Dell Support Services API

Version 2.0
Dell Asset and Warranty Services



Copyright

© 2012 Dell Inc. All rights reserved. Dell and its affiliates cannot be responsible for errors or omissions in typography or photography. Dell and the Dell logo are trademarks of Dell Inc. Microsoft, Windows, and the Windows logo are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. Intel and Xeon are registered trademarks of Intel Corporation in the U.S. and other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others.

January 2012 | Rev 2.0



Contents

Introduction	5
URIs	5
Operations	6
Parameters	6
Response Formats	6
Data Model	7
ReturnType Class	8
Properties	8
Response Format	12
API Operations	15
GetAssetHeaders	15
Request Headers	15
Request Parameters	15
Response Parameters	16
Errors-GetAssetHeader	18
Sample	18
GetAssetWarranty	22
Request Headers	22
Request Parameters	22
Response Parameters	23
Errors-GetAssetWarranty	25
Sample	26
GetAssetDetail	32
Request Headers	32
Request Parameters	32
Response Parameters	33
Errors-GetAssetDetail	35
Sample	36
GetCodeMapping	41
Request Headers	41
Request Parameters	41
Response Parameters	42
Errors-GetCodeMapping	43
Sample	43
Duplicate Service Tags	47
FΔOs	48





Introduction

Dell Support Services APIs are a set of Web Services developed to support programmatic interaction with Dell for checking Asset details and Warranty information.

Dell Support Services APIs - Asset and Warranty Services is the Solution for on-premise and SaaS based systems management applications to access Dell maintained asset information.

The Service is designed to return two types of information about assets.

- Original system configuration, including the list of parts
- Warranty entitlements for 1 to 100 assets

URIs

The base URI for all Dell Support Services APIs is https://api.dell.com and the test URI is https://sandbox.api.dell.com

The detailed URI for live server is:

https://api.dell.com/support/v2/assetinfo/{method}/tags{.xml or .json}?svctags={svctags}&apikey={apikey}

The detailed URI for sandbox server is:

https://sandbox.api.dell.com/support/v2/assetinfo/{method}/tags{.xml or .json}?svctags={svctags}&apikey={apikey}

General Format

https://{baseurl}/support/v2/assetinfo/{method}/tags{.xml or .json}?svctags={svctags}&apikey={apikey}, where,

- /support/v2/assetinfo/ represents naming convention in the path of the URI that matches the asset API families that Dell has disclosed.
- {method} represents the specific asset or warranty operation.
- {.xml or .json} represents an option for selecting the response format.
- apikey={apikey} represents the unique api key to securely access the API.



Operations

Dell Support Services - Asset and Warranty APIs confirms to Representational State Transfer (REST) format. They are read-only services, accepting only the GET keyword.

Keyword	Operations	URI
GET	GetAssetHeaders	https://{baseurl}/support/v2/assetinfo/header/tags{.xml or .json}?svctags={up to 100 delimited service} tags as a string}&apikey={apikey}
GET	GetAssetDetail	https://{baseurl}/support/v2/assetinfo/detail/tags{.xml or .json}?svctags={single service tag}&apikey={apikey}
GET	GetAssetWarranty	https://{baseurl}/support/v2/assetinfo/warranty/tags{.xml or .json}?svctags={up to 100 delimited service tags as a string}&apikey={apikey}
GET	GetCodeMappingB yType	https://{baseurl}/support/v2/assetinfo/codemapping/ctype{ .xml or .json}?ctype={ctype}&apikey={apikey}

Parameters

The table describes the parameters used by the API. The parameters apply primarily to the Support Services API.

Name	Description	Asset Specific	Mandatory	Placement	Values	Sample
svcTags	List of service tags	Yes	Yes, on asset methods	QueryString	separates the list of service tags	?svcTags=9HX123 8VG456
apiKey	Key to use API	No	Yes	QueryString	Valid API key	&apikey=2e66d1 6c-23fd-4dce- ad97- 39853a4259aa

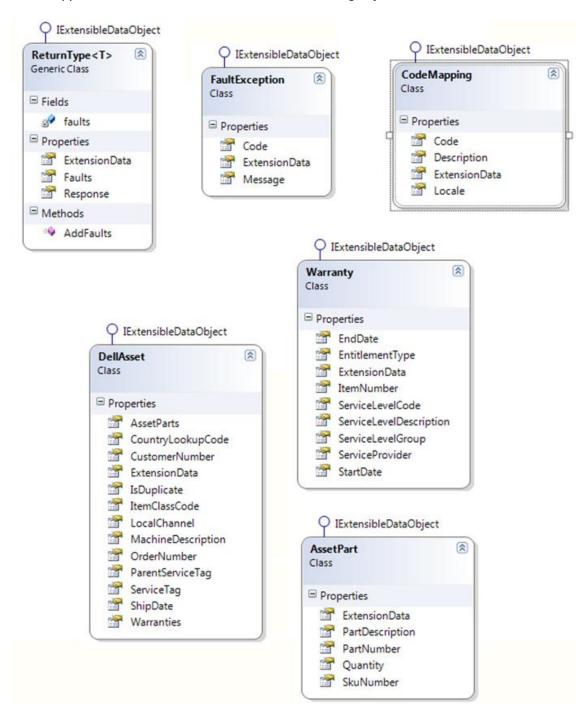
Response Formats

In R2.0, the data is returned in (Plain Old XML) and JSON (Java Script Object Notation) formats. The format can be requested as part of the URI request header.



Data Model

The Dell Support Services data model contains the following objects:





ReturnType Class

The ReturnType is a generic name given for the main object that returns Asset information, Warranty information, or Code Mapping information. The actual name for the ReturnType depends on the requested operation. For example, the returned name for the operation GetAssetHeaders is GetAssetHeadersResponse.

