATA" />

 <xs:enumeration value="Component.Controller.Storage.SCSI" />

 <xs:enumeration value="Component.Controller.USB" />

 <xs:enumeration value="Component.Controller.WUSB" />

 <xs:enumeration value="Component.GraphicsCard" />

 <xs:enumeration value="Component.Hub" />

 <xs:enumeration value="Component.Hub.1394" />

 <xs:enumeration value="Component.Hub.USB" />

 <xs:enumeration value="Component.KVM" />

 <xs:enumeration value="Component.NIC" />

 <xs:enumeration value="Component.SmartCardReader" />

 <xs:enumeration value="Component.System" />

 <xs:enumeration value="Component.System.Board" />

 <xs:enumeration value="Component.System.Memory" />

 <xs:enumeration value="Component.System.Processor" />

 <xs:enumeration value="Component.Tuner" />

 <xs:enumeration value="Component.Tuner.Radio" />

 <xs:enumeration value="Component.Tuner.TV" />

 <xs:enumeration value="Component.Tuner.TV.ATSC" />

 <xs:enumeration value="Component.Tuner.TV.DCB-S" />

 <xs:enumeration value="Component.Tuner.TV.DVB-C" />

 <xs:enumeration value="Component.Tuner.TV.DVB-T" />

 <xs:enumeration value="Component.Tuner.TV.ISDB-T" />

 <xs:enumeration value="Component.Tuner.TV.NTSC" />

 <xs:enumeration value="Component.Tuner.TV.NTSCMJ" />

 <xs:enumeration value="Component.Tuner.TV.OpenCable" />

 <xs:enumeration value="Component.Tuner.TV.PAL" />

 <xs:enumeration value="Component.Tuner.TV.Proprietry" />

 <xs:enumeration value="Component.Tuner.TV.QAM" />

 <xs:enumeration value="Component.Tuner.TV.SECAM" />

 <xs:enumeration value="Computer" />

 <xs:enumeration value="Computer.AllInOne" />

 <xs:enumeration value="Computer.Desktop" />

 <xs:enumeration value="Computer.Desktop.LowProfile" />

 <xs:enumeration value="Computer.Desktop.Pizzabox" />

 <xs:enumeration value="Computer.Handheld" />

 <xs:enumeration value="Computer.Handheld.Windows" />

 <xs:enumeration value="Computer.Laptop" />

 <xs:enumeration value="Computer.Lunchbox" />

 <xs:enumeration value="Computer.Netbook" />

 <xs:enumeration value="Computer.Notebook" />

 <xs:enumeration value="Computer.Notebook.Sub" />

 <xs:enumeration value="Computer.Portable" />

 <xs:enumeration value="Computer.Rackmount" />

 <xs:enumeration value="Computer.Sealed" />

 <xs:enumeration value="Computer.Server" />

 <xs:enumeration value="Computer.SpaceSaving" />

 <xs:enumeration value="Computer.Tablet" />

 <xs:enumeration value="Computer.ThinClient" />

 <xs:enumeration value="Computer.Tower" />

 <xs:enumeration value="Computer.Tower.Mini" />

 <xs:enumeration value="Display" />

 <xs:enumeration value="Display.Monitor" />

 <xs:enumeration value="Display.Monitor.CRT" />

 <xs:enumeration value="Display.Monitor.LCD" />

 <xs:enumeration value="Display.Monitor.Plasma" />

 <xs:enumeration value="Display.PictureFrame" />

 <xs:enumeration value="Display.Projector" />

 <xs:enumeration value="Display.SideShow" />

 <xs:enumeration value="Display.TV" />

 <xs:enumeration value="Display.TV.CRT" />

 <xs:enumeration value="Display.TV.DLP" />

 <xs:enumeration value="Display.TV.LCD" />

 <xs:enumeration value="Display.TV.Plasma" />

 <xs:enumeration value="Health" />

 <xs:enumeration value="Health.BloodGlucose" />

 <xs:enumeration value="Health.BloodPressure" />

 <xs:enumeration value="Health.HeartRate" />

 <xs:enumeration value="Health.Pedometer" />

 <xs:enumeration value="Imaging" />

 <xs:enumeration value="Imaging.Camcorder" />

 <xs:enumeration value="Imaging.Camera" />

 <xs:enumeration value="Imaging.Scanner" />

 <xs:enumeration value="Imaging.Webcam" />

 <xs:enumeration value="Input" />

 <xs:enumeration value="Input.Digitizer" />

 <xs:enumeration value="Input.Digitizer.Multitouch" />

 <xs:enumeration value="Input.Digitizer.Pen" />

 <xs:enumeration value="Input.Digitizer.Touchpad" />

 <xs:enumeration value="Input.Digitizer.Touchscreen" />

 <xs:enumeration value="Input.Gaming" />

 <xs:enumeration value="Input.Gaming.Common" />

 <xs:enumeration value="Input.Gaming.Controller" />

 <xs:enumeration value="Input.Gaming.Gamepad" />

 <xs:enumeration value="Input.Gaming.Generic" />

 <xs:enumeration value="Input.Gaming.Steering" />

 <xs:enumeration value="Input.Keyboard" />

 <xs:enumeration value="Input.KVM" />

 <xs:enumeration value="Input.Mouse" />

 <xs:enumeration value="Input.Remote" />

 <xs:enumeration value="Input.Remote.MCE" />

 <xs:enumeration value="Input.Trackball" />

 <xs:enumeration value="Media" />

 <xs:enumeration value="Media.SmartCard" />

 <xs:enumeration value="Media.Storage" />

 <xs:enumeration value="Media.Storage.Flash" />

 <xs:enumeration value="Media.Storage.Flash.CompactFlash" />

 <xs:enumeration value="Media.Storage.Flash.MemoryStick" />

 <xs:enumeration value="Media.Storage.Flash.SD" />

 <xs:enumeration value="Media.Storage.Optical" />

 <xs:enumeration value="Media.Storage.Optical.BluRay" />

 <xs:enumeration value="Media.Storage.Optical.CD" />

 <xs:enumeration value="Media.Storage.Optical.DVD" />

 <xs:enumeration value="Multimedia" />

 <xs:enumeration value="Multimedia.DMC" />

