



Enhanced Web Services

Data Center Planner

Command Reference Guide

Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures. Visit <https://www.VertivCo.com/en-us/support/> for additional assistance.

TABLE OF CONTENTS

1 Overview	1
1.1 New Features	1
1.2 Authentication	2
1.3 Headers	3
2 Enhanced Query APIs	5
2.1 GetAssetEnhanced	5
2.1.1 GetAssetEnhanced - Request all properties	5
2.1.2 Get Asset - Asset is shelf space	5
2.1.3 Get Asset - Container is a plan	6
2.1.4 Get Asset - Container is a rack	8
2.1.5 Get Asset - Container is a non-rack type asset	10
2.1.6 Get Asset - Container is zero U space	12
2.1.7 Get Asset - Container is shelf space	14
2.1.8 Get Asset - Floor placement type placed in inventory	16
2.1.9 Get Asset - Asset in a rack located in inventory	17
2.1.10 Get Asset - Asset in non-rack located in inventory	18
2.1.11 Get Asset - Asset in a container placed in a rack located in inventory	20
2.1.12 GetAssetEnhanced - Request specific properties	21
2.1.13 Get Asset - Specific name	22
2.1.14 Get Asset - Specific asset status	23
2.1.15 Get Asset - Specific derate properties	23
2.1.16 Get Asset - Specific user-defined properties (UDP)	25
2.1.17 Get Asset - Specific plan	26
2.1.18 Get Asset - Specific rack	27
2.1.19 Get Asset - Specific container	28
2.1.20 Get Asset - Specific location - shelf space	30
2.1.21 Get Asset - Specific shape type	31
2.2 QueryEnhanced	31
2.2.1 QueryEnhanced - Request all properties	34
2.2.2 Query Assets - Query assets and shelf space within a plan	34
2.2.3 Query Assets - Query-placed assets and shelf space across all plans	39
2.2.4 Query Assets - Query unplaced assets	44
2.2.5 Query all templates	47
2.2.6 Query Assets - Templates through asset name	50
2.2.7 Query Assets - Templates through device manufacturer	51
2.2.8 Query Assets - Templates through device description	56
2.2.9 Query Assets - Templates through device type	61
2.2.10 Query Asset - Templates through device model number	65
2.2.11 Query Assets - Templates through device product line	66
2.2.12 Query Assets - Templates through user-defined properties (UDP)	69

2.2.13	Query-placed assets through device manufacturer and model number	71
2.2.14	Query templates through device manufacturer and model number	73
2.2.15	Query assets within plans through wildcards	74
2.2.16	Query assets, templates and shelfspace with a maximum set limit of 2000	76
2.2.17	QueryEnhanced - Request specific properties	77
2.3	GetAssetContainmentDetails	78
2.3.1	GetAssetContainmentDetails - Request all properties	78
2.3.2	Query rack, child assets and shelf space	78
2.3.3	Query non-rack container and all child assets	84
2.3.4	Query non-container type asset	86
2.4	GetAssetContainmentDetails - Request specific properties	88
2.5	GetShape	88
2.5.1	GetShape - Request all device properties	88
2.5.2	GetShape - Query rack cabinet	89
2.5.3	GetShape - Query rack-mounted devices	98
2.5.4	GetShape - Query other type shape	106
2.5.5	GetShape - Request specific device properties	107
2.5.6	GetShape - Specific manufacturer	107
2.5.7	GetShape - Specific model	108
2.5.8	GetShape - Specific product line	109
2.5.9	GetShape - Specific description	110
2.5.10	GetShape - Specific asset type	111
2.5.11	GetShape - Specific dimensions	112
2.5.12	GetShape - Specific placement type	113
2.5.13	GetShape - Specific RU for a rack cabinet	113
2.5.14	GetShape - Specific RU for a rack-mounted device	114
2.5.15	GetShape - Specific slot or port shape	115
2.6	QueryShape	124
2.6.1	Query shape through manufacturer	124
2.6.2	Query shape through model number	126
2.6.3	Query shape through product line	127
2.6.4	Query shape through asset type	129
2.6.5	Query shape through parameters	130
2.7	ListAssetTypes	131
2.8	ListPortTypes	132
2.9	ListPlans	133
2.10	GetPlan	135
	3 Enhanced Asset Manipulation APIs	141
3.1	SetAssetEnhanced	141
3.2	UnsetAssetEnhanced	143
3.3	AddAsset	144
3.3.1	Add asset to plan	145

3.3.2	Default location	146
3.3.3	Specific location	147
3.3.4	Add asset to asset	147
3.3.5	Default value	148
3.3.6	Specific rotation	149
3.3.7	Add asset to shelf space	150
3.3.8	Default value	151
3.3.9	Specific rotation	152
3.3.10	Add asset to inventory	153
3.3.11	Add asset with specific properties	154
3.4	MoveAsset	156
3.4.1	Move asset to plan	156
3.4.2	Move asset to asset	157
3.4.3	Move asset to shelf space	159
3.5	DeactivateAsset	160
3.6	InstantiateTemplate	161
3.6.1	Instantiate template to plan	161
3.6.2	Instantiate template to asset	163
3.6.3	Instantiate template to shelf space	164
3.6.4	Instantiate template to inventory	165
3.7	AddAssetToZeroU	166
3.8	MoveAssetToZeroU	168
3.9	InstantiateTemplateToZeroU	169
3.9.1	AddShelfSpace	170
4	Port Connection APIs	173
4.1	AddConnection	173
4.1.1	Add connection through PortID	173
4.1.2	Add connection through PortName	175
4.1.3	Add connection through LPort	177
4.2	UpdateConnection	178
4.2.1	Update connection through PortID	179
4.2.2	Update connection through PortName	181
4.2.3	Update connection through LPort	182
4.3	RemoveConnection	184
4.3.1	Remove connection through PortID	185
4.3.2	Remove connection through PortName	186
4.3.3	Remove connection through LPort	188
4.4	PortLock	189
4.4.1	Lock a port through PortName	190
4.4.2	Lock a port through PortID	191
4.4.3	Lock a port through LPort	192
4.4.4	Unlock a port through PortName	193

4.4.5 Unlock a port through PortID	194
4.4.6 Unlock a port through LPort	196
5 Conflicts and Error Messages	199
5.1 Conflict Log	199
5.2 Error Response	200
5.3 Error Code and Message Perimeters	200
6 Logical Slot and Port Numbering Method for Assets	205
6.1 Slot Numbering	205
6.2 Port Numbering	208
Appendices	211
Appendix A: Tips	211

1 OVERVIEW

This document provides examples for using the Enhanced Web Service Application Programming Interface (Web Service API) so you can properly develop a client side application to interface to Avocent® Data Center Planner software utilizing this Web Service API. The Enhanced Web Service API is independent of the original web service, Simple Asset Web Service, (SAWS). It does not include any APIs of SAWS and does not change any APIs of SAWS. You have the choice of using the SAWS through the Web Service Description Language (WSDL) address of SAWS or the Enhanced Web Service API through the WSDL address of enhanced WS.

NOTE: All examples were produced using SOAP UI 4.0.0 as the web service testing tool. In each request, the font that is different from the code font is where the unique information is entered, such as an identifier and an assetID.

The service properties exposed through the web services are documented in the following WSDL files:

- AMP Authentication - `https://{installed server}:8092/authenticate?wsdl`
- Data Center Planner Enhanced WS - `https://{installed server}:8443/DataCenterPlanner/ws/enhanced-webservices/enhanced_webservices.wsdl`

To assist new users who are not familiar with slot and port naming used with the assets, a new numbering method is included. For additional information, see [Logical Slot and Port Numbering Method for Assets](#) on page 205.

1.1 New Features

The following is a list of new features in Data Center Planner using the Enhanced Web Service API:

- Enhanced Web Service API requests:
 - GetAssetEnhanced
 - QueryEnhanced
 - GetAssetContainmentDetails
 - GetShape
 - QueryShape
 - ListAssetTypes
 - ListPortTypes
 - ListPlans
 - GetPlan
- Enhanced asset manipulations:
 - SetAssetEnhanced
 - UnsetAssetEnhanced
 - AddAsset
 - MoveAsset
 - DeactivateAsset
 - InstantiateTemplate
 - AddAssetToZeroU
 - MoveAssetToZeroU
 - InstantiateTemplateToZeroU

- AddShelfSpace
- Port connection:
 - AddConnection
 - UpdateConnection
 - RemoveConnection
 - PortLock

1.2 Authentication

The Web Service API is used to authenticate the user prior to execution of the Enhanced Web Services API requests. The client side gets an authentication token from the Avocent® Management Platform (AMP) through the web service, then the authentication token is used in the soap header of each request for security verification.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ser="http://service.authentication.amp.avocent.com">
  <soapenv:Header/>
  <soapenv:Body>
    <ser:authenticate>
      <userName>user name</userName>
      <password>password</password>
      <instanceName>Internal, or custom external authentication instance name</instanceName>
    </ser:authenticate>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<soap:Envelope xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <ns2:authenticateResponse xmlns:ns2="http://service.authentication.amp.avocent.com">
      <out>
        <entry>
          <key>Session_ID</key>
          <value>c5960def-b22e-49c7-87f0-87803f19f3bb</value>
        </entry>
        <entry>
          <key>RETURN_CODE</key>
          <value>SUCCESS</value>
        </entry>
      </out>
    </ns2:authenticateResponse>
  </soap:Body>
</soap:Envelope>
```


1.3 Headers

The following header must be included on all Enhanced Web Services API requests.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>Authentication token</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
```

This page intentionally left blank.

2 ENHANCED QUERY APIS

The Enhanced Query APIs are used to get asset or shelf space properties.

2.1 GetAssetEnhanced

The GetAssetEnhanced query requests all properties of an asset or a shelf space.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID

Optional input:

- RequestedAssetProperties - If RequestedAssetProperties was not provided by the client, all of the properties are returned. If RequestedAssetProperties was provided by the client, only the specified properties are returned.
 - Name: blank
 - AssetStatus: blank
 - Derate: always includes heat, power and/or weight properties
 - UDP: label of user-defined property
 - Plan: blank
 - Rack: blank
 - Container: blank
 - Location: blank
 - ShapeType: blank

2.1.1 GetAssetEnhanced - Request all properties

The following sections show examples of how to request all asset properties.