Properties

The following properties are included:

- ExtensionData Allows expansion of the object when versioning.
- Faults Collection of error codes.
- Response
 - Collection of Dell Assets
 - Collection of Code Mapping

Faults Property

The Faults property contains an object to return series of faults for exceptions or errors. Specific types of faults include:

- Service failures or timeouts Issues with the service returning data.
- Faults affecting all response objects

For example, throttling exception or while requesting redundant data at one time.

Individual faults for response objects

For example, cannot find a specific service tag.

For more information, refer to the Errors-GetAssetHeader, Errors-GetAssetWarranty, Errors-GetAssetDetail, and Errors-GetCodeMapping sections under individual operations.

High level exceptions are also generated to indicate general failures. The table provides the exception code and the related description.

Exception Code	Description
40102	Failed to Authenticate User
40122	Service Profile Throttle Limit Reached



Sample exception (POX Format)

```
- <Fault xmlns="http:/api.dell.com/faults">
<Code>eAPI-40102</Code>
<Url>http://developer.dell.com/faults#eAPI-40102</Url>
<Message>Failed to Authenticate User</Message>
<Reason>User Identification failed in Key Management Service</Reason>
<Source>KMS</Source>
<StackTrace />
</Fault>
```

Response Property

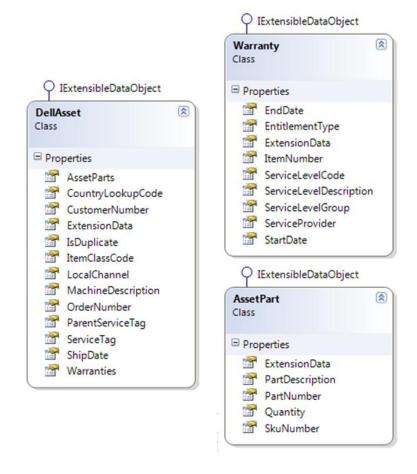
The response property has the following objects:

- DellAsset The parent class returned in response to GetAssetHeaders, GetAssetWarranty, and GetAssetDetails operations.
 - AssetPart A single asset that returns a collection of parts in the Dell system to the AssetParts property in the DellAsset object.
 - Warranty A single warranty that returns a collection of warranties in the Dell systems to the Warranties property in the DellAsset object.
- CodeMapping The parent class returned in response to GetCodeMapping operation.



DellAsset Class

The class contains the original "as-shipped" system configuration of an asset.



Properties

- AssetParts Collection of asset parts.
- CountryLookupCode Code of the country the asset was shipped to.

Note: This field can be used to look up a country with the code mapping service.

- CustomerNumber Dell customer number.
- ExtensionData Allows expansion of the object when versioning.
- IsDuplicate Indicates whether a particular asset originally had a duplicate service tag.
- ItemClassCode Code that indicates the type of asset.

Note: This field can be used to look up the asset type description with the code mapping service.

- LocalChannel Used to identify the customer segment for the asset. For example, Consumer, Small to Medium Business (SMB), Large Enterprise (LE), and Public.
- MachineDescription English only description of the asset.
- OrderNumber The order number under which the asset was procured.



ParentServiceTag — Original service tag associated with the asset.

Note: The data is found only when Is Duplicate is true.

- ServiceTag Service tag for the present asset.
- ShipDate Date the asset was shipped.
- Warranties Collection of warranties

AssetPart Class

The class contains the individual parts included in the asset that is shipped to the customer.

Properties

- PartNumber Part Number
- PartDescription Description of the part.
- Quantity Quantity of the present part in the asset.
- SKUNumber Stock Keeping Unit (SKU) number for the part.

Warranty Class

The class contains the warranty information for the asset.

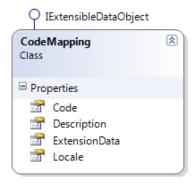
Properties

- EndDate Date when the warranty ends.
- EntitlementType Type of warranty. For example, INITIAL and EXTENDED.
- ItemNumber Dell item number for this type of warranty (similar to a SKU number)
- ServiceLevelCode Code for the type of warranty.
- ServiceLevelDescription English only description of the type of warranty.
- ServiceLevelGroup Identifies the type of Service. For example: ProSupport and Next Business Day.
- ServiceProvider Provider for warranty service and fulfillment.
- StartDate Date when the warranty begins.



CodeMapping Class

Code mapping is a collection listing the country code with the name of the country.



Properties

- Code Code returned from the service.
- Description Mapped value.
- ExtensionData Allows expansion of the object when versioning.
- Locale Used for localization

Note: Localization is slated for a later release (will always be 'US' in R2.0)

Response Format

In R2.0, the data is returned in POX and JSON formats. The format can be requested as part of the URI request header.

https://{baseurl}/support/v2/assetinfo/warranty/tags{.xml or .json}?svctags={svctags}&apikey={apikey}

Sample XML format

https://api.dell.com/support/v2/assetinfo/warranty/tags.xml?svctags={svctags}&apikey={apikey}

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetHeadersResponse xmlns="http://tempuri.org/">
  <GetAssetHeadersResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults/>
    <a:Response>
      <a:DellAsset>
```