 <xs:enumeration value="Multimedia.DMP" />

 <xs:enumeration value="Multimedia.DMR" />

 <xs:enumeration value="Multimedia.DMR.MCE" />

 <xs:enumeration value="Multimedia.DMS" />

 <xs:enumeration value="Multimedia.DVR" />

 <xs:enumeration value="Multimedia.GameConsole" />

 <xs:enumeration value="Multimedia.PMP" />

 <xs:enumeration value="Multimedia.VoiceRecorder" />

 <xs:enumeration value="Network" />

 <xs:enumeration value="Network.AccessPoint" />

 <xs:enumeration value="Network.Bluetooth" />

 <xs:enumeration value="Network.Bridge" />

 <xs:enumeration value="Network.Bridge.Wifi2Ether" />

 <xs:enumeration value="Network.HomeAutomation" />

 <xs:enumeration value="Network.MobileBroadband" />

 <xs:enumeration value="Network.Modem" />

 <xs:enumeration value="Network.NIC" />

 <xs:enumeration value="Network.NIC.Ethernet" />

 <xs:enumeration value="Network.NIC.IR" />

 <xs:enumeration value="Network.NIC.PLC" />

 <xs:enumeration value="Network.NIC.Wireless" />

 <xs:enumeration value="Network.PrintServer" />

 <xs:enumeration value="Network.Router" />

 <xs:enumeration value="Network.Router.Wireless" />

 <xs:enumeration value="Network.Switch" />

 <xs:enumeration value="Network.UWB" />

 <xs:enumeration value="Network.WUSB" />

 <xs:enumeration value="Network.WUSB.DWA" />

 <xs:enumeration value="PersonalIdentity" />

 <xs:enumeration value="PersonalIdentity.FaceScanner" />

 <xs:enumeration value="PersonalIdentity.FingerprintReader" />

 <xs:enumeration value="PersonalIdentity.RetinalScanner" />

 <xs:enumeration value="PersonalIdentity.Smartcard" />

 <xs:enumeration value="PersonalIdentity.SmartcardReader" />

 <xs:enumeration value="PrintFax" />

 <xs:enumeration value="PrintFax.FAX" />

 <xs:enumeration value="PrintFax.MFP" />

 <xs:enumeration value="PrintFax.Printer" />

 <xs:enumeration value="PrintFax.Printer.Inkjet" />

 <xs:enumeration value="PrintFax.Printer.Laser" />

 <xs:enumeration value="Sensor" />

 <xs:enumeration value="Sensor.Electrical" />

 <xs:enumeration value="Sensor.Enviromental" />

 <xs:enumeration value="Sensor.Enviromental.Temp" />

 <xs:enumeration value="Sensor.Light" />

 <xs:enumeration value="Sensor.Location" />

 <xs:enumeration value="Sensor.Location.GPS" />

 <xs:enumeration value="Sensor.Mechanical" />

 <xs:enumeration value="Sensor.Motion" />

 <xs:enumeration value="Sensor.Orientation" />

 <xs:enumeration value="Sensor.Proximity" />

 <xs:enumeration value="Sensor.Proximity.NFC" />

 <xs:enumeration value="Sensor.Proximity.RFID" />

 <xs:enumeration value="Storage" />

 <xs:enumeration value="Storage.CardReader" />

 <xs:enumeration value="Storage.CardReader.Combo" />

 <xs:enumeration value="Storage.Changer" />

 <xs:enumeration value="Storage.Changer.Optical" />

 <xs:enumeration value="Storage.FDD" />

 <xs:enumeration value="Storage.HDD" />

 <xs:enumeration value="Storage.HDD.SolidState" />

 <xs:enumeration value="Storage.Network" />

 <xs:enumeration value="Storage.Network.Wireless" />

 <xs:enumeration value="Storage.Optical" />

 <xs:enumeration value="Storage.Optical.Bluray" />

 <xs:enumeration value="Storage.Optical.CD" />

 <xs:enumeration value="Storage.Optical.DVD" />

 <xs:enumeration value="Storage.Tape" />

 <xs:enumeration value="Storage.UFD" />

 <xs:enumeration value="Other" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

* The first **DeviceCategory** element in the **DeviceCategoryList** element specifies the device’s primary functional category. The primary functional category should match how the device is advertised, packaged, sold, and ultimately identified by users.

For example, consider a multifunction device that supports a printer, fax, scanner, and removable storage device functionality. Most users would identify it as a printer, and the primary category should be specified as such.

* Because a single-function device is defined only by its primary functional category, only one instance of the **DeviceCategory** element should be specified in the **DeviceCategoryList** element.
* For multifunction devices, multiple instances of the **DeviceCategory** element can be specified in the **DeviceCategoryList** element. Each instance after the first instance specifies the device’s secondary functional categories.
* The Devices and Printers UI displays the device’s primary and secondary functional categories in the order that is specified in the **DeviceCategoryList** element.
* If a device’s primary or secondary functional categories do not match any existing enumeration values, you must use the **Other** enumeration value to specify the functional category.

### **ModelName** Element

The **ModelName** element specifies the model name device. A string of up to 200 printable characters can be used to specify this information:

<xs:element name="ModelName" type="tns:GenericNameType" />

<xs:simpleType name="GenericNameType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="200" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

The **ModelName** element contains a string that specifies a single device name.