2.1.2 Get Asset - Asset is shelf space

The following request and response are examples to get the asset properties in a shelf space. The shelf space ID should be entered in the AssetID field under GetAssetEnhancedRequest. It returns the detailed properties of the specific shelf space.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
```

```

<soapenv:Body>
  <enh:GetAssetEnhancedRequest>
    <enh:AssetID>1311749</enh:AssetID>
  </enh:GetAssetEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311749</sa:AssetID>
        <sa:Properties>
          <sa:ShapeTypeID>shelf space</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1311640</sa:RackID>
            <sa:RackName>rack cabinet 11</sa:RackName>
          </sa:Rack>
          <sa:ConsumedRU>10</sa:ConsumedRU>
          <sa:Location>
            <sa:SlotName>Slot#1</sa:SlotName>
            <sa:LSlot>LSlot#34</sa:LSlot>
          </sa:Location>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.1.3 Get Asset - Container is a plan

The following request and response are examples to search a floor placement type asset that is placed in a plan. The AssetID shown is for an asset that is floor-mounted in a plan.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311640</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311640</sa:AssetID>
        <sa:Properties>
          <sa:Name>rack cabinet 11</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Location>
            <sa:Xcoord>2.50</sa:Xcoord>
            <sa:Ycoord>1.00</sa:Ycoord>
            <sa:MountingRotation>0.00</sa:MountingRotation>
          </sa:Location>
          <sa:Derate>
            <sa:Heat>
              <sa:Units>kW</sa:Units>
              <sa:Value>1.00</sa:Value>
              <sa:IsAggregate>>true</sa:IsAggregate>
            </sa:Heat>
            <sa:Power>
              <sa:Units>kilowatts</sa:Units>
              <sa:Value>2.00</sa:Value>
              <sa:IsAggregate>>false</sa:IsAggregate>
            </sa:Power>
          </sa:Derate>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>R1000001</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.1.4 Get Asset - Container is a rack

The following request and response are examples to get an asset that is placed in a rack.

Request

```
<soap:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311777</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311777</sa:AssetID>
        <sa:Properties>
          <sa:Name>server 2</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1311640</sa:RackID>
            <sa:RackName>rack cabinet 11</sa:RackName>
          </sa:Rack>
          <sa:Container/>
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>rear facing/front mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#6</sa:SlotName>
            <sa:LSlot>LSlot#29</sa:LSlot>
          </sa:Location>
          <sa:Derate>
            <sa:Power>
              <sa:Units>kilowatts</sa:Units>
              <sa:Value>0.10</sa:Value>
              <sa:IsAggregate>>false</sa:IsAggregate>
            </sa:Power>
          </sa:Derate>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S1000001</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>

```

2.1.5 Get Asset – Container is a non-rack type asset

The following request and response are examples to search an asset that is placed in a container which is not a rack type asset, such as a server type asset.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311816</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311816</sa:AssetID>
        <sa:Properties>
          <sa:Name>module 4</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1311640</sa:RackID>
            <sa:RackName>rack cabinet 11</sa:RackName>
          </sa:Rack>
          <sa:Container>
            <sa:ContainerID>1311777</sa:ContainerID>
            <sa:ContainerName>server 2</sa:ContainerName>
          </sa:Container>
          <sa:Location>
            <sa:MountingRotation>two hundred seventy degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#02</sa:SlotName>
            <sa:LSlot>LSlot#3</sa:LSlot>
          </sa:Location>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>M1000001</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.6 Get Asset – Container is zero U space

The following request and response are examples to search an asset that is placed in zero U space.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311852</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311852</sa:AssetID>
        <sa:Properties>
          <sa:Name>storage system 6</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A004594</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1311640</sa:RackID>
            <sa:RackName>rack cabinet 11</sa:RackName>
          </sa:Rack>
          <sa:Container>
            <sa:ContainerID>1311857</sa:ContainerID>
            <sa:ContainerName>zero u space</sa:ContainerName>
          </sa:Container>
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:SlotName>front left</sa:SlotName>
          </sa:Location>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S100002</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.7 Get Asset – Container is shelf space

The following request and response are examples to search an asset that is placed in shelf space.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
```

```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:GetAssetEnhancedRequest>
    <enh:AssetID>1311923</enh:AssetID>
  </enh:GetAssetEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311923</sa:AssetID>
        <sa:Properties>
          <sa:Name>firewall 11</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A012527</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1311640</sa:RackID>
            <sa:RackName>rack cabinet 11</sa:RackName>
          </sa:Rack>
          <sa:Container>
            <sa:ContainerID>1311749</sa:ContainerID>
            <sa:ContainerName>shelf space</sa:ContainerName>
          </sa:Container>
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
          </sa:Location>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S100003</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.1.8 Get Asset - Floor placement type placed in inventory

The following request and response are examples to search a floor-level type asset that is placed in inventory.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5cee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1433945</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1433945</sa:AssetID>
        <sa:Properties>
          <sa:Name>Black Rack Cabinet 2</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
          </sa:Plan>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S100002</sa:Value>
          </sa:UDP>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.9 Get Asset - Asset in a rack located in inventory

The following request and response are examples to search a non-floor level asset that is placed in a rack cabinet type asset and the rack is placed in inventory.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5ceee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1434113</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1434113</sa:AssetID>
        <sa:Properties>
          <sa:Name>server 11</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1434092</sa:RackID>
            <sa:RackName>rack cabinet 9</sa:RackName>
          </sa:Rack>
          <sa:Container/>
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#1</sa:SlotName>
            <sa:LSlot>LSlot#34</sa:LSlot>
          </sa:Location>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.10 Get Asset - Asset in non-rack located in inventory

The following request and response are examples to search a non-floor level asset that is placed in a non-rack cabinet type asset and the container asset is placed in inventory.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5ceee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1434060</enh:AssetID>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1434060</sa:AssetID>
        <sa:Properties>
          <sa:Name>module 7</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>JUNP546</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
          </sa:Plan>
          <sa:Rack/>
          <sa:Container>
            <sa:ContainerID>1434033</sa:ContainerID>
            <sa:ContainerName>router 5</sa:ContainerName>
          </sa:Container>
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#00</sa:SlotName>
            <sa:LSlot>LSlot#1</sa:LSlot>
          </sa:Location>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.11 Get Asset - Asset in a container placed in a rack located in inventory

The following request and response are examples to search a non-floor level asset that is placed in a non-rack cabinet type asset, the container asset is placed in a rack and the rack is placed in inventory.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5cee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedResponse>
      <enh:Asset>
        <enh:AssetID>1434060</enh:AssetID>
        <enh:Properties>
          <enh:Name>module 7</enh:Name>
          <enh:AssetStatus>tangible</enh:AssetStatus>
          <enh:ShapeTypeID>JUNP546</enh:ShapeTypeID>
          <enh:Plan>
            <enh:PlanID/>
            <enh:PlanName>Planless</enh:PlanName>
          </enh:Plan>
          <enh:Rack/>
          <enh:Container>
            <enh:ContainerID>1434033</enh:ContainerID>
            <enh:ContainerName>router 5</enh:ContainerName>
          </enh:Container>
          <enh:Location>
            <enh:MountingRotation>zero degrees</enh:MountingRotation>
            <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
            <enh:SlotName>Slot#00</enh:SlotName>
            <enh:LSlot>LSlot#1</enh:LSlot>
          </enh:Location>
        </enh:Properties>
      </enh:Asset>
    </enh:GetAssetEnhancedResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    </wsse:Security>
  <enh:GetAssetEnhancedRequest>
    <enh:AssetID>1434134</enh:AssetID>
  </enh:GetAssetEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1434134</sa:AssetID>
        <sa:Properties>
          <sa:Name>module 13</sa:Name>
          <sa:AssetStatus>tangible</sa:AssetStatus>
          <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
          <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
          </sa:Plan>
          <sa:Rack>
            <sa:RackID>1434092</sa:RackID>
            <sa:RackName>rack cabinet 9</sa:RackName>
          </sa:Rack>
          <sa:Container>
            <sa:ContainerID>1434113</sa:ContainerID>
            <sa:ContainerName>server 11</sa:ContainerName>
          </sa:Container>
          <sa:Location>
            <sa:MountingRotation>two hundred seventy degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#04</sa:SlotName>
            <sa:LSlot>LSlot#4</sa:LSlot>
          </sa:Location>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.1.12 GetAssetEnhanced - Request specific properties

The following sections show request and response examples to get specific asset properties.

2.1.13 Get Asset - Specific name

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311640</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Name/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311640</sa:AssetID>
        <sa:Properties>
          <sa:Name>rack cabinet 11</sa:Name>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.14 Get Asset - Specific asset status

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5ceee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1434134</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:AssetStatus/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1434134</sa:AssetID>
        <sa:Properties>
          <sa:AssetStatus>tangible</sa:AssetStatus>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.15 Get Asset - Specific derate properties

If the asset does not have the specified derate property, the GetAssetEnhanced response is ignored.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311640</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Derate>Heat</enh:Derate>
        <enh:Derate>Power</enh:Derate>
        <enh:Derate>Weight</enh:Derate>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311640</sa:AssetID>
        <sa:Properties>
          <sa:Derate>
            <sa:Heat>
              <sa:Units>kW</sa:Units>
              <sa:Value>1.00</sa:Value>
              <sa:IsAggregate>true</sa:IsAggregate>
            </sa:Heat>
            <sa:Power>
              <sa:Units>kilowatts</sa:Units>
              <sa:Value>2.00</sa:Value>
              <sa:IsAggregate>false</sa:IsAggregate>
            </sa:Power>
          </sa:Derate>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.16 Get Asset - Specific user-defined properties (UDP)

If the asset does not have the requested UDP, the GetAssetEnhanced response is ignored.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311640</enh:AssetID>
      <enh:RequestedAssetProperties>
```

```

        <enh:UDP>serial number</enh:UDP>
        <enh:UDP>IP address</enh:UDP>
    </enh:RequestedAssetProperties>
</enh:GetAssetEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311640</sa:AssetID>
        <sa:Properties>
          <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>R1000001</sa:Value>
          </sa:UDP>
        <!-- The asset did not have an IP Address so it was not listed in the response-->
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.1.17 Get Asset - Specific plan

If this asset is placed in inventory, the PlanID field is blank and “Planless” appears in the PlanName field for the GetAssetEnhanced response.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311640</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Plan/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311640</sa:AssetID>
        <sa:Properties>
          <sa:Plan>
            <sa:PlanID>1311591</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
          </sa:Plan>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.18 Get Asset - Specific rack

If the asset does not belong to any rack, the GetAssetEnhanced response is set blank to rack node.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311923</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Rack/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
<SOAP-ENV:Header/>
<SOAP-ENV:Body>
  <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
    <sa:Asset>
      <sa:AssetID>1311923</sa:AssetID>
      <sa:Properties>
        <sa:Rack>
          <sa:RackID>1311640</sa:RackID>
          <sa:RackName>rack cabinet 11</sa:RackName>
        </sa:Rack>
      </sa:Properties>
    </sa:Asset>
  </sa:GetAssetEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.19 Get Asset - Specific container

If the asset does not belong to any container, the "Container" node is blank in the GetAssetEnhanced response.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311923</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Container/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311923</sa:AssetID>
        <sa:Properties>
          <sa:Container>
            <sa:ContainerID>1311749</sa:ContainerID>
            <sa:ContainerName>shelf space</sa:ContainerName>
          </sa:Container>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.20 Get Asset - Specific location - shelf space

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311923</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:Location/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311923</sa:AssetID>
        <sa:Properties>
          <!-- This asset is in shelf space so no slot data. If the asset was in a rack/container asset then the location
          would include first slot data.-->
          <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
          </sa:Location>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.1.21 Get Asset - Specific shape type

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetEnhancedRequest>
      <enh:AssetID>1311923</enh:AssetID>
      <enh:RequestedAssetProperties>
        <enh:ShapeType/>
      </enh:RequestedAssetProperties>
    </enh:GetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1311923</sa:AssetID>
        <sa:Properties>
          <sa:ShapeTypeID>A012527</sa:ShapeTypeID>
        </sa:Properties>
      </sa:Asset>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2 QueryEnhanced

QueryEnhanced requests all assets, shelf spaces and templates in the database through full text search. The QueryString is a Lucene type query string composed of the following terms, phrases and fields:

- A term is a single word value such as server or rack.
- A phrase is a value composed of a group of words surrounded by double quotes such as "rack cabinet" or "7014 T00 38U".