```
<a:AssetParts i:nil="true"/>
        <a:CountryLookupCode>11</a:CountryLookupCode>
        <a:CustomerNumber>656</a:CustomerNumber>
        <a:IsDuplicate>false</a:IsDuplicate>
        <a:ItemClassCode>`0008</a:ItemClassCode>
        <a:LocalChannel>08</a:LocalChannel>
<a:MachineDescription>LatE6500, T9800, CPEN, Maybach</a:MachineDescription>
        <a:OrderNumber>0</a:OrderNumber>
        <a:ParentServiceTag i:nil="true"/>
        <a:ServiceTag>STE0382</a:ServiceTag>
        <a:ShipDate>2008-08-01T00:00:00</a:ShipDate>
        <a:Warranties i:nil="true"/>
      </a:DellAsset>
    </a:Response>
  </GetAssetHeadersResult>
</GetAssetHeadersResponse>
Sample JSON format
https://{baseurl}/support/v2/assetinfo/warranty/tags.json}?svctags={svctags}&apikey={apikey}
   "GetAssetHeadersResponse":{
      "@xmlns": "http:\/\/tempuri.org\/",
      "GetAssetHeadersResult":{
"@a":"http:\/\/schemas.datacontract.org\/2004\/07\/Dell.AWR.Domain.Asset",
         "@i":"http:\/\/www.w3.org\/2001\/XMLSchema-instance",
         "Faults":null,
         "Response": {
```



```
"DellAsset":{
            "AssetParts":{
               "@nil":"true"
            } ,
            "CountryLookupCode":7465,
            "CustomerNumber":770265037,
            "IsDuplicate": "false",
            "ItemClassCode": "^#010",
            "LocalChannel":30163,
            "MachineDescription": "LatE6500, T9800, CPEN, Maybach",
            "OrderNumber":7700013740,
            "ParentServiceTag":{
               "@nil":"true"
            },
            "ServiceTag": "2SQS3BS",
            "ShipDate": "2009-08-17T14:00:00",
            "Warranties":{
               "@nil":"true"
            }
      }
   }
}
```



API Operations

GetAssetHeaders

The GetAssetHeaders operation can be performed on either a single service tag or multiple service tags (up to a maximum of 100) to retrieve the asset information. This operation only provides a summary of asset details.

Request Headers

The following section lists the header format for the URI and samples for usage:

Header	Mandatory
Content-Type: application/xml	Υ
GET support/v2/assetinfo/header/tags.xml?svctags=a1b2c3d HTTP/1.1	N
Host: api.dell.com	N
Accept: text/xml	N
Date: Wed, 15 Fe 2011 18:07:24 GMT	N
apikey: a0753a615f7c578f67daf5c318595e0b	N (if used in the request parameters)

Request Parameters

Query Parameter	Description	Mandatory	Possible Values
svctags	Single or Multiple Service tags Note: Each tag must be separated by " ".	Y	1A2B3C4



Response Parameters

The returned Asset summary data information is shown in the table.

The namespaces mentioned in the table can be found in the following locations:

- ns1 http://tempuri.org/
- ns2 http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset

Level	Query Parameter	Description	Data Type	Possible Values
1	ns1:GetAssetHeadersResponse	Root Element of the response	-	-
2	ns1:GetAssetHeadersResult	Wraps the Success and Failure responses within	-	-
3	ns1:Faults	Array of FaultException elements Note: This is null in case of no exceptions.	-	-
4	ns1:FaultException	Group to identify a single faulting reason	-	-
5	ns1:Code	Fault Code	char	See Errors
5	ns1:Message	Fault Message	char	See Errors
3	ns2:Response	Array of DellAsset elements	-	-
4	ns2:DellAsset	Contains information for a single Asset	-	-
5	ns2:AssetParts	Array of AssetPart elements	-	NIL
5	ns2:CountryLookupCode	Code mapped to every country	char (0-20)	0
5	ns2:CustomerNumber	Dell Customer identification number	int (64 bit)	1234567
5	ns2:IsDuplicate	Indicates if the	Boolea	true/false



		service tag is duplicated. This is true on an asset that is assigned a new service tag.	n	
5	ns2:ItemClassCode	Code mapped to a machine description	char (0-20)	002
5	ns2:LocalChannel	Code mapped to a customer segment.	char (0-20)	28
5	ns2:MachineDescription	Description of the Dell asset.	char (0-200)	PWS M4400,T9600,CPEN, AVIA N
5	ns2:OrderNumber	Order Identification Number under which the asset was purchased.	int (64- bit)	123456789
5	ns2:ParentServiceTag	This contains the old service tag. Exists when an asset has a duplicated service tag, else the value is null.	char (0-20)	1A2B3C4
5	ns2:ServiceTag	What is a service tag?	char (0-20)	1A2B3C4
5	ns2:ShipDate	Date when the asset was shipped to the customer.	date- time	2008-08- 01T00:00:00
5	ns2:Warranties	Array of warranty elements.	-	NIL



Errors-GetAssetHeader

The table includes the error code and description for GetAssetHeader operation.

Error Code	Description
400	Missing API Key
401	Invalid API Key / API Key not found
403	Access Denied / Rate Limit Exceeded
500	Invalid URI / Internal Server Error / Request count exceeded maximum permissible limit / Missing version number / REST Verb not valid
4001	The number of tags that returned no data exceeded the maximum percentage of incorrect tags. / The tag you sent is not present. Check your separator character and ensure it is .
4002	The code mapping requested is invalid.
4003	Service Tag a1b2c3d does not exist in our records.

Sample

The sample includes the request and the response. The returned data is in POX and JSON format. The given sample shows an error code 4001 on the requested tags.

Sample Request

Single Service Tag:

https://api.dell.com/support/v2/assetinfo/header/tags.xml?svctags=ste0382}&apikey=2e66d16c-23fd-4dce-ad97-39853a4259aa

Multiple Service Tags:

https://api.dell.com/support/v2/assetinfo/header/tags.xml?svctags=ste0382|ste0383|ste0384}&api key=2e66d16c-23fd-4dce-ad97-39853a4259aa



Sample Response

Note: The samples given are for single service tag.

XML Format

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetHeadersResponse xmlns="http://tempuri.org/">
 <GetAssetHeadersResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults/>
    <a:Response>
      <a:DellAsset>
        <a:AssetParts i:nil="true"/>
        <a:CountryLookupCode>11</a:CountryLookupCode>
        <a:CustomerNumber>656</a:CustomerNumber>
        <a:IsDuplicate>false</a:IsDuplicate>
        <a:ItemClassCode>`0008</a:ItemClassCode>
        <a:LocalChannel>08</a:LocalChannel>
        <a:MachineDescription>LatE6500, T9800, CPEN, Maybach</a:MachineDescript
        ion>
        <a:OrderNumber>0</a:OrderNumber>
        <a:ParentServiceTag i:nil="true"/>
        <a:ServiceTag>STE0382</a:ServiceTag>
        <a:ShipDate>2008-08-01T00:00:00</a:ShipDate>
        <a:Warranties i:nil="true"/>
      </a:DellAsset>
    </a:Response>
  </GetAssetHeadersResult>
</GetAssetHeadersResponse>
```