The selection of the device model name that appears in the Devices and Printers UI depends on the bus or device type. For example, the Devices and Printers UI displays the user-defined friendly name of the computer rather than the model name that is listed in the device metadata.

The following table shows the order of model name selection based on device category.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank-ing | Generic rules | Computer | Bluetooth/PnP-X device | Printer |
| 1 | Model Name in DeviceInfo XML document | User-defined Computer Name | Device Name in device (firmware) | Friendly Name reported from the print spooler |
| 2 | Friendly Name in driver’s INF file | Model Name in DeviceInfo XML document | Model Name in DeviceInfo XML document | Not applicable |
| 3 | Device Name in device’s firmware | Product Name in BIOS | Not applicable | Not applicable |

### **DeviceDescription1** Element

The **DeviceDescription1** element specifies descriptive information about the device. A string of up to 1,024 printable characters can be used to specify this information:

<xs:element name="DeviceDescription1" type="tns:DeviceDescriptionType” minOccurs=”0” />

<xs:simpleType name="DeviceDescriptionType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="1024" />

 </xs:restriction>

</xs:simpleType>

### **DeviceDescription2** Element

The **DeviceDescription2** element specifies additional descriptive information about the device. A string of up to 1,024 printable characters can be used to specify this information:

<xs:element name="DeviceDescription2" type="tns:DeviceDescriptionType" minOccurs=”0” />

<xs:simpleType name="DeviceDescriptionType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="1024" />

 </xs:restriction>

</xs:simpleType>

#### Remarks

The information that is specified in the **DeviceDescription1** and **DeviceDescription2** elements must be considered discrete informational strings that describe the device. Remember that, under certain contexts, the Devices and Printers UI may append the two strings, whereas in other contexts, the two strings may appear in different panes on the same page.

### **ModelNumber** Element

The **ModelNumber** element specifies the model or part number of the device as defined by the manufacturer. A string of up to 200 printable characters can be used to specify this information.

The model or part number should be a device-neutral number or string. It must be a unique ID of the device in general and not of a single device in particular. Because the model or part number is device-neutral, device-specific IDs—such as serial numbers or other device-specific numbers—should not be used:

<xs:element name=”ModelNumber” type=”tns.GenericNameType” minOccurs=”0” />

<xs:simpleType name="GenericNameType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="200" />

 </xs:restriction>

 </xs:simpleType>

### **Manufacturer** Element

The **Manufacturer** element specifies the name of the device manufacturer. A string of up to 200 printable characters can be used to specify this information:

<xs:element name="Manufacturer" type="tns:GenericNameType" />

<xs:simpleType name="GenericNameType">

 <xs:restriction base="xs:string">

 <xs:minLength value="1" />

 <xs:maxLength value="200" />

 </xs:restriction>

 </xs:simpleType>

### **DeviceIconFile** Element

The **DeviceIconFile** element specifies the name of the device icon file in the device metadata package. This file name must end with a suffix of .*dll* or .*ico*.

This element, along with the device icon file, is optional. However, we highly recommend that the device metadata package contains a device icon file, which is used to display the photo-realistic image of the device in the Devices and Printers UI:

<xs:element name="DeviceIconFile" type="tns:DeviceIconFileType" minOccurs=”0” />

<xs:simpleType name="DeviceIconFileType">

 <xs:restriction base="xs:string">

 <xs:pattern value=".+(\.ico|\.dll,-\d+)" />

 </xs:restriction>

</xs:simpleType>

For more details about the device Icon file, see “[Device Icon File](#_Device_Icon_File)” later in this paper.

## DeviceInfo XML Example

The following XML document uses the DeviceInfo XML schema to specify the attributes of a vendor’s keyboard device:

<DeviceInfo xmls="http://schemas.microsoft.com/windows/DeviceMetadata/DeviceInfo/2007/11/">

 <DeviceCategoryList>

 <DeviceCategory>Input.Keyboard</DeviceCategory>

 </DeviceCategoryList>

 <ModelName>52760</ModelName>

 <DeviceDescription1>This is a beta version of Keyboard</DeviceDescription1>

 <DeviceDescription2>This keyboard supports music buttons and internet buttons</DeviceDescription2>

 <Manufacturer>Microsoft</Manufacturer>

 <Icon>MicrosoftKeyboard.ico</Icon>

</DeviceInfo>

# Device Icon File

A metadata package contains one photo-realistic image, or icon, that represents the device in the Devices and Printers UI. The image is stored in an icon file, and the file name must be specified in the **DeviceIconFile** element of the DeviceInfo XML document.

The Microsoft publication “Icons in Windows Vista Developer Center,” which is listed in “[Resources](#_Resources)” later in this paper provides guidelines for creating icons that have the same display qualities of Windows graphical elements.

# WindowsInfo XML Schema for Beta (Build 7000 and lower)

A metadata package contains one WindowsInfo.xml document, which contains information that the operating system uses to define display actions for the device that is specified in the metadata package.

The data in the PackageInfo.xml document is formatted based on the WindowsInfo XML schema, which is described in this section.