- Name of the field followed by a colon (:) and the term you are looking for such as tag:"rack cabinet 10".

Example: plan:HSV* tag:"server 10" cpu\ count:4* serial\ number:A00001

- The wildcard asterisk (*) and question mark (?) are supported within the term, and not within phrase values.
 - To perform a single character wildcard search, use the question mark (?) symbol.

Example: type.manufacturer:IB? or ra?k

- To perform a multiple character wildcard search, use the asterisk (*) symbol.

Example: type.model:VOL-0*S or r*k

- The tilde ~ symbol is supported at the end of a single word term for a fuzzy search.

Example: term value roam~

NOTE: This search will find similar terms with values like foam and roams.

- AND, +, OR, NOT and - as Boolean operators are supported in a query string field.
 - The AND operator matches records where both columns exist anywhere in the text of a single record. This is the default conjunction operator in QueryEnhanced.

Example: A search for the assets that have "Rack Cabinet 10" in the name field and "IBM" in the manufacturer field, uses the following query: tag:"Rack Cabinet 10" AND type.manufacturer:IBM, or, tag:"Rack Cabinet 10" type.manufacturer:IBM separated by white-space.
 - The add (+) or required operator requires that the term after the add (+) symbol exist somewhere in the column of a single record.

Example: A search for the assets that must have "Rack Cabinet 10" in the name field uses the query: +tag:"Rack Cabinet 10".
 - The OR operator links two terms and finds a matching record if either of the columns exist in a record.

Example: A search for the assets that contain "Rack Cabinet 10" in the name field OR "IBM" in the manufacturer field uses the query: tag:"Rack Cabinet 10" OR type.manufacturer:IBM.
 - The NOT operator excludes documents that contain any terms listed after the word NOT. This is equivalent to a difference using sets.

Example: A search for the assets that have "Rack Cabinet 10" in the name field and must not have "IBM" in the manufacturer field uses the query: tag:"Rack Cabinet 10" NOT type.manufacturer:IBM.
 - Either a dash or hyphen prohibit operator excludes documents that contain any terms listed after the dash or hyphen symbol.

Example: A search for the assets that have "Rack Cabinet 10" in the name field and must not have "IBM" in the manufacturer field uses the query: tag:"Rack Cabinet 10" type.manufacturer:IBM.
- Field grouping is supported within a single field.

Example: A search for an asset with "IBM" and "rack cabinet" in the tag field uses the query:
tag:+IBM +"rack cabinet".

Additional information:

- If the plan name, asset name, manufacturer, description, asset type name, model number and property value are phrases, you must use quotation marks (") to surround them, such as "example of this".
- If the field name contains whitespace, you must use "\" to escape the whitespace.
- For properties, the application uses lowercase characters as the key of the Lucene index, so all the field names of properties should be lowercase characters.
- Wildcard (?, *) can only be used in the term (single word, not within a phrase).
- A Lucene search returns all the objects that contain the value of fields, terms or phrases that are specified in QueryString.

An asset-specific string includes: id, plan, device name (tag), asset status (assetStatus), manufacturer (type.manufacturer), description (type.description), asset class (type.assetClass), model (type.model), product line (type.productLine), property or user-defined property.

The following are supported terms, phrases, fields and field values:

- id:asset id (search for the asset properties)
Example: id 1306644 or id:130664? or id:130*44
- assetStatus:tangible -plan:planless (search for only placed assets)
- assetStatus:template (search for all templates in Data Center Planner)
- plan:planless assetStatus:tangible (search for only unplaced assets)
- plan:plan name (enter a specific plan name to search for assets and shelf spaces only contained within that plan)
Example: plan:"Huntsville Plan"
- tag:asset name (search for assets by asset name)
Example: tag:"server 1"
- type.manufacturer:manufacturer name (search for assets by device manufacturer)
Example: type.manufacturer:IBM
- type.description:description (search for assets by device description)
Example: type.description:"RS-6000 Model T00 Enterprise Rack"
- type.assetClass:asset type name (search for assets by device type (Display, Rack Cabinet, KVM Switch))
Example: type.assetClass:Display
- type.model:model number (search for assets by device model number) type.model:"7014 T00 38U"
- type.productLine:product line (search for assets by device product line)

Example: type:productLine:RS-6000

- property label:property value (search for assets only contains that property)

Example: serial\ number:A00108702

- planless, plan name, asset name, manufacturer, description, asset type name, model number, property value as terms or phrases set in query string field.

Required input:

- Authentication token: Session ID
- Query String Lucene type query string syntax.

Optional input:

- Unlimited: true or false. The default is false.
 - If Unlimited is absent or Unlimited is specified as "false", the default limits the maximum number of assets (and respective asset properties) to return at 2000.
 - If Unlimited is specified as "true", there is no limit to the number of assets that can be returned from the query request.
- RequestedAssetProperties: If RequestedAssetProperties was not provided, all of properties for each object would be returned. If RequestedAssetProperties was provided, only the following specified properties for each object would be returned:
 - Name: blank
 - AssetStatus: blank
 - Derate: always includes heat, power and/or weight properties
 - UDP: label of user-defined property
 - Plan: blank
 - Rack: blank
 - Container: blank
 - Location: blank
 - ShapeType: blank

2.2.1 QueryEnhanced - Request all properties

The following section shows examples of how to request all properties of assets.

2.2.2 Query Assets - Query assets and shelf space within a plan

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>da2827df-7c2c-4b01-85b3-517847e13069</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
</soapenv:Envelope>
```



```

</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:QueryEnhancedRequest>
    <enh:QueryString>plan:HSV-Plan</enh:QueryString>
    <enh:Unlimited>>false</enh:Unlimited>
  </enh:QueryEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>plan:HSV-Plan</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1311749</sa:AssetID>
          <!--Shelf Spacehas no AssetStatus property-->
          <sa:Properties>
            <sa:ShapeTypeID>shelf space</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1311591</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1311640</sa:RackID>
              <sa:RackName>rack cabinet 11</sa:RackName>
            </sa:Rack>
            <sa:ConsumedRU>10</sa:ConsumedRU>
            <sa:Location>
              <sa:SlotName>Slot#1</sa:SlotName>
              <sa:LSlot>LSlot#34</sa:LSlot>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
        <sa:Asset>
          <sa:AssetID>1311777</sa:AssetID>
          <sa:Properties>
            <sa:Name>server 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1311591</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

</sa:Plan>
<sa:Rack>
  <sa:RackID>1311640</sa:RackID>
  <sa:RackName>rack cabinet 11</sa:RackName>
</sa:Rack>
<sa:Container/>
<sa:Location>
  <sa:MountingRotation>zero degrees</sa:MountingRotation>
  <sa:MountingOrientation>rear facing/front mounted</sa:MountingOrientation>
  <sa:SlotName>Slot#6</sa:SlotName>
  <sa:LSlot>LSlot#29</sa:LSlot>
</sa:Location>
<sa:Derate>
  <sa:Power>
    <sa:Units>kilowatts</sa:Units>
    <sa:Value>0.10</sa:Value>
    <sa:IsAggregate>>false</sa:IsAggregate>
  </sa:Power>
</sa:Derate>
<sa:UDP>
  <sa:Label>serial number</sa:Label>
  <sa:Value>S1000001</sa:Value>
</sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1311816</sa:AssetID>
  <sa:Properties>
    <sa:Name>module 4</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1311591</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1311640</sa:RackID>
      <sa:RackName>rack cabinet 11</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1311777</sa:ContainerID>
      <sa:ContainerName>server 2</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>two hundred seventy degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#02</sa:SlotName>
      <sa:LSlot>LSlot#3</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>

```

```

    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>M1000001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1311640</sa:AssetID>
  <sa:Properties>
    <sa:Name>rack cabinet 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1311591</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Location>
      <sa:Xcoord>2.50</sa:Xcoord>
      <sa:Ycoord>1.00</sa:Ycoord>
      <sa:MountingRotation>0.00</sa:MountingRotation>
    </sa:Location>
    <sa:Derate>
      <sa:Heat>
        <sa:Units>kW</sa:Units>
        <sa:Value>1.00</sa:Value>
        <sa:IsAggregate>>true</sa:IsAggregate>
      </sa:Heat>
      <sa:Power>
        <sa:Units>kilowatts</sa:Units>
        <sa:Value>2.00</sa:Value>
        <sa:IsAggregate>>false</sa:IsAggregate>
      </sa:Power>
    </sa:Derate>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>R1000001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1311852</sa:AssetID>
  <sa:Properties>
    <sa:Name>storage system 6</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A004594</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1311591</sa:PlanID>

```

```

    <sa:PlanName>HSV-Plan</sa:PlanName>
  </sa:Plan>
  <sa:Rack>
    <sa:RackID>1311640</sa:RackID>
    <sa:RackName>rack cabinet 11</sa:RackName>
  </sa:Rack>
  <sa:Container>
    <sa:ContainerID>1311857</sa:ContainerID>
    <sa:ContainerName>zero u space</sa:ContainerName>
  </sa:Container>
  <sa:Location>
    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:SlotName>front left</sa:SlotName>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S100002</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1311923</sa:AssetID>
  <sa:Properties>
    <sa:Name>firewall 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A012527</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1311591</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1311640</sa:RackID>
      <sa:RackName>rack cabinet 11</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1311749</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S100003</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>

```

```

    </sa:Assets>
  </sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.3 Query Assets - Query-placed assets and shelf space across all plans

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>assetStatus:tangible-plan:planless</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>assetStatus:tangible -plan:planless</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433819</sa:AssetID>
          <sa:Properties>
            <sa:Name>Rack Cabinet 3</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
          <sa:Location>

```

```

    <sa:Xcoord>5.00</sa:Xcoord>
    <sa:Ycoord>6.80</sa:Ycoord>
    <sa:MountingRotation>120.00</sa:MountingRotation>
  </sa:Location>
  <sa:Derate>
    <sa:Heat>
      <sa:Units>kW</sa:Units>
      <sa:Value>1.00</sa:Value>
      <sa:IsAggregate>>true</sa:IsAggregate>
    </sa:Heat>
    <sa:Power>
      <sa:Units>kilowatts</sa:Units>
      <sa:Value>2.10</sa:Value>
      <sa:IsAggregate>>false</sa:IsAggregate>
    </sa:Power>
  </sa:Derate>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433843</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container/>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#3</sa:SlotName>
      <sa:LSlot>LSlot#32</sa:LSlot>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433877</sa:AssetID>
  <sa:Properties>

```