JSON Format

```
"GetAssetHeadersResponse":{
      "@xmlns": "http:\/\/tempuri.org\/",
      "GetAssetHeadersResult":{
"@a": "http:\/\/schemas.datacontract.org\/2004\/07\/Dell.AWR.Domain.Asset",
         "@i":"http:\/\/www.w3.org\/2001\/XMLSchema-instance",
         "Faults":null,
         "Response": {
            "DellAsset":{
               "AssetParts":{
                  "@nil":"true"
               },
               "CountryLookupCode":7465,
               "CustomerNumber":770265037,
               "IsDuplicate":"false",
               "ItemClassCode": "^#010",
               "LocalChannel":30163,
               "MachineDescription": "LatE6500, T9800, CPEN, Maybach",
               "OrderNumber":7700013740,
               "ParentServiceTag":{
                  "@nil":"true"
               } ,
               "ServiceTag": "2SQS3BS",
               "ShipDate": "2009-08-17T14:00:00",
               "Warranties":{
```



```
"@nil":"true"
              }
           }
Sample Error
<?xml version="1.0" encoding="utf-8"?>
<GetAssetHeadersResponse xmlns="http://tempuri.org/">
  <GetAssetHeadersResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults>
      <a:FaultException>
        <a:Code>4001</a:Code>
        <a:Message>The tag you sent is not present. Check your separator
character and ensure it is |. </a:Message>
      </a:FaultException>
    </a:Faults>
    <a:Response/>
  </GetAssetHeadersResult>
</GetAssetHeadersResponse>
```



GetAssetWarranty

The GetAssetWarranty operation can be performed on a single service tag or multiple service tags (up to a maximum of 100) to retrieve warranty information.

Request Headers

The following section lists the header format for the URI and samples for usage:

Header	Mandatory
Content-Type: application/xml	Υ
GET support/v2/assetinfo/warranty/tags.xml?svctags=a1b2c3d HTTP/1.1	N
Host: api.dell.com	N
Accept: text/xml	N
Date: Wed, 15 Feb 2011 18:07:24 GMT	N
apikey: a0753a615f7c578f67daf5c318595e0b	N (if used in the request parameters)

Request Parameters

Query Parameter	Description	Mandatory	Possible Values
svctags	Single or Multiple Service Tags Note: Each tag must be separated by " ".	Υ	1A2B3C4



Response Parameters

The returned Asset summary and warranty data is shown in the table.

The namespaces mentioned in the table can be found in the following locations:

- ns1 <u>http://tempuri.org/</u>
- ns2 http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset

Level	Query Parameter	Description	Data Type	Possible Values
1	ns1:GetAssetHeadersResponse	Root Element of the response	-	-
2	ns1:GetAssetHeadersResult	Wraps the Success and Failure responses within	-	-
3	ns1:Faults	Array of FaultException elements. It is null in case of no exceptions.	-	-
4	ns1:FaultException	Group to identify a single faulting reason.	-	-
5	ns1:Code	Fault Code	char	See Errors
5	ns1:Message	Fault Message	char	See Errors
3	ns2:Response	Array of DellAsset elements	-	-
4	ns2:DellAsset	Contains information for a single asset	-	-
5	ns2:AssetParts	Array of AssetPart elements	-	NIL
5	ns2:CountryLookupCode	Code mapped to every country	char (0- 20)	0
5	ns2:CustomerNumber	Dell Customer identification number	int (64 bit)	1234567
5	ns2:IsDuplicate	Indicates if the service tag is duplicated. This is true on an asset that	boolean	true/false



		is assigned a new service tag.		
5	ns2:ItemClassCode	Code mapped to a machine description.	char (0- 20)	002
5	ns2:LocalChannel	Code mapped to a customer segment.	char (0- 20)	28
5	ns2:MachineDescription	Description of the Dell asset.	char (0- 200)	PWS M4400,T9600,C PEN,AVIA N
5	ns2:OrderNumber	Order Identification Number under which the asset was purchased.	int (64- bit)	123456789
5	ns2:ParentServiceTag	This contains the old service tag. Exists when an asset has a duplicated service tag, else the value is null.	char (0- 20)	1A2B3C4
5	ns2:ServiceTag	What is a service tag?	char (0- 20)	1A2B3C4
5	ns2:ShipDate	Date when the asset was shipped to customer	date-time	2008-08- 01T00:00:00
5	ns2:Warranties	Array of warranty elements	-	-
6	ns2:Warranty	Contains information for a single warranty entity.	-	-
7	ns2:EndDate	End date for the warranty	date-time	2011-02- 23T00:00:00
7	ns2:EntitlementType	Entitlement type for the warranty.	char (0- 20)	INITIAL
7	ns2:ItemNumber	Warranty type identification key.	char (0- 25)	123-1234
7	ns2:ServiceLevelCode	Code mapped to the warranty's service level.	char (2)	ND
7	ns2:ServiceLevelDescription	Description of the warranty's service	char (0- 200)	Next Day OnSite