## WindowsInfo XML Schema NameSpace

The following is the namespace for the WindowsInfo XML schema:

**http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/**

## Overview of WindowsInfo XML Elements

The following table shows the metadata elements that are in WindowsInfo.xml.

| **Element** | **Element Type** | **Required/ Optional** | **Description** |
| --- | --- | --- | --- |
| [**ShowDeviceInDisconnectedState**](#_ShowDeviceInDisconnectedState_Eleme) | Boolean | Required | Specifies whether the icon of the device appears when the device is in a disconnected state, such as when the user unplugs or powers down a locally connected device. |
| [**LaunchDXPOnDeviceConnect**](#_LaunchDXPOnDeviceConnect_Element) | Boolean | Optional | Specifies whether a DXP UI appears when the device transitions from a disconnected state to a connected state, such as when the user plugs in the device. |
| [**LaunchDXPFromExplorer**](#_LaunchDXPFromExplorer_Element) | Boolean | Optional | Specifies whether a DXP UI is started when the user double-clicks the device icon that appears either in the Devices and Printers UI or in Windows Explorer. |

## WindowsInfo XML Schema Metadata

The following is the WindowsInfo XML schema metadata for Windows 7 Beta builds 7000 and lower:

<?xml version="1.0" encoding="UTF-8"?>

<xs:schema targetNamespace="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/" xmlns:tns="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/" xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" blockDefault="#all">

 <xs:element name="WindowsInfo" type="tns:WindowsInfoType" />

 <xs:complexType name="WindowsInfoType">

 <xs:sequence>

 <xs:element name="ShowDeviceInDisconnectedState" type="xs:boolean" default="false" />

 <xs:element name="LaunchDXPOnDeviceConnect" type="xs:boolean" default="false" minOccurs="0" />

 <xs:element name="LaunchDXPFromExplorer" type="xs:boolean" default="false" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

</xs:schema>

## WindowsInfo XML Schema Reference

The WindowsInfo XML schema defines the following elements:

* **WindowsInfo**
	+ **ShowDeviceInDisconnectedState**
	+ **LaunchDXPOnDeviceConnect**
	+ **LaunchDXPFromExplorer**

### **ShowDeviceInDisconnectedState** Element

**The ShowDeviceInDisconnectedState** element specifies whether the device icon of the device metadata package appears when the device is in a disconnected state, such as when the user removes the device:

<xs:element name="ShowDeviceInDisconnectedState" type="xs:boolean" default="false" />

#### Remarks

If the value is set to **true** (1), the operating system dims the device icon and label to show that it is unavailable.

### **LaunchDXPOnDeviceConnect** Element

The **LaunchDXPOnDeviceConnect** element specifies whether a DXP UI appears when the device transitions from a disconnected state to a connected state, such as when the user plugs in the device:

<xs:element name="LaunchDXPOnDeviceConnect" type="xs:boolean" default="false" minOccurs="0" />

#### Remarks

If the value is set to **true** (1), the operating system displays the DXP UI when the device transitions from a disconnected to a connected state.

### **LaunchDXPFromExplorer** Element

The **LaunchDXPFromExplorer** element specifies whether a DXP UI appears when the user double-clicks the device icon that appears in either the Devices and Printers UI or in Windows Explorer:

<xs:element name="LaunchDXPFromExplorer" type="xs:boolean" default="false" minOccurs="0" />

#### Remarks

* If the value is set to **true** (1), the operating system displays the DXP UI when the user double-clicks the device icon.
* You can specify this element as **true** only when the metadata package includes DXP documents.

## WindowsInfo XML Example

The following XML document uses the WindowsInfo XML schema to specify the display actions for the device that is specified in a metadata package:

<?xml version="1.0" encoding ="UTF-8" ?>

<WindowsInfo xmlns="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/">

 <ShowDeviceInOfflineState>true</ShowDeviceInOfflineState>

 <LaunchDXPOnDeviceConnect>false</LaunchDXPOnDeviceConnect>

 <LaunchDXPFromExplorer>false</LaunchDXPFromExplorer>

</WindowsInfo>

# WindowsInfo XML Schema for RC (Build 7001 and greater)

A metadata package contains one Windowsinfo.xml document, which contains information that the operating system uses to define display actions for the device specified within the metadata package.

The data within the packageinfo.xml document is formatted based on the WindowsInfo XML schema, which is described in this section.

## WindowsInfo XML Schema NameSpace

The namespace for the WindowsInfo XML schema is:

**http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/**

## Overview of WindowsInfo XML Elements

The following table shows the metadata elements that are in Windowsinfo.xml.

| **Element** | **Element type** | **Required/optional** | **Description** |
| --- | --- | --- | --- |
| [**ShowDeviceInDisconnectedState**](#_ShowDeviceInDisconnectedState_Eleme) | Boolean | Required | Specifies whether the icon of the device appears when the device is in a disconnected state, such as when the user unplugs or powers down a locally connected device. |
| [**LaunchDeviceStageOnDeviceConnect**](#_LaunchDXPOnDeviceConnect_Element) | Boolean | Optional | Specifies whether a Device Stage UI appears whenever the device transitions from a disconnected state to a connected state, such as when the user plugs in the device. |
| [**LaunchDeviceStageFromExplorer**](#_LaunchDXPFromExplorer_Element) | Boolean | Optional | Specifies whether a Device Stage UI starts whenever the user double-clicks the device icon that appears in either the Devices and Printers UI or Windows Explorer. |

## WindowsInfo XML Schema Metadata

The following is the WindowsInfo XML schema metadata:

<?xml version="1.0" encoding="UTF-8"?>

<xs:schema targetNamespace="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/" xmlns:tns="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/" xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" blockDefault="#all">

 <xs:element name="WindowsInfo" type="tns:WindowsInfoType" />

 <xs:complexType name="WindowsInfoType">

 <xs:sequence>

 <xs:element name="ShowDeviceInDisconnectedState" type="xs:boolean" default="false" />

 <xs:element name="LaunchDeviceStageOnDeviceConnect" type="xs:boolean" default="false" minOccurs="0" />

 <xs:element name="LaunchDeviceStageFromExplorer" type="xs:boolean" default="false" minOccurs="0" />

 <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded" />

 </xs:sequence>

 </xs:complexType>

</xs:schema>

## WindowsInfo XML Schema Reference

The WindowsInfo XML schema defines the following elements:

* **WindowsInfo**
	+ **ShowDeviceInDisconnectedState**
	+ **LaunchDeviceStageOnDeviceConnect**
	+ **LaunchDeviceStageFromExplorer**

### **ShowDeviceInDisconnectedState** Element

The **ShowDeviceInDisconnectedState** element specifies whether the device icon of the device metadata package appears whenever the device is in a disconnected state, such as when the user removes the device:

<xs:element name="ShowDeviceInDisconnectedState" type="xs:boolean" default="false" />

#### Remarks

If the value is set to **true** (1), the operating system dims the device icon and label to indicate that the device is unavailable.