```

<sa:Name>Module 1</sa:Name>
<sa:AssetStatus>tangible</sa:AssetStatus>
<sa:ShapeTypeID>A001042</sa:ShapeTypeID>
<sa:Plan>
  <sa:PlanID>1433764</sa:PlanID>
  <sa:PlanName>HSV-Plan</sa:PlanName>
</sa:Plan>
<sa:Rack>
  <sa:RackID>1433791</sa:RackID>
  <sa:RackName>Rack Cabinet 1</sa:RackName>
</sa:Rack>
<sa:Container>
  <sa:ContainerID>1433843</sa:ContainerID>
  <sa:ContainerName>Server 1</sa:ContainerName>
</sa:Container>
<sa:Location>
  <sa:MountingRotation>zero degrees</sa:MountingRotation>
  <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
  <sa:SlotName>Slot#01</sa:SlotName>
  <sa:LSlot>LSlot#1</sa:LSlot>
</sa:Location>
<sa:UDP>
  <sa:Label>serial number</sa:Label>
  <sa:Value>S300001</sa:Value>
</sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433911</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>IBMM055</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1433877</sa:ContainerID>
      <sa:ContainerName>Module 1</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
  </sa:Properties>
</sa:Asset>

```

```

    <sa:SlotName>Slot#00</sa:SlotName>
    <sa:LSlot>LSlot#1</sa:LSlot>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S300002</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434298</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 2</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434272</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434332</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 3</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>

```



```

    <sa:RackID>1433791</sa:RackID>
    <sa:RackName>Rack Cabinet 1</sa:RackName>
  </sa:Rack>
  <sa:Container>
    <sa:ContainerID>1434337</sa:ContainerID>
    <sa:ContainerName>zero u space</sa:ContainerName>
  </sa:Container>
  <sa:Location>
    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:SlotName>front left</sa:SlotName>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S200003</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433791</sa:AssetID>
  <sa:Properties>
    <sa:Name>Rack Cabinet 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Location>
      <sa:Xcoord>2.19</sa:Xcoord>
      <sa:Ycoord>0.96</sa:Ycoord>
      <sa:MountingRotation>0.00</sa:MountingRotation>
    </sa:Location>
    <sa:Derate>
      <sa:Heat>
        <sa:Units>kW</sa:Units>
        <sa:Value>1.00</sa:Value>
        <sa:IsAggregate>>true</sa:IsAggregate>
      </sa:Heat>
      <sa:Power>
        <sa:Units>kilowatts</sa:Units>
        <sa:Value>2.10</sa:Value>
        <sa:IsAggregate>>false</sa:IsAggregate>
      </sa:Power>
    </sa:Derate>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S100001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>

```

```

    <sa:UDP>
      <sa:Label>IP address</sa:Label>
      <sa:Value>10.207.2.100</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.4 Query Assets - Query unplaced assets

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>plan:planless assetStatus:tangible</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>assetStatus:tangible plan:planless</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433945</sa:AssetID>
          <sa:Properties>
            <sa:Name>Black Rack Cabinet 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S100002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434033</sa:AssetID>
  <sa:Properties>
    <sa:Name>router 5</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000347</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434060</sa:AssetID>
  <sa:Properties>
    <sa:Name>module 7</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>JUNP546</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
    <sa:Container>
      <sa:ContainerID>1434033</sa:ContainerID>
      <sa:ContainerName>router 5</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#00</sa:SlotName>
      <sa:LSlot>LSlot#1</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
<sa:Asset>

```

```

<sa:AssetID>1434113</sa:AssetID>
<sa:Properties>
  <sa:Name>server 11</sa:Name>
  <sa:AssetStatus>tangible</sa:AssetStatus>
  <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
  <sa:Plan>
    <sa:PlanID/>
    <sa:PlanName>Planless</sa:PlanName>
  </sa:Plan>
  <sa:Rack>
    <sa:RackID>1434092</sa:RackID>
    <sa:RackName>rack cabinet 9</sa:RackName>
  </sa:Rack>
  <sa:Container/>
  <sa:Location>
    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    <sa:SlotName>Slot#1</sa:SlotName>
    <sa:LSlot>LSlot#34</sa:LSlot>
  </sa:Location>
</sa:Properties>
</sa:Asset>      <sa:Asset>
<sa:AssetID>1434134</sa:AssetID>
<sa:Properties>
  <sa:Name>module 13</sa:Name>
  <sa:AssetStatus>tangible</sa:AssetStatus>
  <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
  <sa:Plan>
    <sa:PlanID/>
    <sa:PlanName>Planless</sa:PlanName>
  </sa:Plan>
  <sa:Rack>
    <sa:RackID>1434092</sa:RackID>
    <sa:RackName>rack cabinet 9</sa:RackName>
  </sa:Rack>
  <sa:Container>
    <sa:ContainerID>1434113</sa:ContainerID>
    <sa:ContainerName>server 11</sa:ContainerName>
  </sa:Container>
  <sa:Location>
    <sa:MountingRotation>two hundred seventy degrees</sa:MountingRotation>
    <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
    <sa:SlotName>Slot#04</sa:SlotName>
    <sa:LSlot>LSlot#4</sa:LSlot>
  </sa:Location>
</sa:Properties>
</sa:Asset>
<sa:Asset>

```

```

    <sa:AssetID>1434092</sa:AssetID>
    <sa:Properties>
      <sa:Name>rack cabinet 9</sa:Name>
      <sa:AssetStatus>tangible</sa:AssetStatus>
      <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
      <sa:Plan>
        <sa:PlanID/>
        <sa:PlanName>Planless</sa:PlanName>
      </sa:Plan>
    </sa:Properties>
  </sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.5 Query all templates

The following request is an example of searching all the templates in the database, including all child templates contained inside another template. All assets and asset properties contained in all templates are provided. If the asset has no rack and no container listed in its asset properties, it means this asset is the top level asset of the template that has been predefined in the Data Center Planner GUI.

The template uses the same data structure that is defined in the WSDL file. For each template, the AssetID of this top level asset is the TemplateID and AssetName is the TemplateName.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>assetStatus:template</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>assetStatus:template plan:planless</sa:QueryString>
      <sa:Assets>
        <!-- This template is a rack with multiple assets mounted in the rack. There is no guaranteed order of
        how the top level asset and the child assets of the template will be given.
        It is Top-level template that has been predefined in Data Center Planner GUI, because it has no Rack, no
        Container properties.-->
          <sa:Asset>
            <!-- template has associated assetid.-->
            <sa:AssetID>1434186</sa:AssetID>
            <sa:Properties>
              <!--This AssetName is the TemplateName that has been predefined in Data Center Planner GUI-->
              <sa:Name>Template-Rack-1</sa:Name>
              <sa:AssetStatus>template</sa:AssetStatus>
              <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
              <sa:Plan>
                <sa:PlanID/>
                <sa:PlanName>Planless</sa:PlanName>
              </sa:Plan>
              <sa:Location/>
            </sa:Properties>
          </sa:Asset>
          <sa:Asset>
            <sa:AssetID>1434212</sa:AssetID>
            <sa:Properties>
              <sa:Name>Template-Server-1</sa:Name>
              <sa:AssetStatus>template</sa:AssetStatus>
              <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
              <sa:Plan>
                <sa:PlanID/>
                <sa:PlanName>Planless</sa:PlanName>
              </sa:Plan>
              <sa:Rack/>
              <sa:Container/>
              <sa:Location/>
            </sa:Properties>
          </sa:Asset>
          <!--This is an new template that copy from Template_Server-2, and is placed in Template-Rack-1 -->
          <sa:Asset>
            <sa:AssetID>1434249</sa:AssetID>
            <sa:Properties>
              <sa:Name>Template_Server-2</sa:Name>
              <sa:AssetStatus>template</sa:AssetStatus>
              <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
            </sa:Properties>
          </sa:Asset>
        </sa:Assets>
      </sa:QueryEnhancedResponse>
    </sa:Body>
  </SOAP-ENV:Envelope>

```

```

<sa:Plan>
  <sa:PlanID/>
  <sa:PlanName>Planless</sa:PlanName>
</sa:Plan>
<sa:Rack>
  <sa:RackID>1434186</sa:RackID>
  <sa:RackName>Template-Rack-1</sa:RackName>
</sa:Rack>
<sa:Container>
  <sa:ContainerID>1434198</sa:ContainerID>
  <sa:ContainerName>Server-1</sa:ContainerName>
</sa:Container>
<sa:Location>
  <sa:MountingRotation>two hundred seventy degrees</sa:MountingRotation>
  <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
  <sa:SlotName>Slot#03</sa:SlotName>
  <sa:LSlot>LSlot#2</sa:LSlot>
</sa:Location>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434232</sa:AssetID>
  <sa:Properties>
    <sa:Name>Template_Server-2</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A001198</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
    <sa:Container/>
    <sa:Location/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434198</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1434186</sa:RackID>
      <sa:RackName>Template-Rack-1</sa:RackName>

```

```

        </sa:Rack>
        <sa:Container/>
        <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
            <sa:SlotName>Slot#1</sa:SlotName>
            <sa:LSlot>LSlot#34</sa:LSlot>
        </sa:Location>
    </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.6 Query Assets - Templates through asset name

This is an example of searching for the assets/templates where the name contains "rackcabinet11".

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
<!--It will list all the asset name that contains "rack cabinet 11", such as "black rack cabinet11", "rack
cabinet112"-->
      <enh:QueryString>tag:"rack cabinet 11"</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```


Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>tag:"Rack Cabinet 11"</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>3060844</sa:AssetID>
          <sa:Properties>
            <sa:Name>Rack Cabinet 11 Template-1</sa:Name>
            <sa:AssetStatus>template</sa:AssetStatus>
            <sa:ShapeTypeID>CHTW468</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID/>
              <sa:PlanName>Planless</sa:PlanName>
            </sa:Plan>
            <sa:Location/>
          </sa:Properties>
        </sa:Asset>
        <sa:Asset>
          <sa:AssetID>3060801</sa:AssetID>
          <sa:Properties>
            <sa:Name>rack cabinet 11</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>CHTW468</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>2313751</sa:PlanID>
              <sa:PlanName>Plan-1</sa:PlanName>
            </sa:Plan>
            <sa:Location>
              <sa:Xcoord>10.25</sa:Xcoord>
              <sa:Ycoord>10.50</sa:Ycoord>
              <sa:MountingRotation>0.00</sa:MountingRotation>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.7 Query Assets - Templates through device manufacturer

The following is an example of an asset/template search with "IBM" as the device manufacturer.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-78e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>type.manufacturer:IBM</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.manufacturer:IBM</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433843</sa:AssetID>
          <sa:Properties>
            <sa:Name>Server 1</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1433791</sa:RackID>
              <sa:RackName>Rack Cabinet 1</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#3</sa:SlotName>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

    <sa:LSlot>LSlot#32</sa:LSlot>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S200001</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433877</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A001042</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1433843</sa:ContainerID>
      <sa:ContainerName>Server 1</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#01</sa:SlotName>
      <sa:LSlot>LSlot#1</sa:LSlot>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S300001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433911</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>IBMM055</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>

```

```

<sa:Rack>
  <sa:RackID>1433791</sa:RackID>
  <sa:RackName>Rack Cabinet 1</sa:RackName>
</sa:Rack>
<sa:Container>
  <sa:ContainerID>1433877</sa:ContainerID>
  <sa:ContainerName>Module 1</sa:ContainerName>
</sa:Container>
<sa:Location>
  <sa:MountingRotation>zero degrees</sa:MountingRotation>
  <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
  <sa:SlotName>Slot#00</sa:SlotName>
  <sa:LSlot>LSlot#1</sa:LSlot>
</sa:Location>
<sa:UDP>
  <sa:Label>serial number</sa:Label>
  <sa:Value>S300002</sa:Value>
</sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434113</sa:AssetID>
  <sa:Properties>
    <sa:Name>server 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
  </sa:Properties>
  <sa:Rack>
    <sa:RackID>1434092</sa:RackID>
    <sa:RackName>rack cabinet 9</sa:RackName>
  </sa:Rack>
  <sa:Container/>
  <sa:Location>
    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    <sa:SlotName>Slot#1</sa:SlotName>
    <sa:LSlot>LSlot#34</sa:LSlot>
  </sa:Location>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434212</sa:AssetID>
  <sa:Properties>
    <sa:Name>Template-Server-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
  </sa:Properties>
</sa:Asset>

```

```

    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
    <sa:Container/>
    <sa:Location/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434298</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 2</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434272</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434332</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 3</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>

```

```

    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434337</sa:ContainerID>
      <sa:ContainerName>zero u space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:SlotName>front left</sa:SlotName>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200003</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434198</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1434186</sa:RackID>
      <sa:RackName>Template-Rack-1</sa:RackName>
    </sa:Rack>
    <sa:Container/>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#1</sa:SlotName>
      <sa:LSlot>LSlot#34</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.8 Query Assets - Templates through device description

This is an example of searching for the assets/templates where the device description contains "X3650".