		level.		
7	ns2:ServiceLevelGroup	Group of the warranty's service level.	int (64- bit)	5
7	ns2:ServiceProvider	Code mapped to the service provider name.	char (3)	UNY
7	ns2:StartDate	Start date for the warranty.	date-time	2010-01- 23T00:00:00

Errors-GetAssetWarranty

Error Code	Error Description
400	Missing API Key
401	Invalid API Key / API Key not found
403	Access Denied / Rate Limit Exceeded
500	Invalid URI / Internal Server Error / Request count exceeded maximum permissible limit / Missing version number / REST Verb not valid
4001	The number of tags that returned no data exceeded the maximum percentage of incorrect tags. / The tag you sent is not present. Check your separator character and ensure it is .
4002	The code mapping requested is invalid.
4003	Service Tag a1b2c3d does not exist in our records.



Sample

The sample includes the sample request and the sample response. The returned data is in POX or JSON format. The given sample shows an error code 4001 on the requested tags.

Sample Request

Single Service Tag:

https://api.dell.com/support/v2/assetinfo/warranty/tags.xml?svctags=ste0382&apikey=2e66d16c-23fd-4dce-ad97-39853a4259aa

Multiple Service Tag:

https://api.dell.com/support/v2/assetinfo/warranty/tags.xml?svctags=ste0382|ste0383&apikey=2e 66d16c-23fd-4dce-ad97-39853a4259aa

Sample Response

NOTE: The samples given are for single service tag.

XML Format

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetWarrantyResponse xmlns="http://tempuri.org/">
  <GetAssetWarrantyResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
                        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults />
   <a:Response>
      <a:DellAsset>
        <a:AssetParts i:nil="true" />
        <a:CountryLookupCode>1234</a:CountryLookupCode>
        <a:CustomerNumber>1234567</a:CustomerNumber>
        <a:IsDuplicate>false</a:IsDuplicate>
        <a:ItemClassCode>^#001</a:ItemClassCode>
        <a:LocalChannel>30233</a:LocalChannel>
```



```
<a:MachineDescription>LatE6500,T9800,CPEN,Maybach</a:MachineDescript
        ion>
        <a:OrderNumber>1113740</a:OrderNumber>
        <a:ParentServiceTag i:nil="true" />
        <a:ServiceTag>1S2S3S4</a:ServiceTag>
        <a:ShipDate>2009-08-17T14:00:00</a:ShipDate>
        <a:Warranties>
          <a:Warranty>
            <a:EndDate>2012-08-18T13:59:59</a:EndDate>
            <a:EntitlementType>INITIAL</a:EntitlementType>
            <a:ItemNumber>WXPW213-LC-I</a:ItemNumber>
            <a:ServiceLevelCode>PROSUPIT</a:ServiceLevelCode>
            <a:ServiceLevelDescription>Pro Support for IT
TechSupport& Assistant </a: ServiceLevelDescription>
            <a:ServiceLevelGroup>9999</a:ServiceLevelGroup>
            <a:ServiceProvider i:nil="true" />
            <a:StartDate>2009-08-17T14:00:00</a:StartDate>
          </a:Warranty>
          <a:Warranty>
            <a:EndDate>2012-08-18T13:59:59</a:EndDate>
            <a:EntitlementType>INITIAL</a:EntitlementType>
            <a:ItemNumber>WXSP111-LC-I</a:ItemNumber>
            <a:ServiceLevelCode>POW</a:ServiceLevelCode>
            <a:ServiceLevelDescription>Parts Only
Warranty</a:ServiceLevelDescription>
            <a:ServiceLevelGroup>99999</a:ServiceLevelGroup>
            <a:ServiceProvider i:nil="true" />
            <a:StartDate>2011-08-17T14:00:00</a:StartDate>
```



```
</a:Warranty>
          . . .
        </a:Warranties>
      </a:DellAsset>
    </a:Response>
 </GetAssetWarrantyResult>
</GetAssetWarrantyResponse>
JSON Format
 {
   "GetAssetWarrantyResponse":{
      "@xmlns": "http:\/\/tempuri.org\/",
      "GetAssetWarrantyResult":{
"@a":"http:\/\/schemas.datacontract.org\/2004\/07\/Dell.AWR.Domain.Asset",
         "@i":"http:\/\/www.w3.org\/2001\/XMLSchema-instance",
         "Faults":null,
         "Response":{
            "DellAsset":{
               "AssetParts":{
                  "@nil":"true"
               },
               "CountryLookupCode":1234,
               "CustomerNumber":1234567,
               "IsDuplicate": "false",
               "ItemClassCode":"^#001",
```