### **LaunchDeviceStageOnDeviceConnect** Element

The **LaunchDeviceStageOnDeviceConnect** element specifies whether a Device Stage UI appears whenever the device transitions from a disconnected state to a connected state, such as when the user plugs in the device:

<xs:element name="LaunchDeviceStageOnDeviceConnect" type="xs:boolean" default="false" minOccurs="0" />

#### Remarks

* If the value is set to **true** (1), the operating system displays the Device Stage UI when the device transitions from a disconnected to a connected state.
* For more information about Device Stage, refer to the Windows Device Experience Web page.

### **LaunchDeviceStageFromExplorer** Element

The **LaunchDeviceStageFromExplorer** element specifies whether a Device Stage UI appears whenever the user double-clicks the device icon in either the Devices and Printers UI or Windows Explorer:

<xs:element name="LaunchDeviceStageFromExplorer" type="xs:boolean" default="false" minOccurs="0" />

#### Remarks

* If the value is set to **true** (1), the operating system displays the Device Stage UI when the user double-clicks the device icon.
* You can specify this element as **true** only when the metadata package includes Device Stage documents.
* For more information about Device Stage, refer to the Windows Device Experience Web page.

## WindowsInfo XML Example

The following XML document uses the WindowsInfo XML schema to specify the display actions for the device that is specified within a metadata package:

<?xml version="1.0" encoding ="UTF-8" ?>

<WindowsInfo xmlns="http://schemas.microsoft.com/windows/DeviceMetadata/WindowsInfo/2007/11/">

 <ShowDeviceInOfflineState>true</ShowDeviceInOfflineState>

 <LaunchDeviceStageOnDeviceConnect>false</LaunchDeviceStageOnDeviceConnect>

 <LaunchDeviceStageFromExplorer>false</LaunchDeviceStageFromExplorer>

</WindowsInfo>

# Glossary

cabinet file

A file that stores multiple compressed files in a file library. The cabinet format is an efficient way to package files because compression is performed across file boundaries, which significantly improves the compression ratio.

Device Metadata Store

%programdata%\Microsoft\Windows\DeviceMetadataStore\

The folder to which users or applications copy device metadata packages when they install the packages on the local system.

Device Metadata Cache

%localappdata%\Local\Microsoft\Device Metadata\

The folder that caches the unpacked device metadata package. All unpacked device metadata packages, such as the device metadata packages that are downloaded from WMIS or the device metadata packages that are installed into the Local Device Metadata Store, are saved in this folder.

DMRC

Device Metadata Retrieval Client, which manages the device metadata operation in Windows 7.

WMIS

Windows Metadata Information Server, which serves device metadata packages that partners submit to the Winqual Web site over the Internet.

Winqual

See the link in “[Resources](#_Resources)” later in this paper.

Winqual enables you to qualify hardware devices and software applications for the Microsoft Logo Program. You may then provide information about your products on the Windows Product Listing sites, as well as update your driver distribution settings on Windows Update, retrieve end-user crash data, and submit device metadata packages.

# Resources

### Microsoft

#### Windows Hardware Developer Central:

Windows Device Experience Web page (including white papers)

<http://www.microsoft.com/whdc/device/DeviceExperience/default.mspx>

#### Windows Driver Kit:

Device Identification Strings

http://go.[microsoft](http://go.microsoft.com/fwlink/?LinkId=146573).com/fwlink/?LinkId=146573

Sample Device Metadata Package

A sample device metadata packages is included in the Windows 7 WDK. The sample is located in the *src/general/toaster/devicemetadatapackage* subdirectory of the WDK.

#### MSDN Library:

Icons

<http://go.microsoft.com/fwlink/?LinkId=146574>

Locale Identifier Constants and Strings

<http://go.microsoft.com/fwlink/?LinkId=146575>

#### Windows Logo Program:

Windows Quality Online Services (Winqual)

<https://winqual.microsoft.com/>

#### Technet

Cabarc Overview

<http://technet.microsoft.com/en-us/library/cc781787.aspx>

#### Help and Support

Microsoft Cabinet Software Development Kit

<http://support.microsoft.com/kb/310618>

### Organizations

Bluetooth Device Identification Profile Specification

<http://www.bluetooth.com/NR/rdonlyres/6F5750AC-8A3C-4A45-B8FD-BE5A4AEC921B/6544/DeviceID_SPEC_V13.pdf>

System Management BIOS (SMBIOS) Specification

<http://www.dmtf.org/standards/smbios/>

# Appendix. Device Categories

The following tables list the various device categories that can be specified in the [**DeviceCategory**](#_DeviceCategoryList_Element) element. Each row in the table defines:

* The name of the device category.
* The icon that represents the device category by default in Devices and Printers. If the metadata package contains an icon file for a device of this category, that icon is used instead of the default device icon. For more information, refer to the “[Device Icon File](#_Device_Icon_File)” section.
* Descriptive information about the device category that appears in Devices and Printers.
* Note that this descriptive information is related to the device category and is not related to the information that is specified through the **DeviceDescription1** and **DeviceDescription2** elements. These elements specify the text that appears for the device properties. For more information, refer to the “[**DeviceDescription1** Element](#_DeviceDescription1_Element)” and “[**DeviceDescription2** Element](#_DeviceDescription2_Element)” sections.