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5cee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <!--It will list all the device description that contains "X3650 M3", it is not exact match -->
      <enh:QueryString>type.description:"X3650 M3"</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.description:"X3650 M3"</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433843</sa:AssetID>
          <sa:Properties>
            <sa:Name>Server 1</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1433791</sa:RackID>
              <sa:RackName>Rack Cabinet 1</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#3</sa:SlotName>
              <sa:LSlot>LSlot#32</sa:LSlot>
            </sa:Location>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
              <sa:Value>S200001</sa:Value>
            </sa:UDP>
          </sa:Properties>
        </sa:Asset>
        <sa:Asset>
          <sa:AssetID>1434113</sa:AssetID>
          <sa:Properties>
            <sa:Name>server 11</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID/>
              <sa:PlanName>Planless</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1434092</sa:RackID>
              <sa:RackName>rack cabinet 9</sa:RackName>
            </sa:Rack>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```



```

    <sa:Container/>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#1</sa:SlotName>
      <sa:LSlot>LSlot#34</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434212</sa:AssetID>
  <sa:Properties>
    <sa:Name>Template-Server-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
    <sa:Container/>
    <sa:Location/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434298</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 2</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434272</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>

```

```

        <sa:Value>S200002</sa:Value>
    </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
    <sa:AssetID>1434332</sa:AssetID>
    <sa:Properties>
        <sa:Name>Server 3</sa:Name>
        <sa:AssetStatus>tangible</sa:AssetStatus>
        <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
        <sa:Plan>
            <sa:PlanID>1433764</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
        </sa:Plan>
        <sa:Rack>
            <sa:RackID>1433791</sa:RackID>
            <sa:RackName>Rack Cabinet 1</sa:RackName>
        </sa:Rack>
        <sa:Container>
            <sa:ContainerID>1434337</sa:ContainerID>
            <sa:ContainerName>zero u space</sa:ContainerName>
        </sa:Container>
        <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:SlotName>front left</sa:SlotName>
        </sa:Location>
        <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S200003</sa:Value>
        </sa:UDP>
    </sa:Properties>
</sa:Asset>
<sa:Asset>
    <sa:AssetID>1434198</sa:AssetID>
    <sa:Properties>
        <sa:Name>Server-1</sa:Name>
        <sa:AssetStatus>template</sa:AssetStatus>
        <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
        <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
        </sa:Plan>
        <sa:Rack>
            <sa:RackID>1434186</sa:RackID>
            <sa:RackName>Template-Rack-1</sa:RackName>
        </sa:Rack>
        <sa:Container/>
        <sa:Location>

```

```

        <sa:MountingRotation>zero degrees</sa:MountingRotation>
        <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
        <sa:SlotName>Slot#1</sa:SlotName>
        <sa:LSlot>LSlot#34</sa:LSlot>
    </sa:Location>
</sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.9 Query Assets - Templates through device type

This is an example of searching for the assets/templates where the device type is "Server".

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>type.assetClass:Server</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.assetClass:Server</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433843</sa:AssetID>
          <sa:Properties>
            <sa:Name>Server 1</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1433791</sa:RackID>
              <sa:RackName>Rack Cabinet 1</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#3</sa:SlotName>
              <sa:LSlot>LSlot#32</sa:LSlot>
            </sa:Location>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
              <sa:Value>S200001</sa:Value>
            </sa:UDP>
          </sa:Properties>
        </sa:Asset>
        <sa:Asset>
          <sa:AssetID>1434113</sa:AssetID>
          <sa:Properties>
            <sa:Name>server 11</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID/>
              <sa:PlanName>Planless</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1434092</sa:RackID>
              <sa:RackName>rack cabinet 9</sa:RackName>
            </sa:Rack>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    <sa:Container/>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#1</sa:SlotName>
      <sa:LSlot>LSlot#34</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434212</sa:AssetID>
  <sa:Properties>
    <sa:Name>Template-Server-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Rack/>
    <sa:Container/>
    <sa:Location/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434298</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 2</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434272</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
  </sa:Properties>
</sa:Asset>

```

```

        <sa:Value>S200002</sa:Value>
    </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
    <sa:AssetID>1434332</sa:AssetID>
    <sa:Properties>
        <sa:Name>Server 3</sa:Name>
        <sa:AssetStatus>tangible</sa:AssetStatus>
        <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
        <sa:Plan>
            <sa:PlanID>1433764</sa:PlanID>
            <sa:PlanName>HSV-Plan</sa:PlanName>
        </sa:Plan>
        <sa:Rack>
            <sa:RackID>1433791</sa:RackID>
            <sa:RackName>Rack Cabinet 1</sa:RackName>
        </sa:Rack>
        <sa:Container>
            <sa:ContainerID>1434337</sa:ContainerID>
            <sa:ContainerName>zero u space</sa:ContainerName>
        </sa:Container>
        <sa:Location>
            <sa:MountingRotation>zero degrees</sa:MountingRotation>
            <sa:SlotName>front left</sa:SlotName>
        </sa:Location>
        <sa:UDP>
            <sa:Label>serial number</sa:Label>
            <sa:Value>S200003</sa:Value>
        </sa:UDP>
    </sa:Properties>
</sa:Asset>
<sa:Asset>
    <sa:AssetID>1434198</sa:AssetID>
    <sa:Properties>
        <sa:Name>Server-1</sa:Name>
        <sa:AssetStatus>template</sa:AssetStatus>
        <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
        <sa:Plan>
            <sa:PlanID/>
            <sa:PlanName>Planless</sa:PlanName>
        </sa:Plan>
        <sa:Rack>
            <sa:RackID>1434186</sa:RackID>
            <sa:RackName>Template-Rack-1</sa:RackName>
        </sa:Rack>
        <sa:Container/>
        <sa:Location>

```

```

        <sa:MountingRotation>zero degrees</sa:MountingRotation>
        <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
        <sa:SlotName>Slot#1</sa:SlotName>
        <sa:LSlot>LSlot#34</sa:LSlot>
    </sa:Location>
</sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.10 Query Asset - Templates through device model number

This is an example of searching for the assets/templates where the device model contains "Generis-PDU".

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
<!-- This will list all assets that contain Generic-PDU in the model number -->
      <enh:QueryString>type.model:Generic-PDU</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.model:Generic-PDU</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1312176</sa:AssetID>
          <sa:Properties>
            <sa:Name>power distribution unit 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>0GRM154</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1312148</sa:PlanID>
              <sa:PlanName>SH-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Location>
              <sa:Xcoord>3.75</sa:Xcoord>
              <sa:Ycoord>3.50</sa:Ycoord>
              <sa:MountingRotation>0.00</sa:MountingRotation>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.11 Query Assets - Templates through device product line

This is an example of searching for the assets/templates where the device product line contains "Cabinet".

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b24d8338-9426-451a-8fc4-5ceee27c218b</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
```



```

    <enh:QueryString>type.productLine:CABINET</enh:QueryString>
    <enh:Unlimited>>false</enh:Unlimited>
  </enh:QueryEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.productLine:CABINET</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433819</sa:AssetID>
          <sa:Properties>
            <sa:Name>Rack Cabinet 3</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Location>
              <sa:Xcoord>5.00</sa:Xcoord>
              <sa:Ycoord>6.80</sa:Ycoord>
              <sa:MountingRotation>120.00</sa:MountingRotation>
            </sa:Location>
            <sa:Derate>
              <sa:Heat>
                <sa:Units>kW</sa:Units>
                <sa:Value>1.00</sa:Value>
                <sa:IsAggregate>>true</sa:IsAggregate>
              </sa:Heat>
              <sa:Power>
                <sa:Units>kilowatts</sa:Units>
                <sa:Value>2.10</sa:Value>
                <sa:IsAggregate>>false</sa:IsAggregate>
              </sa:Power>
            </sa:Derate>
          </sa:Properties>
        </sa:Asset>
        <sa:Asset>
          <sa:AssetID>1433945</sa:AssetID>
          <sa:Properties>
            <sa:Name>Black Rack Cabinet 2</sa:Name>

```

```

    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S100002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434092</sa:AssetID>
  <sa:Properties>
    <sa:Name>rack cabinet 9</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434186</sa:AssetID>
  <sa:Properties>
    <sa:Name>Template-Rack-1</sa:Name>
    <sa:AssetStatus>template</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID/>
      <sa:PlanName>Planless</sa:PlanName>
    </sa:Plan>
    <sa:Location/>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433791</sa:AssetID>
  <sa:Properties>
    <sa:Name>Rack Cabinet 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Location>

```

```

        <sa:Xcoord>2.19</sa:Xcoord>
        <sa:Ycoord>0.96</sa:Ycoord>
        <sa:MountingRotation>0.00</sa:MountingRotation>
    </sa:Location>
    <sa:Derate>
        <sa:Heat>
            <sa:Units>kW</sa:Units>
            <sa:Value>1.00</sa:Value>
            <sa:IsAggregate>>true</sa:IsAggregate>
        </sa:Heat>
        <sa:Power>
            <sa:Units>kilowatts</sa:Units>
            <sa:Value>2.10</sa:Value>
            <sa:IsAggregate>>false</sa:IsAggregate>
        </sa:Power>
    </sa:Derate>
    <sa:UDP>
        <sa:Label>serial number</sa:Label>
        <sa:Value>S100001</sa:Value>
    </sa:UDP>
    <sa:UDP>
        <sa:Label>IP address</sa:Label>
        <sa:Value>10.207.2.100</sa:Value>
    </sa:UDP>
    </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.12 Query Assets - Templates through user-defined properties (UDP)

This is an example of searching for the assets/templates where the UDP serial number has the value "S1000001" and the UDP IP address has the value of "10.207.2.100".

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>