```
"LocalChannel":30233,
               "MachineDescription": "LatE6500, T9800, CPEN, Maybach",
               "OrderNumber":123456789,
               "ParentServiceTag":{
                  "@nil":"true"
               },
               "ServiceTag":"1S2S3S4",
               "ShipDate": "2009-08-17T14:00:00",
               "Warranties":{
                  "Warranty":[
                     {
                         "EndDate": "2012-08-18T13:59:59",
                         "EntitlementType":"INITIAL",
                         "ItemNumber": "WXPW213-LC-I",
                         "ServiceLevelCode": "PROSUPIT",
                         "ServiceLevelDescription": "Pro Support for IT Tech
Support&Assistant",
                         "ServiceLevelGroup":99999,
                         "ServiceProvider":{
                            "@nil":"true"
                        },
                         "StartDate":"2009-08-17T14:00:00"
                     } ,
                         "EndDate": "2012-08-18T13:59:59",
                         "EntitlementType":"INITIAL",
                         "ItemNumber": "WXSN111-LC-I",
```



```
"ServiceLevelCode": "NBD",
                       "ServiceLevelDescription":"Next Business Day
response",
                       "ServiceLevelGroup":99999,
                       "ServiceProvider":{
                          "@nil":"true"
                       } ,
                       "StartDate":"2011-08-17T14:00:00"
                    },
                ]
             }
           }
     }
 }
}
```



Sample Error

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetWarrantyResponse xmlns="http://tempuri.org/">
  <GetAssetWarrantyResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
                        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults>
      <a:FaultException>
       <a:Code>4001</a:Code>
        <a:Message>The tag you sent is not present. Check your separator
character and ensure it is |. </a:Message>
      </a:FaultException>
    </a:Faults>
    <a:Response />
  </GetAssetWarrantyResult>
</GetAssetWarrantyResponse>
```



GetAssetDetail

The GetAssetDetail operation can be performed only on a single service tag to retrieve detailed asset information. The details of all the asset parts included in the original system configuration except software and documentation is retrieved.

Request Headers

The following section lists the header format for the URI and samples for usage:

Header	Mandatory
Content-Type: application/xml	Υ
GET support/v2/assetinfo/detail/tags.sml?svctags=a1b2c3d HTTP/1.1	N
Host: api.dell.com	N
Accept: text/xml	N
Date: Wed, 15 Feb 2011 18:07:24 GMT	N
apikey: a0753a615f7c578f67daf5c318595e0b	N (if used in the request parameters)

Request Parameters

Query Parameter	Description	Mandatory	Possible Values
svctags	Single Service Tag	Υ	1A2B3CD



Response Parameters

Asset summary and parts data are returned, as shown in the following table and figure:

The namespaces mentioned in the table can be found in the following locations:

- ns1 <u>http://tempuri.org</u>
- ns2 http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset

Level	Query Parameter	Description	Data Type	Possible Values
1	ns1:GetAssetDetailResponse	Root Element of the response	-	-
2	ns1:GetAssetDetailResult	Wraps the Success and Failure responses within	-	-
3	ns1:Faults	Array of FaultException elements. It is null in case of no exceptions.	-	-
4	ns1:FaultException	Group to identify a single faulting reason	-	-
5	ns1:Code	Fault Code	char	See Errors
5	ns1:Message	Fault Message	char	See Errors
3	ns2:Response	Array of DellAsset elements	-	-
4	ns2:DellAsset	Contains information for a single asset.	-	-
5	ns2:AssetParts	Array of AssetPart elements	-	-
6	ns2:AssetPart	Contains information for a single AssetPart.	-	-
7	ns2:PartDescription	Description of the asset part.	char (0- 200)	Processor,T9600,2.8, 6MB,Core Penryn, 35W,E0
7	ns2:PartNumber	Part identification	char (0-	Y644C



		key for the asset part.	20)	
7	ns2:Quantity	Number of parts in the asset.	int (64 bit)	1
7	ns2:SkuNumber	Identification number of the Store Keeping Unit (SKU) for the asset part.	char (0- 25)	Y664
5	ns2:CountryLookupCode	Code mapped to every country.	char (0- 20)	0
5	ns2:CustomerNumber	Dell Customer identification number.	int (64 bit)	1234567
5	ns2:IsDuplicate	Indicates if the service tag is duplicated. This is true on an asset that is assigned a new service tag.	boolean	true/false
5	ns2:ItemClassCode	Code mapped to a machine description.	char (0- 20)	002
5	ns2:LocalChannel	Code mapped to a customer segment.	char (0- 20)	28
5	ns2:MachineDescription	Description of the Dell asset	char (0- 200)	PWS M4400,T9600,CPEN, AVIA N
5	ns2:OrderNumber	Order Identification Number under which the asset was purchased	int (64- bit)	123456789
5	ns2:ParentServiceTag	This contains the old service tag value. Exists when an Asset has a duplicated service tag, else the value is null.	char (0- 20)	1A2B3C4
5	ns2:ServiceTag	What is a service tag?	char (0- 20)	1A2B3C4
5	ns2:ShipDate	Date when the asset was shipped	date- time	2008-08-01T00:00:00



		to customer.		
5	ns2:Warranties	Array of warranty elements	-	NIL

Errors-GetAssetDetail

Error Code	Error Description
400	Missing API Key
401	Invalid API Key / API Key not found
403	Access Denied / Rate Limit Exceeded
500	Invalid URI / Internal Server Error / Request count exceeded maximum permissible limit / Missing version number / REST Verb not valid
4000	The number of tags (n) exceeds the maximum for the Asset Detail service method.
4001	The number of tags that returned no data exceeded the maximum percentage of incorrect tags. / The tag you sent is not present. Check your separator character and ensure it is .
4002	The code mapping requested is invalid.
4003	Service Tag a1b2c3d does not exist in our records.



Sample

The sample includes the sample request and the sample response. The returned data is in POX or JSON format. The given sample shows an error code 4001 on the requested tags.