#### Audio Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Audio** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2011.png | Audio device | Audio devices |
| **Audio.Adapter** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2001.png | Audio adapter | Audio adapters |
| **Audio.Headphone** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2013.png | Headphone | Headphones |
| **Audio.Microphone** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2014.png | Microphone | Microphones |
| **Audio.Speakerphone** | **mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2018.png** | Speaker phone | Speaker phones |
| **Audio.Speakers** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2015.png | Speakers | Speakers |
| **Audio.Speakers.USB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2015.png | USB speakers | USB speakers |
| **Audio.Speakers.Wireless** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2015.png | Wireless speakers | Wireless speakers |

#### Communications Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Communication** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Communications device | Communications devices |
| **Communication.Headset** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2032.png | Headset | Headsets |
| **Communication.Headset.Bluetooth** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2033.png | Bluetooth headset | Bluetooth headsets |
| **Communication.Phone** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2035.png | Phone | Phones |
| **Communication.Phone.Cell** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2035.png | Cell phone | Cell phones |
| **Communication.Phone.IP** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2035.png | IP phone | IP phones |
| **Communication.Phone.Speaker** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2018.png | Speaker phone | Speaker phone |

#### External Adapters and Hardware Components

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Component** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Adapter | External adapters and hardware components |
| **Component.AudioAdapter** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Audio Adapter | Audio Adapters |
| **Component.Battery** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2143.png | Battery | Batteries and uninterruptable power supplies (UPS) |
| **Component.Bridge** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2374.png | Bridge device | Bridge devices |
| **Component.Bridge.Network** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2374.png | Network bridge | Network bridges |
| **Component.Bridge.Storage** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Storage bridge | Storage bridges |
| **Component.Cable** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Cable | Cables |
| **Component.Cable.Transfer** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Transfer cable | Transfer cables |
| **Component.Cable.Transfer.USB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | USB transfer cable | USB transfer cables |
| **Component.Capture** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Capture device | Capture devices |
| **Component.Capture.Video** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Video capture device | Video capture devices |
| **Component.Controller** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Controller | Controllers |
| **Component.Controller.1394** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | 1394 controller | 1394 controllers |
| **Component.Controller.Bluetooth** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2389.png | Bluetooth adapter | Bluetooth adapters |
| **Component.Controller.CardBus** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | CardBus controller | CardBus controllers |
| **Component.Controller.IR** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2381.png | Infrared receiver | Infrared receivers |
| **Component.Controller.IR.MCE** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2214.png | MCE Infrared receiver | MCE Infrared receivers |
| **Component.Controller.SDH** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Secure Digital Host (SDH) controller | Secure Digital Host (SDH) controllers |
| **Component.Controller.Serial** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Serial port adapter | Serial port adapters |
| **Component.Controller.Storage** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Storage controller | Storage controller |
| **Component.Controller.Storage.IDE** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | IDE controller | IDE controllers |
| **Component.Controller.Storage.iSCSI** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | iSCSI controller | iSCSI controllers |
| **Component.Controller.Storage.Raid** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | RAID controller | RAID controllers |
| **Component.Controller.Storage.SATA** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | SATA controller | SATA controllers |
| **Component.Controller.Storage.SCSI** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | SCSI controller | SCSI controllers |
| **Component.Controller.USB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | USB controller | USB controllers |
| **Component.Controller.WUSB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2389.png | Wireless USB adapter | Wireless USB adapters |
| **Component.GraphicsCard** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Graphics card | Graphics cards |
| **Component.Hub** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2169.png | Hub | Hubs |
| **Component.Hub.1394** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2169.png | 1394 hub | 1394 hubs |
| **Component.Hub.USB** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2169.png | USB hub | USB hubs |
| **Component.KVM** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | KVM switch | KVM switches |
| **Component.NIC** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Network adapter | Network adapters |
| **Component.SmartCardReader** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2174.png | Smart card reader | Smart card readers |
| **Component.System** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | System component | System components |
| **Component.System.Board** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | System board | System boards |
| **Component.System.Memory** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | System memory | System memory |
| **Component.System.Processor** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | System processor | System processors |
| **Component.Tuner** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Tuner | Tuners |
| **Component.Tuner.Radio** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Radio tuner | Radio tuners |
| **Component.Tuner.TV** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.ATSC** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.DCB-S** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.DVB-C** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.DVB-T** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.ISDB-T** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.NTSC** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.NTSCMJ** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.OpenCable** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.PAL** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.Proprietry** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.QAM** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |
| **Component.Tuner.TV.SECAM** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | TV tuner | TV tuners |

#### Computers

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Computer** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Computer | Computers |
| **Computer.AllInOne** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | All-in-one computer | All-in-one computers |
| **Computer.Desktop** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Desktop computer | Desktop computers |
| **Computer.Desktop.LowProfile** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Desktop computer | Desktop computers |
| **Computer.Desktop.Pizzabox** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Desktop computer | Desktop computers |
| **Computer.Handheld** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2066.png | Handheld computer | Handheld computers |
| **Computer.Handheld.Windows** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2067.png | Windows handheld computer | Windows handheld computers |
| **Computer.Laptop** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2068.png | Laptop computer | Laptop computers |
| **Computer.Lunchbox** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2068.png | Lunchbox computer | Lunchbox computers |
| **Computer.Netbook** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2068.png | Netbook computer | Netbook computers |
| **Computer.Notebook** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2068.png | Notebook computer | Notebook computers |
| **Computer.Notebook.Sub** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2068.png | Subnotebook computer | Subnotebook computers |
| **Computer.Portable** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2068.png | Portable computer | Portable computers |
| **Computer.Rackmount** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Rack-mount computer | Rack-mount computers |
| **Computer.Sealed** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Sealed-case computer | Sealed-case computers |
| **Computer.Server** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2076.png | Server | Servers |
| **Computer.SpaceSaving** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Space-saving computer | Space-saving computers |
| **Computer.Tablet** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2078.png | Tablet PC | Tablet PCs |
| **Computer.ThinClient** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2061.png | Thin client computer | Thin client computers |
| **Computer.Tower** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2061.png | Tower computer | Tower computers |
| **Computer.Tower.Mini** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2061.png | Mini-tower computer | Mini-tower computers |