```

```

<soapenv:Body>
  <enh:QueryEnhancedRequest>
<!-- UDP names as Field names are case sensitive, should always use lowercase characters. -->
    <enh:QueryString>serial\ number:S1000001 ip\ address:10.207.2.100</enh:QueryString>
    <enh:Unlimited>>false</enh:Unlimited>
  </enh:QueryEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>serial\ number:S1000001 ip\ address:10.207.2.100</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1311777</sa:AssetID>
          <sa:Properties>
            <sa:Name>server 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1311591</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1311640</sa:RackID>
              <sa:RackName>rack cabinet 11</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>rear facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#6</sa:SlotName>
              <sa:LSlot>LSlot#29</sa:LSlot>
            </sa:Location>
            <sa:Derate>
              <sa:Power>
                <sa:Units>kilowatts</sa:Units>
                <sa:Value>0.10</sa:Value>
                <sa:IsAggregate>>false</sa:IsAggregate>
              </sa:Power>
            </sa:Derate>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
            </sa:UDP>
          </sa:Asset>
        </sa:Assets>
      </sa:QueryEnhancedResponse>
    </SOAP-ENV:Body>
  </SOAP-ENV:Envelope>

```

```

        <sa:Value>S1000001</sa:Value>
    </sa:UDP>
    <sa:UDP>
        <sa:Label>IP address</sa:Label>
        <sa:Value>10.207.2.100</sa:Value>
    </sa:UDP>
</sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.13 Query-placed assets through devise manufacturer and model number

This is an example of searching for the assets/templates where the device manufacturer is "IBM" and the model number contains "7945-D2U".

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>type.manufacturer:IBM type.model:"7945-D2U"-
plan:planless</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.manufacturer:IBM -plan:planless</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1311777</sa:AssetID>
          <sa:Properties>
            <sa:Name>server 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A0000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID/>1311591<sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1311640</sa:RackID>
              <sa:RackName>rack cabinet 11</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>rear racing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#6</sa:SlotName>
              <sa:LSlot>LSlot#29</sa:LSlot>
            </sa:Location>
            <sa:Derate>
              <sa:Power>
                <sa:Units>kilowatts</sa:Units>
                <sa:Value>0.10</sa:Value>
                <sa:IsAggregate>>false</sa:IsAggregate>
              </sa:Power>
            </sa:Derate>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
              <sa:Value>S1000001</sa:Value>
            </sa:UDP>
            <sa:UDP>
              <sa:Label>IP address</sa:Label>
              <sa:Value>10.207.2.100</sa:Value>
            </sa:UDP>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  
```

```
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.14 Query templates through device manufacturer and model number

This is an example of searching for the templates where the device manufacturer contains "IBM" and the model contains "2005-R18V3".

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>type.manufacturer:IBM type.model:"2005-R18 V3"
assetStatus:template</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.manufacturer:IBM type.model:"2005-R18 V3"
assetStatus:template</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1311710</sa:AssetID>
          <sa:Properties>
            <sa:Name>router 18</sa:Name>
            <sa:AssetStatus>template</sa:AssetStatus>
            <sa:ShapeTypeID>A011572</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID/>
              <sa:PlanName>Planless</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1311685</sa:RackID>
              <sa:RackName>Template-FromAssets-2</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#2</sa:SlotName>
              <sa:LSlot>LSlot#41</sa:LSlot>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.2.15 Query assets within plans through wildcards

The following is an example of searching for the assets within a plan where the plan name starts with SH.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
```



```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:QueryEnhancedRequest>
<!--This will list all assets/shelf spaces within the plan that plan name starts with "SH" -->
    <enh:QueryString>plan:SH*</enh:QueryString>
    <enh:Unlimited>>false</enh:Unlimited>
  </enh:QueryEnhancedRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>plan:SH*</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1312176</sa:AssetID>
          <sa:Properties>
            <sa:Name>power distribution unit 2</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>0GRM154</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1312148</sa:PlanID>
              <sa:PlanName>SH-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Location>
              <sa:Xcoord>3.75</sa:Xcoord>
              <sa:Ycoord>3.50</sa:Ycoord>
              <sa:MountingRotation>0.00</sa:MountingRotation>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:QueryEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.16 Query assets, templates and shelfspace with a maximum set limit of 2000

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryEnhancedRequest>
      <enh:QueryString>plan:*</enh:QueryString>
      <enh:Unlimited>>false</enh:Unlimited>
    </enh:QueryEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>plan:*/</sa:QueryString>
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1311749</sa:AssetID>
          <sa:Properties>
            <sa:ShapeTypeID>shelf space</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1311591</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1311640</sa:RackID>
              <sa:RackName>rack cabinet 11</sa:RackName>
            </sa:Rack>
            <sa:ConsumedRU>10</sa:ConsumedRU>
            <sa:Location>
              <sa:SlotName>Slot#1</sa:SlotName>
              <sa:LSlot>LSlot#34</sa:LSlot>
            </sa:Location>
          </sa:Properties>
        </sa:Asset>
        .....
      <!-- Only return 2000 assets/shelf spaces to client -->
    </sa:Assets>
    <sa:Error>
      <sa:ErrorCode>90001</sa:ErrorCode>
      <sa:ErrorMessage> This is only a partial response to the QueryEnhanced request. The maximum
limit set for this query of 2000 assets has been reached.</sa:ErrorMessage>
    </sa:Error>
  </sa:QueryEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.2.17 QueryEnhanced - Request specific properties

The RequestAssetProperties for QueryEnhanced are the same as GetAssetEnhanced. Use the following links to view examples:

- Specific Name - See [Get Asset - Specific name](#) on page 22
- Specific AssetStatus - See [Get Asset - Specific asset status](#) on page 23
- Specific Derate - See [Get Asset - Specific derate properties](#) on page 23
- Specific User-Defined Property - See [Get Asset - Specific user-defined properties \(UDP\)](#) on page 25

- Specific Plan - See [Get Asset - Specific plan](#) on page 26
- Specific Rack - See [Get Asset - Specific rack](#) on page 27
- Specific Container - See [Get Asset - Specific container](#) on page 28
- Specific Location - See [Get Asset - Specific location - shelf space](#) on page 30
- Specific ShapeType - See [Get Asset - Specific shape type](#) on page 31

2.3 GetAssetContainmentDetails

GetAssetContainerDetails requests detailed properties of specific assets, all child assets and all child shelf spaces within the specific asset.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID

Optional input:

- RequestedAssetProperties: If RequestedAssetProperties was not provided by the client, all properties are returned. If RequestedAssetProperties was provided by client, only the following specified properties are returned:
 - Name: blank
 - AssetStatus: blank
 - Derate: always includes heat, power and/or weight properties
 - UDP: label of user-defined property
 - Plan: blank
 - Rack: blank
 - Container: blank
 - Location: blank
 - ShapeType: blank

2.3.1 GetAssetContainmentDetails - Request all properties

The following sections show examples of how to get all containment property details.

2.3.2 Query rack, child assets and shelf space

The following request and response are examples to get the asset properties for a rack cabinet type asset and all child assets and shelf spaces within the asset. The asset specified in the request is always listed first in the response. The child assets can be listed in any order.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>2d375d57-bee3-4292-9d3c-55c0aa5db620</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wssse:Security>
  </soapenv:Header>
</soapenv:Envelope>
```

```

    </wsse:SecurityContextToken>
  </wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:GetAssetContainmentDetailsRequest>
    <enh:AssetID>1433791</enh:AssetID>
  </enh:GetAssetContainmentDetailsRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetContainmentDetailsResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433791</sa:AssetID>
          <sa:Properties>
            <sa:Name>Rack Cabinet 1</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Location>
              <sa:Xcoord>2.19</sa:Xcoord>
              <sa:Ycoord>0.96</sa:Ycoord>
              <sa:MountingRotation>0.00</sa:MountingRotation>
            </sa:Location>
            <sa:Derate>
              <sa:Heat>
                <sa:Units>kW</sa:Units>
                <sa:Value>1.00</sa:Value>
                <sa:IsAggregate>>true</sa:IsAggregate>
              </sa:Heat>
              <sa:Power>
                <sa:Units>kilowatts</sa:Units>
                <sa:Value>2.10</sa:Value>
                <sa:IsAggregate>>false</sa:IsAggregate>
              </sa:Power>
            </sa:Derate>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
              <sa:Value>S100001</sa:Value>
            </sa:UDP>
          </sa:Asset>
        </sa:Assets>
      </sa:GetAssetContainmentDetailsResponse>
    </SOAP-ENV:Body>
  </SOAP-ENV:Envelope>

```

```

    </sa:UDP>
    <sa:UDP>
      <sa:Label>IP address</sa:Label>
      <sa:Value>10.207.2.100</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433843</sa:AssetID>
  <sa:Properties>
    <sa:Name>Server 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container/>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#3</sa:SlotName>
      <sa:LSlot>LSlot#32</sa:LSlot>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433877</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A001042</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
  </sa:Properties>
</sa:Asset>

```

```

<sa:Container>
  <sa:ContainerID>1433843</sa:ContainerID>
  <sa:ContainerName>Server 1</sa:ContainerName>
</sa:Container>
<sa:Location>
  <sa:MountingRotation>zero degrees</sa:MountingRotation>
  <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
  <sa:SlotName>Slot#01</sa:SlotName>
  <sa:LSlot>LSlot#1</sa:LSlot>
</sa:Location>
<sa:UDP>
  <sa:Label>serial number</sa:Label>
  <sa:Value>S300001</sa:Value>
</sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433911</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>IBMM055</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1433877</sa:ContainerID>
      <sa:ContainerName>Module 1</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#00</sa:SlotName>
      <sa:LSlot>LSlot#1</sa:LSlot>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S300002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434332</sa:AssetID>

```

```

<sa:Properties>
  <sa:Name>Server 3</sa:Name>
  <sa:AssetStatus>tangible</sa:AssetStatus>
  <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
  <sa:Plan>
    <sa:PlanID>1433764</sa:PlanID>
    <sa:PlanName>HSV-Plan</sa:PlanName>
  </sa:Plan>
  <sa:Rack>
    <sa:RackID>1433791</sa:RackID>
    <sa:RackName>Rack Cabinet 1</sa:RackName>
  </sa:Rack>
  <sa:Container>
    <sa:ContainerID>1434337</sa:ContainerID>
    <sa:ContainerName>zero u space</sa:ContainerName>
  </sa:Container>
  <sa:Location>
    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:SlotName>front left</sa:SlotName>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S200003</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434272</sa:AssetID>
  <sa:Properties>
    <sa:ShapeTypeID>shelf space</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:ConsumedRU>4</sa:ConsumedRU>
    <sa:Location>
      <sa:SlotName>Slot#5</sa:SlotName>
      <sa:LSlot>LSlot#30</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434298</sa:AssetID>
  <sa:Properties>