Sample Request

https://api.dell.com/support/v2/assetinfo/warranty/tags.xml?svctags=ste0382&apikey=2e66d16c-23fd-4dce-ad97-39853a4259aa

Sample Response

XML Format

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetDetailResponse xmlns="http://tempuri.org/">
  <GetAssetDetailResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
                        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults />
    <a:Response>
      <a:DellAsset>
        <a:AssetParts>
          <a:AssetPart>
            <a:PartDescription>Base, Notebook, Core Penryn
T9800, E6500</a:PartDescription>
            <a:PartNumber>R615M</a:PartNumber>
            <a:Quantity>1</a:Quantity>
            <a:SkuNumber i:nil="true" />
          </a:AssetPart>
          <a:AssetPart>
            <a:PartDescription>Processor, T9800, 2.93, 6MB, Core
Penryn, 35W, E0</a:PartDescription>
            <a:PartNumber>F804K</a:PartNumber>
```



```
<a:Quantity>1</a:Quantity>
            <a:SkuNumber>R615M</a:SkuNumber>
          </a:AssetPart>
          . . .
          . . .
          . . .
        </a:AssetParts>
        <a:CountryLookupCode>7465</a:CountryLookupCode>
        <a:CustomerNumber>770265037</a:CustomerNumber>
        <a:IsDuplicate>false</a:IsDuplicate>
        <a:ItemClassCode>^#010</a:ItemClassCode>
        <a:LocalChannel>30163</a:LocalChannel>
<a:MachineDescription>LatE6500, T9800, CPEN, Maybach</a:MachineDescription>
        <a:OrderNumber>7700013740</a:OrderNumber>
        <a:ParentServiceTag i:nil="true" />
        <a:ServiceTag>2SQS3BS</a:ServiceTag>
        <a:ShipDate>2009-08-17T14:00:00</a:ShipDate>
        <a:Warranties i:nil="true" />
      </a:DellAsset>
    </a:Response>
  </GetAssetDetailResult>
</GetAssetDetailResponse>
```



JSON Format

```
{
   "GetAssetDetailResponse":{
      "@xmlns": "http:\/\/tempuri.org\/",
      "GetAssetDetailResult":{
"@a": "http:\/\/schemas.datacontract.org\/2004\/07\/Dell.AWR.Domain.Asset",
         "@i":"http:\/\/www.w3.org\/2001\/XMLSchema-instance",
         "Faults":null,
         "Response": {
            "DellAsset":{
                "AssetParts":{
                   "AssetPart":[
                      {
                         "PartDescription": "Base, Notebook, Core Penryn
T9800, E6500",
                         "PartNumber": "R615M",
                         "Quantity":1,
                         "SkuNumber":{
                            "@nil":"true"
                         }
                      } ,
                      {
                         "PartDescription": "Processor, T9800, 2.93, 6MB, Core
Penryn, 35W, E0",
                         "PartNumber": "F804K",
                         "Quantity":1,
                         "SkuNumber": "R615M"
```



```
},
                  ]
               },
               "CountryLookupCode":7465,
               "CustomerNumber":770265037,
               "IsDuplicate": "false",
               "ItemClassCode":"^#010",
               "LocalChannel":30163,
               "MachineDescription": "LatE6500, T9800, CPEN, Maybach",
               "OrderNumber":7700013740,
               "ParentServiceTag":{
                  "@nil":"true"
               } ,
               "ServiceTag":"2SQS3BS",
               "ShipDate":"2009-08-17T14:00:00",
               "Warranties":{
                  "@nil":"true"
               }
}
```



Sample Error

```
<?xml version="1.0" encoding="utf-8"?>
<GetAssetDetailResponse xmlns="http://tempuri.org/">
  <GetAssetDetailResult
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
                        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults>
      <a:FaultException>
        <a:Code>4001</a:Code>
        <a:Message>The tag you sent is not present. Check your separator
character and ensure it is |.</a:Message>
      </a:FaultException>
    </a:Faults>
    <a:Response />
  </GetAssetDetailResult>
</GetAssetDetailResponse>
```



GetCodeMapping

The GetCodeMapping operation retrieves the description for codes returned by asset oriented operations. In R2.0, the values accepted for code lookup is to only find the countries. For example, CountryLookup - maps country code to a country

Request Headers

The following section lists the header format for the URI and samples for usage:

Header	Mandatory
Content-Type: application/xml	N
GET support/v2/assetinfo/codemapping/type.xml?ctype=type1 HTTP/1.1	N
Host: api.dell.com	N
Accept: text/xml	N
Date: Wed, 15 Feb 2011 18:07:24 GMT	N
apikey: a0753a615f7c578f67daf5c318595e0b	N (if it is used in request parameters)

Request Parameters

Query Parameter	Description	Mandatory	Possible Values
Ctype	Type of code mapping lookup	Y	type1 (region)



Response Parameters

The returned Code Mapper data is shown in the table.

The namespaces mentioned in the table can be found in the following locations:

- ns1 http://tempuri.org
- ns2 http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset

Level	Query Parameter	Description	Data Type	Possible Values
1	ns1:GetCodeMappingByTypeResponse	Root Element of the response	-	-
2	ns1:GetCodeMappingByTypeResult	Wraps the Success and Failure responses within	-	-
3	ns1:Faults	Array of FaultException elements (will be null in case of no exceptions)	-	-
4	ns1:FaultException	Group to identify a single faulting reason	-	-
5	ns1:Code	Fault Code	char	See Errors
5	ns1:Message	Fault Message	char	See Errors
3	ns2:Response	Array of CodeMapping elements	-	-
4	ns2:Code	Code corresponding to a Dell lookup entity	char	999904
4	ns2:Description	Value which the code maps to	char	EMEA
4	ns2:Locale	Locale for mapping - Will be used once service is globalized	char	-



Errors-GetCodeMapping

Error Code	Description
400	Missing API Key
401	Invalid API Key / API Key not found
403	Access Denied / Rate Limit Exceeded
500	Invalid URI / Internal Server Error / Request count exceeded maximum permissible limit / Missing version number / REST Verb not valid

Sample

The sample includes the sample request and the sample response. The returned data is in POX or JSON format.

Sample Request

https://api.dell.com/support/v2/assetinfo/codemapping/type.xml?ctype=type1&apikey=2e66d16c-23fd-4dce-ad97-39853a4259aa

Sample Response

Note: If Locale is empty, the code applies to all localizations.

XML Format