#### Displays and Projectors

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Display** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2102.png | Display | Displays |
| **Display.Monitor** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2102.png | Monitor | Monitors |
| **Display.Monitor.CRT** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2102.png | CRT monitor | CRT monitors |
| **Display.Monitor.LCD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2102.png | LCD monitor | LCD monitors |
| **Display.Monitor.Plasma** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2102.png | Plasma display | Plasma displays |
| **Display.PictureFrame** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2106.png | Picture frame | Picture frames |
| **Display.Projector** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2107.png | Projector | Projectors |
| **Display.SideShow** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2108.png | SideShow device | SideShow devices |
| **Display.TV** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2109.png | Television | Televisions |
| **Display.TV.CRT** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2109.png | Television | Televisions |
| **Display.TV.DLP** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2109.png | Television | Televisions |
| **Display.TV.LCD** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2109.png | Television | Televisions |
| **Display.TV.Plasma** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2109.png | Television | Televisions |

#### Healthcare Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Health** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2241.png | Healthcare device | Healthcare devices |
| **Health.BloodGlucose** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2241.png | Blood glucose meter | Blood glucose meters |
| **Health.BloodPressure** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2241.png | Blood pressure meter | Blood pressure meters |
| **Health.HeartRate** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2241.png | Heart-rate monitor | Heart-rate monitors |
| **Health.Pedometer** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2241.png | Pedometer | Pedometers |

#### Keyboards, Mice, and Other Input Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Input** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2201.png | Input device | Keyboards, mice and other input devices |
| **Input.Digitizer** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2202.png | Digitizer | Tablets and digitizers |
| **Input.Digitizer.Multitouch** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2202.png | Multitouch input device | Multitouch input devices |
| **Input.Digitizer.Pen** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2202.png | Pen | Pens |
| **Input.Digitizer.Touchpad** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2202.png | Touch pad | Touch pads |
| **Input.Digitizer.Touchscreen** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2078.png | Touch screen | Touch screens |
| **Input.Gaming** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Game controller | Game controllers |
| **Input.Gaming.Common** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Game controller | Game controllers |
| **Input.Gaming.Controller** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Game controller | Game controllers |
| **Input.Gaming.Gamepad** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Game controller | Game controllers |
| **Input.Gaming.Generic** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Game controller | Game controllers |
| **Input.Gaming.Steering** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2207.png | Steering wheel | Steering wheels |
| **Input.Keyboard** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2210.png | Keyboard | Keyboards |
| **Input.KVM** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2201.png | KVM switch | KVM switches |
| **Input.Mouse** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2212.png | Mouse | Mice |
| **Input.Remote** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2214.png | Remote control | Remote controls |
| **Input.Remote.MCE** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2214.png | Remote control | Remote controls |
| **Input.Trackball** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2201.png | Trackball | Trackballs |

#### Media Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Media** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2511.png | Media | Media |
| **Media.SmartCard** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2302.png | Smart-card | Smart-cards |
| **Media.Storage** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2511.png | Storage media | Storage media |
| **Media.Storage.Flash** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2526.png | Flash memory | Flash memory |
| **Media.Storage.Flash.CompactFlash** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2305.png | Compact Flash card | Compact Flash cards |
| **Media.Storage.Flash.MemoryStick** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2526.png | Memory Stick | Memory Sticks |
| **Media.Storage.Flash.SD** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2307.png | SD card | SD cards |
| **Media.Storage.Optical** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2308.png | Optical disc | Optical discs |
| **Media.Storage.Optical.BluRay** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2308.png | Blu-Ray disc | Blu-Ray disc |
| **Media.Storage.Optical.CD** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2308.png | CD | CDs |
| **Media.Storage.Optical.DVD** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2308.png | DVD | DVDs |

#### Media and Entertainment Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Multimedia** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2356.png | Entertainment device | Media and entertainment devices |
| **Multimedia.DMC** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2214.png | Digital media controller | Digital media controllers |
| **Multimedia.DMP** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2354.png | Digital media player | Digital media players |
| **Multimedia.DMR** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2354.png | Digital media renderer | Digital media renderers |
| **Multimedia.DMR.MCE** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2354.png | Digital media renderer | Digital media renderers |
| **Multimedia.DMS** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2356.png | Digital media server | Digital media servers |
| **Multimedia.DVR** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2357.png | Digital video recorder | Digital video recorders |
| **Multimedia.GameConsole** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2358.png | Game console | Game consoles |
| **Multimedia.PMP** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2359.png | Portable Media Player | Portable Media Players |
| **Multimedia.VoiceRecorder** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2066.png | Voice recorder | Voice recorders |