```



```

    <sa:Name>Server 2</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1434272</sa:ContainerID>
      <sa:ContainerName>shelf space</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S200002</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1434285</sa:AssetID>
  <sa:Properties>
    <sa:ShapeTypeID>shelf space</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:ConsumedRU>4</sa:ConsumedRU>
    <sa:Location>
      <sa:SlotName>Slot#7</sa:SlotName>
      <sa:LSlot>LSlot#28</sa:LSlot>
    </sa:Location>
  </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:GetAssetContainmentDetailsResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.3.3 Query non-rack container and all child assets

The following request and response are examples of a search for the asset properties of a non-rack cabinet type asset and all child assets and shelf spaces within this asset. The child assets can be listed in any order.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>2d375d57-bee3-4292-9d3c-55c0aa5db620</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetContainmentDetailsRequest>
      <enh:AssetID>1433843</enh:AssetID>
    </enh:GetAssetContainmentDetailsRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetContainmentDetailsResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433843</sa:AssetID>
          <sa:Properties>
            <sa:Name>Server 1</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>A000097</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1433791</sa:RackID>
              <sa:RackName>Rack Cabinet 1</sa:RackName>
            </sa:Rack>
            <sa:Container/>
            <sa:Location>
```

```

    <sa:MountingRotation>zero degrees</sa:MountingRotation>
    <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
    <sa:SlotName>Slot#3</sa:SlotName>
    <sa:LSlot>LSlot#32</sa:LSlot>
  </sa:Location>
  <sa:UDP>
    <sa:Label>serial number</sa:Label>
    <sa:Value>S200001</sa:Value>
  </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433877</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 1</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>A001042</sa:ShapeTypeID>
    <sa:Plan>
      <sa:PlanID>1433764</sa:PlanID>
      <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
      <sa:RackID>1433791</sa:RackID>
      <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
      <sa:ContainerID>1433843</sa:ContainerID>
      <sa:ContainerName>Server 1</sa:ContainerName>
    </sa:Container>
    <sa:Location>
      <sa:MountingRotation>zero degrees</sa:MountingRotation>
      <sa:MountingOrientation>front facing/rear mounted</sa:MountingOrientation>
      <sa:SlotName>Slot#01</sa:SlotName>
      <sa:LSlot>LSlot#1</sa:LSlot>
    </sa:Location>
    <sa:UDP>
      <sa:Label>serial number</sa:Label>
      <sa:Value>S300001</sa:Value>
    </sa:UDP>
  </sa:Properties>
</sa:Asset>
<sa:Asset>
  <sa:AssetID>1433911</sa:AssetID>
  <sa:Properties>
    <sa:Name>Module 11</sa:Name>
    <sa:AssetStatus>tangible</sa:AssetStatus>
    <sa:ShapeTypeID>IBMM055</sa:ShapeTypeID>
    <sa:Plan>

```

```

        <sa:PlanID>1433764</sa:PlanID>
        <sa:PlanName>HSV-Plan</sa:PlanName>
    </sa:Plan>
    <sa:Rack>
        <sa:RackID>1433791</sa:RackID>
        <sa:RackName>Rack Cabinet 1</sa:RackName>
    </sa:Rack>
    <sa:Container>
        <sa:ContainerID>1433877</sa:ContainerID>
        <sa:ContainerName>Module 1</sa:ContainerName>
    </sa:Container>
    <sa:Location>
        <sa:MountingRotation>zero degrees</sa:MountingRotation>
        <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
        <sa:SlotName>Slot#00</sa:SlotName>
        <sa:LSlot>LSlot#1</sa:LSlot>
    </sa:Location>
    <sa:UDP>
        <sa:Label>serial number</sa:Label>
        <sa:Value>S300002</sa:Value>
    </sa:UDP>
    </sa:Properties>
</sa:Asset>
</sa:Assets>
</sa:GetAssetContainmentDetailsResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.3.4 Query non-container type asset

The following is an example of how to request the asset properties of an asset that does not contain any asset. The response of GetAssetContainmentDetails only returns detailed properties of this asset.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>2d375d57-bee3-4292-9d3c-55c0aa5db620</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetAssetContainmentDetailsRequest>
      <enh:AssetID>1433911</enh:AssetID>
    </enh:GetAssetContainmentDetailsRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

```

    </enh:GetAssetContainmentDetailsRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetContainmentDetailsResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Assets>
        <sa:Asset>
          <sa:AssetID>1433911</sa:AssetID>
          <sa:Properties>
            <sa:Name>Module 11</sa:Name>
            <sa:AssetStatus>tangible</sa:AssetStatus>
            <sa:ShapeTypeID>IBMM055</sa:ShapeTypeID>
            <sa:Plan>
              <sa:PlanID>1433764</sa:PlanID>
              <sa:PlanName>HSV-Plan</sa:PlanName>
            </sa:Plan>
            <sa:Rack>
              <sa:RackID>1433791</sa:RackID>
              <sa:RackName>Rack Cabinet 1</sa:RackName>
            </sa:Rack>
            <sa:Container>
              <sa:ContainerID>1433877</sa:ContainerID>
              <sa:ContainerName>Module 1</sa:ContainerName>
            </sa:Container>
            <sa:Location>
              <sa:MountingRotation>zero degrees</sa:MountingRotation>
              <sa:MountingOrientation>front facing/front mounted</sa:MountingOrientation>
              <sa:SlotName>Slot#00</sa:SlotName>
              <sa:LSlot>LSlot#1</sa:LSlot>
            </sa:Location>
            <sa:UDP>
              <sa:Label>serial number</sa:Label>
              <sa:Value>S300002</sa:Value>
            </sa:UDP>
          </sa:Properties>
        </sa:Asset>
      </sa:Assets>
    </sa:GetAssetContainmentDetailsResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.4 GetAssetContainmentDetails - Request specific properties

RequestedAssetProperties for GetAssetContainmentDetails are the same as GetAssetEnhanced. Use the following links to view examples:

- Specific Name - See [Get Asset - Specific name](#) on page 22
- Specific AssetStatus - See [Get Asset - Specific asset status](#) on page 23
- Specific Derate - See [Get Asset - Specific derate properties](#) on page 23
- Specific User-Defined Property - See [Get Asset - Specific user-defined properties \(UDP\)](#) on page 25
- Specific Plan - See [Get Asset - Specific plan](#) on page 26
- Specific Rack - See [Get Asset - Specific rack](#) on page 27
- Specific Container - See [Get Asset - Specific container](#) on page 28
- Specific Location - See [Get Asset - Specific location - shelf space](#) on page 30
- Specific ShapeType - See [Get Asset - Specific shape type](#) on page 31

2.5 GetShape

GetShape requests all properties of a single device shape.

Required input:

- Authentication token: Session ID
- ShapeTypeID: Shape identifier

Optional input:

- RequestedDeviceProperties: If RequestedDeviceProperties are not provided by the client, all properties are returned. If RequestedDeviceProperties are provided by the client, only the following specified properties are returned:
 - Manufacturer: blank
 - Model: blank
 - ProductLine: blank
 - Description: blank
 - AssetType: blank
 - Dimensions: blank
 - PlacementType: blank
 - RackUnits:blank. For rack cabinet shape, TotalRU will be returned. For rack mounted shape, ConsumedRU will be returned. If does not contains, blank node will be returned.
 - SlotOrPortShape: blank. If it contains slots, all slots information will be returned. If contains ports, all ports information will be returned. If neither contains slot or port, blank node will be returned.

2.5.1 GetShape - Request all device properties

The following sections provide examples of how to get device properties with the specified ShapeTypeID.

2.5.2 GetShape - Query rack cabinet

The following request and response examples show how to request the device properties for a rack cabinet device with the specified ShapeTypeID from the device library.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>A000898</enh:ShapeTypeID>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>A000898</sa:ShapeTypeID>
        <sa:Manufacturer>Panduit</sa:Manufacturer>
        <sa:Model>CN2</sa:Model>
        <sa:ProductLine>NET ACCESS</sa:ProductLine>
        <sa:Description>45U 19IN CABINET</sa:Description>
        <sa:AssetType>Rack Cabinet</sa:AssetType>
        <sa:Dimensions>
          <sa:Height>84.00</sa:Height>
          <sa:Width>31.50</sa:Width>
          <sa:Depth>41.10</sa:Depth>
        </sa:Dimensions>
        <sa:PlacementType>floor_mounted_rack</sa:PlacementType>
        <sa:TotalRU>45</sa:TotalRU>
        <sa:Slots>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#45</sa:SlotName>
          </sa:SlotShape>
        </sa:Slots>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

<sa:LSlot>LSlot#1</sa:LSlot>
<sa:SlotOriginPosition>
  <sa:Xcoord>125</sa:Xcoord>
  <sa:Y coord>53</sa:Y coord>
</sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#44</sa:SlotName>
  <sa:LSlot>LSlot#2</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Y coord>88</sa:Y coord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#43</sa:SlotName>
  <sa:LSlot>LSlot#3</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Y coord>123</sa:Y coord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#42</sa:SlotName>
  <sa:LSlot>LSlot#4</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Y coord>158</sa:Y coord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#41</sa:SlotName>
  <sa:LSlot>LSlot#5</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Y coord>193</sa:Y coord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#40</sa:SlotName>
  <sa:LSlot>LSlot#6</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>

```



```

    <sa:Ycoord>228</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#39</sa:SlotName>
  <sa:LSlot>LSlot#7</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>263</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#38</sa:SlotName>
  <sa:LSlot>LSlot#8</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>298</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#37</sa:SlotName>
  <sa:LSlot>LSlot#9</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>333</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#36</sa:SlotName>
  <sa:LSlot>LSlot#10</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>368</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#35</sa:SlotName>
  <sa:LSlot>LSlot#11</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>403</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>

```

```

<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#34</sa:SlotName>
  <sa:LSlot>LSlot#12</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>438</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#33</sa:SlotName>
  <sa:LSlot>LSlot#13</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>473</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#32</sa:SlotName>
  <sa:LSlot>LSlot#14</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>508</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#31</sa:SlotName>
  <sa:LSlot>LSlot#15</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>543</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#30</sa:SlotName>
  <sa:LSlot>LSlot#16</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>578</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#29</sa:SlotName>

```

```

    <sa:LSlot>LSlot#17</sa:LSlot>
    <sa:SlotOriginPosition>
      <sa:Xcoord>125</sa:Xcoord>
      <sa:Ycoord>613</sa:Ycoord>
    </sa:SlotOriginPosition>
  </sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#28</sa:SlotName>
  <sa:LSlot>LSlot#18</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>648</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#27</sa:SlotName>
  <sa:LSlot>LSlot#19</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>683</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#26</sa:SlotName>
  <sa:LSlot>LSlot#20</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>718</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#25</sa:SlotName>
  <sa:LSlot>LSlot#21</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>753</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#24</sa:SlotName>
  <sa:LSlot>LSlot#22</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>

```

```

    <sa:Ycoord>788</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#23</sa:SlotName>
  <sa:LSlot>LSlot#23</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>823</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#22</sa:SlotName>
  <sa:LSlot>LSlot#24</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>858</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#21</sa:SlotName>
  <sa:LSlot>LSlot#25</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>893</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#20</sa:SlotName>
  <sa:LSlot>LSlot#26</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>928</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#19</sa:SlotName>
  <sa:LSlot>LSlot#27</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>963</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>

```

```

<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#18</sa:SlotName>
  <sa:LSlot>LSlot#28</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>998</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#17</sa:SlotName>
  <sa:LSlot>LSlot#29</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1033</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#16</sa:SlotName>
  <sa:LSlot>LSlot#30</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1068</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#15</sa:SlotName>
  <sa:LSlot>LSlot#31</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1103</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#14</sa:SlotName>
  <sa:LSlot>LSlot#32</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1138</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#13</sa:SlotName>

```