```
<?xml version="1.0" encoding="UTF-8"?>
<GetCodeMappingByTypeResponse xmlns="http://tempuri.org/">
  <GetCodeMappingByTypeResult</pre>
xmlns:a="http://schemas.datacontract.org/2004/07/Dell.AWR.Domain.Asset"
                        xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
    <a:Faults />
    <a:Response>
      <a:CodeMapping>
        <a:Code>11</a:Code>
        <a:Description>us</a:Description>
        <a:Locale i:nil="true" />
```



```
</a:CodeMapping>
      <a:CodeMapping>
        <a:Code>20</a:Code>
        <a:Description />
        <a:Locale i:nil="true" />
      </a:CodeMapping>
      <a:CodeMapping>
        <a:Code>202</a:Code>
        <a:Description>uk</a:Description>
        <a:Locale i:nil="true" />
      </a:CodeMapping>
      <a:CodeMapping>
        <a:Code>999904</a:Code>
        <a:Description>EMEA</a:Description>
        <a:Locale i:nil="true" />
      </a:CodeMapping>
      <a:CodeMapping>
        <a:Code>999960</a:Code>
        <a:Description>LATIN AMERICA</a:Description>
        <a:Locale i:nil="true" />
      </a:CodeMapping>
      . . .
      . . .
    </a:Response>
  </GetCodeMappingByTypeResult>
</GetCodeMappingByTypeResponse>
```

JSON Format

```
{
   "GetCodeMappingByTypeResponse":{
      "@xmlns":"http:\/\/tempuri.org\/",
      "GetCodeMappingByTypeResult":{
"@a":"http:\/\/schemas.datacontract.org\/2004\/07\/Dell.AWR.Domain.Asset",
         "@i":"http:\/\/www.w3.org\/2001\/XMLSchema-instance",
         "Faults":null,
         "Response":{
            "CodeMapping":[
               {
                  "Code":11,
                  "Description": "us",
                  "Locale":{
                     "@nil":"true"
                  }
               },
               {
                  "Code":202,
                  "Description": "uk",
                  "Locale":{
                     "@nil":"true"
                  }
               },
                  "Code":999904,
```



```
"Description": "EMEA",
                  "Locale":{
                     "@nil":"true"
                  }
                },
                {
                  "Code":999960,
                  "Description": "LATIN AMERICA",
                  "Locale":{
                     "@nil":"true"
                  }
                . . .
           ]
     }
  }
}
```



Duplicate Service Tags

For service tags created prior to 2009, there were a small number of tags that were duplicated across regions. For example, an asset in North or South America (Americas Region) could be duplicated in Europe and the Middle East (EMEA) and/or Asia Pacific (AP) and/or Japan (J). The incidence of duplicate tags is slightly higher than ½ of 1 percent.

When a duplicate exists, all of the data for the tag will be returned, including duplicates, which will be retagged with a new service tag. The retagged item will have the IsDuplicate property set to true and contain the original service tag in the ParentServiceTag property.

There are a couple of ways to determine which asset is the correct asset.

- If the company using the API is present in a single country, the CountryLookupCode field can be examined against the code mapping for country lookup code and determine which asset is correct.
- For multi-national companies, the machine description can be examined and compared to the information already gathered for the asset.
- Alternately, the ItemClassCode can be used, with its mapping, to compare against information already gathered for the asset.

If the API is being used for asset management purposes, the new service tag should be stored for the item for any future calls to the Asset Service.



FAQs

Q: Is the service localized?

A: In R2.0, none of the data is localized. Localization is initially achieved through the code mapping service method after implemention.

Q: Is there an alert mechanism for changed data?

A: There is no alert mechanism for changed data in R2.0.

Q: What data is subject to change?

A: In R2.0, the only item that changes with any regularity is the service provider for warranties. The clients do not use this information as the calls for service go to Dell and the information must be current.

Q: Is there a unique key returned for a warranty?

A: There is no unique key for a specific warranty in R2.0.

Q: Can a single asset have more than one warranty line?

A: Yes, this is common when any warranty purchased is other than standard. For example, on a two year warranty, there is a warranty line marked INITIAL for the first year and another marked EXTENDED for the second year.

Q: Can a single warranty cover more than one asset?

A: In the current state, this is not possible, as warranties are related to a single service tag.

Q: Why is the limit set to only 100 tags for the asset service?

A: In R2.0, the limitations are set to 100 tags and will be assessed and expanded in future revisions.

Q: Does the ItemNumber (Warranty) serve as a key for the actual warranty?

A: ItemNumber is a key for the warranty type, not the individual warranty.

Q: Is there a lookup for SKU numbers?

A: No. The information may be provided in future releases.

Q: Is there a mapping for Service Provider (Warranty)?

A: The mapping is available on the Code Mapping service.

Q: Do you have a method in place to handle 100 tags on the query string?

A: This has been handled technically with the RESTful service operations.