#### Network Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Network** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2371.png | Network infrastructure device | Routers, access points and other network devices |
| **Network.AccessPoint** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2372.png | Network access point | Network access points |
| **Network.Bluetooth** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2389.png | Bluetooth radio | Bluetooth dongles and adapter cards |
| **Network.Bridge** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2374.png | Network bridge | Network bridges |
| **Network.Bridge.Wifi2Ether** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2374.png | Wireless to Ethernet bridge | Wireless to Ethernet bridges |
| **Network.HomeAutomation** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2376.png | Home automation controller | Home automation controllers |
| **Network.MobileBroadband** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Mobile broadband adapter | Mobile broadband adapters |
| **Network.Modem** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2378.png | Modem | Modems |
| **Network.NIC** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2383.png | Network adapter | Network adapters |
| **Network.NIC.Ethernet** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2383.png | Ethernet adapter | Ethernet adapters |
| **Network.NIC.IR** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2381.png | Infrared network adapter | Infrared network adapters |
| **Network.NIC.PLC** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2383.png | Power-line network adapter | Power-line network adapters |
| **Network.NIC.Wireless** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2383.png | Wireless network adapter | Wireless network adapters |
| **Network.PrintServer** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2371.png | Print server | Print servers |
| **Network.Router** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2371.png | Network router | Network routers |
| **Network.Router.Wireless** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2372.png | Wireless network router | Wireless network routers |
| **Network.Switch** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2371.png | Network switch | Network switches |
| **Network.UWB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2389.png | Ultra wideband radio | Ultra wideband radios |
| **Network.WUSB** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2389.png | Wireless USB radio | Wireless USB radios |
| **Network.WUSB.DWA** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2389.png | Wireless USB radio | Wireless USB radios |

#### Personal identity devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **PersonalIdentity** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2434.png | Personal identity device | Personal identity devices |
| **PersonalIdentity.FaceScanner** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2433.png | Face scanner | Face scanners |
| **PersonalIdentity.FingerprintReader** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2434.png | Fingerprint scanner | Fingerprint scanners |
| **PersonalIdentity.RetinalScanner** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2435.png | Retinal scanner | Retinal scanners |
| **PersonalIdentity.Smartcard** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2302.png | Smart card | Smart cards |
| **PersonalIdentity.SmartcardReader** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2174.png | Smart card reader | Smart card reader |

#### Printers and Faxes

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **PrintFax** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2414.png | Printer | Printers and faxes |
| **PrintFax.FAX** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2412.png | Fax | Fax machines |
| **PrintFax.MFP** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2413.png | Multi function printer | Multi function printers |
| **PrintFax.Printer** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2414.png | Printer | Printers |
| **PrintFax.Printer.Inkjet** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2414.png | Printer | Printers |
| **PrintFax.Printer.Laser** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2414.png | Printer | Printers |

#### Sensors

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Sensor** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2431.png | Sensor | Sensors |
| **Sensor.Electrical** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2436.png | Electrical sensor | Electrical sensors |
| **Sensor.Enviromental** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2431.png | Sensor | Sensors |
| **Sensor.Enviromental.Temp** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2431.png | Sensor | Sensors |
| **Sensor.Light** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2439.png | Light sensor | Light sensors |
| **Sensor.Location** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2440.png | Location sensor | Location sensors |
| **Sensor.Location.GPS** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2441.png | GPS | Location sensors |
| **Sensor.Mechanical** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2442.png | Mechanical sensor | Mechanical sensors |
| **Sensor.Motion** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2443.png | Motion sensor | Motion sensors |
| **Sensor.Orientation** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2444.png | Orientation sensor | Orientation sensors |
| **Sensor.Proximity** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2445.png | Proximity sensor | Proximity sensors |
| **Sensor.Proximity.NFC** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2446.png | NFC sensor | NFC sensors |
| **Sensor.Proximity.RFID** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2447.png | RFID sensor | RFID sensors |

#### Storage Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Storage** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2511.png | Storage device | Storage devices |
| **Storage.CardReader** | mhtml:file://C:\Users\mitsurus.NTDEV\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\OXQZ36ME\Device%20Categories.mht!http://localhost:55873/Images/48/-2512.png | Card reader | Card readers |
| **Storage.CardReader.Combo** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2512.png | Combination card reader | Combination card readers |
| **Storage.Changer** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Storage media changer | Storage media changers |
| **Storage.Changer.Optical** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Optical storage media changer | Optical storage media changers |
| **Storage.FDD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2516.png | Floppy disk drive | Floppy disk drives |
| **Storage.HDD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2511.png | Hard disk drive | Hard disk drives |
| **Storage.HDD.SolidState** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2511.png | Solid state drive | Solid state drives |
| **Storage.Network** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2519.png | Network storage device | Network attached storage devices |
| **Storage.Network.Wireless** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2519.png | Wireless storage device | Wireless storage devices |
| **Storage.Optical** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2521.png | Optical drive | Optical drives |
| **Storage.Optical.Bluray** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2522.png | Blu-ray drive | Blu-ray drives |
| **Storage.Optical.CD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2521.png | CD drive | CD drives |
| **Storage.Optical.DVD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2524.png | DVD drive | DVD drives |
| **Storage.Tape** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2525.png | Tape drive | Tape drives |
| **Storage.UFD** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2526.png | USB flash drive | USB flash drives |

#### Video and Imaging Devices

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Imaging** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2551.png | Imaging device | Video and imaging devices |
| **Imaging.Camcorder** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2552.png | Camcorder | Camcorders |
| **Imaging.Camera** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2553.png | Camera | Cameras |
| **Imaging.Scanner** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2554.png | Scanner | Scanners |
| **Imaging.Webcam** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2555.png | Webcam | Webcams |

#### Unclassified Device Types

|  |  |  |  |
| --- | --- | --- | --- |
| Device category | Default device icon | Singular description | Plural description |
| **Other** | mhtml:file://\\wdegshare\users\mitsurus\Device%20Center%20Kit\December\Device%20Categories.mht!http://deviceteam/categories/Images/48/-2001.png | Other | Other |