```

<sa:LSlot>LSlot#33</sa:LSlot>
<sa:SlotOriginPosition>
  <sa:Xcoord>125</sa:Xcoord>
  <sa:Ycoord>1173</sa:Ycoord>
</sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#12</sa:SlotName>
  <sa:LSlot>LSlot#34</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1208</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#11</sa:SlotName>
  <sa:LSlot>LSlot#35</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1243</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#10</sa:SlotName>
  <sa:LSlot>LSlot#36</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1278</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#9</sa:SlotName>
  <sa:LSlot>LSlot#37</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>
    <sa:Ycoord>1313</sa:Ycoord>
  </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
  <sa:Aspect>front</sa:Aspect>
  <sa:SlotName>Slot#8</sa:SlotName>
  <sa:LSlot>LSlot#38</sa:LSlot>
  <sa:SlotOriginPosition>
    <sa:Xcoord>125</sa:Xcoord>

```

```

        <sa:Ycoord>1348</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#7</sa:SlotName>
    <sa:LSlot>LSlot#39</sa:LSlot>
    <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1383</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#6</sa:SlotName>
    <sa:LSlot>LSlot#40</sa:LSlot>
    <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1418</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#5</sa:SlotName>
    <sa:LSlot>LSlot#41</sa:LSlot>
    <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1453</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#4</sa:SlotName>
    <sa:LSlot>LSlot#42</sa:LSlot>
    <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1488</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>
<sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#3</sa:SlotName>
    <sa:LSlot>LSlot#43</sa:LSlot>
    <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1523</sa:Ycoord>
    </sa:SlotOriginPosition>
</sa:SlotShape>

```

```

    <sa:SlotShape>
      <sa:Aspect>front</sa:Aspect>
      <sa:SlotName>Slot#2</sa:SlotName>
      <sa:LSlot>LSlot#44</sa:LSlot>
      <sa:SlotOriginPosition>
        <sa:Xcoord>125</sa:Xcoord>
        <sa:Ycoord>1558</sa:Ycoord>
      </sa:SlotOriginPosition>
    </sa:SlotShape>
  </sa:SlotShape>
  <sa:SlotShape>
    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#1</sa:SlotName>
    <sa:LSlot>LSlot#45</sa:LSlot>
    <sa:SlotOriginPosition>
      <sa:Xcoord>125</sa:Xcoord>
      <sa:Ycoord>1593</sa:Ycoord>
    </sa:SlotOriginPosition>
  </sa:SlotShape>
</sa:Slots>
<sa:Ports/>
</sa:Shape>
</sa:GetShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.3 GetShape - Query rack-mounted devices

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
      secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>

```


Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:Manufacturer>Hellermann Tyton</sa:Manufacturer>
        <sa:Model>RapidNet RNPP1U with pre-filled back view</sa:Model>
        <sa:ProductLine>RapidNet</sa:ProductLine>
        <sa:Description>RapidNet 1U Modular Patch Panel</sa:Description>
        <sa:AssetType>Patch Panel</sa:AssetType>
        <sa:Dimensions>
          <sa:Height>1.75</sa:Height>
          <sa:Width>19.00</sa:Width>
          <sa:Depth>1.33</sa:Depth>
        </sa:Dimensions>
        <sa:PlacementType>rack_mounted</sa:PlacementType>
        <sa:ConsumedRU>1</sa:ConsumedRU>
        <sa:Slots>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#1</sa:SlotName>
            <sa:LSlot>LSlot#1</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>92</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#2</sa:SlotName>
            <sa:LSlot>LSlot#2</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>661</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#3</sa:SlotName>
            <sa:LSlot>LSlot#3</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>1230</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>

```

```

    <sa:Aspect>front</sa:Aspect>
    <sa:SlotName>Slot#4</sa:SlotName>
    <sa:LSlot>LSlot#4</sa:LSlot>
    <sa:SlotOriginPosition>
      <sa:Xcoord>1799</sa:Xcoord>
      <sa:Ycoord>44</sa:Ycoord>
    </sa:SlotOriginPosition>
  </sa:SlotShape>
</sa:Slots>
<sa:Ports>
  <sa:PortShape>
    <sa:Aspect>back</sa:Aspect>
    <sa:PortID>14181</sa:PortID>
    <sa:PortName>Cable#24</sa:PortName>
    <sa:LPort>LPort#1</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>115</sa:Xcoord>
      <sa:Ycoord>92</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:PortShape>
  <sa:PortShape>
    <sa:Aspect>back</sa:Aspect>
    <sa:PortID>14185</sa:PortID>
    <sa:PortName>Cable#23</sa:PortName>
    <sa:LPort>LPort#2</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>200</sa:Xcoord>
      <sa:Ycoord>92</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:PortShape>
  <sa:PortShape>
    <sa:Aspect>back</sa:Aspect>
    <sa:PortID>14189</sa:PortID>
    <sa:PortName>Cable#22</sa:PortName>
    <sa:LPort>LPort#3</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>282</sa:Xcoord>
      <sa:Ycoord>92</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:PortShape>
  <sa:PortShape>
    <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14193</sa:PortID>
<sa:PortName>Cable#21</sa:PortName>
<sa:LPort>LPort#4</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>370</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14197</sa:PortID>
  <sa:PortName>Cable#20</sa:PortName>
  <sa:LPort>LPort#5</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>455</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14201</sa:PortID>
  <sa:PortName>Cable#19</sa:PortName>
  <sa:LPort>LPort#6</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>540</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14205</sa:PortID>
  <sa:PortName>Cable#18</sa:PortName>
  <sa:LPort>LPort#7</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>678</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14209</sa:PortID>
<sa:PortName>Cable#17</sa:PortName>
<sa:LPort>LPort#8</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>763</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14213</sa:PortID>
  <sa:PortName>Cable#16</sa:PortName>
  <sa:LPort>LPort#9</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>848</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14217</sa:PortID>
  <sa:PortName>Cable#15</sa:PortName>
  <sa:LPort>LPort#10</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>933</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14221</sa:PortID>
  <sa:PortName>Cable#14</sa:PortName>
  <sa:LPort>LPort#11</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1018</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14225</sa:PortID>
<sa:PortName>Cable#13</sa:PortName>
<sa:LPort>LPort#12</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>1105</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14129</sa:PortID>
  <sa:PortName>Cable#12</sa:PortName>
  <sa:LPort>LPort#13</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1250</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14133</sa:PortID>
  <sa:PortName>Cable#11</sa:PortName>
  <sa:LPort>LPort#14</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1335</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14137</sa:PortID>
  <sa:PortName>Cable#10</sa:PortName>
  <sa:LPort>LPort#15</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1420</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14141</sa:PortID>
<sa:PortName>Cable#9</sa:PortName>
<sa:LPort>LPort#16</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>1507</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14145</sa:PortID>
  <sa:PortName>Cable#8</sa:PortName>
  <sa:LPort>LPort#17</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1590</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14149</sa:PortID>
  <sa:PortName>Cable#7</sa:PortName>
  <sa:LPort>LPort#18</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1678</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14153</sa:PortID>
  <sa:PortName>Cable#6</sa:PortName>
  <sa:LPort>LPort#19</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1820</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14157</sa:PortID>
<sa:PortName>Cable#5</sa:PortName>
<sa:LPort>LPort#20</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>1906</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14161</sa:PortID>
  <sa:PortName>Cable#4</sa:PortName>
  <sa:LPort>LPort#21</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1990</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14165</sa:PortID>
  <sa:PortName>Cable#3</sa:PortName>
  <sa:LPort>LPort#22</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>2075</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14169</sa:PortID>
  <sa:PortName>Cable#2</sa:PortName>
  <sa:LPort>LPort#23</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>2162</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

    <sa:PortID>14173</sa:PortID>
    <sa:PortName>Cable#1</sa:PortName>
    <sa:LPort>LPort#24</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>2250</sa:Xcoord>
      <sa:Ycoord>92</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:PortShape>
</sa:Ports>
</sa:Shape>
</sa:GetShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.4 GetShape - Query other type shape

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>VDEO020</enh:ShapeTypeID>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>VDEO020</sa:ShapeTypeID>
        <sa:Manufacturer>Videor Technical E. Hartig</sa:Manufacturer>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```



```

<sa:Model>F-417</sa:Model>
<sa:ProductLine>AG neovo</sa:ProductLine>
<sa:Description>17 Inch LCD Display</sa:Description>
<sa:AssetType>Display</sa:AssetType>
<sa:Dimensions>
  <sa:Height>14.70</sa:Height>
  <sa:Width>14.80</sa:Width>
  <sa:Depth>7.90</sa:Depth>
</sa:Dimensions>
<sa:PlacementType>floor_mounted</sa:PlacementType>
<sa:Slots/>
<sa:Ports>
  <sa:PortShape>
    <sa:Aspect>back</sa:Aspect>
    <sa:PortID>1173527</sa:PortID>
    <sa:PortName>AC Power Input#1</sa:PortName>
    <sa:LPort>LPort#1</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>456</sa:Xcoord>
      <sa:Ycoord>1321</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>plug/socket</sa:PortType>
    <sa:PortGender>male</sa:PortGender>
  </sa:PortShape>
</sa:Ports>
</sa:Shape>
</sa:GetShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.5 GetShape - Request specific device properties

The following sections show examples of how to get specific device properties.

2.5.6 GetShape - Specific manufacturer

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>

```

```

<soapenv:Body>
  <enh:GetShapeRequest>
    <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
    <enh:RequestedDeviceProperties>
      <enh:Manufacturer/>
    </enh:RequestedDeviceProperties>
  </enh:GetShapeRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:Manufacturer>Hellermann Tyton</sa:Manufacturer>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.7 GetShape - Specific model

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
      secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:Model/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

```
</soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:Model>RapidNet RNPP1U with pre-filled back view</sa:Model>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.5.8 GetShape - Specific product line

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:ProductLine/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:ProductLine>RapidNet</sa:ProductLine>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.5.9 GetShape - Specific description

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:Description/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
```

```

    <sa:Description>RapidNet 1U Modular Patch Panel</sa:Description>
  </sa:Shape>
</sa:GetShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.10 GetShape - Specific asset type

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:AssetType/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:AssetType>Patch Panel</sa:AssetType>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.11 GetShape - Specific dimensions

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:Dimensions/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:Dimensions>
          <sa:Height>1.75</sa:Height>
          <sa:Width>19.00</sa:Width>
          <sa:Depth>1.33</sa:Depth>
        </sa:Dimensions>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.5.12 GetShape - Specific placement type

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:PlacementType/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:PlacementType>rack_mounted</sa:PlacementType>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.5.13 GetShape - Specific RU for a rack cabinet

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
```

```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:GetShapeRequest>
    <enh:ShapeTypeID>A003603</enh:ShapeTypeID>
    <enh:RequestedDeviceProperties>
      <enh:RackUnits/>
    </enh:RequestedDeviceProperties>
  </enh:GetShapeRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>A003603</sa:ShapeTypeID>
        <sa:TotalRU>34</sa:TotalRU>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.14 GetShape - Specific RU for a rack-mounted device

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>

```



```

    <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
    <enh:RequestedDeviceProperties>
      <enh:RackUnits/>
    </enh:RequestedDeviceProperties>
  </enh:GetShapeRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:ConsumedRU>1</sa:ConsumedRU>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.5.15 GetShape - Specific slot or port shape

This is an example of searching for the slot and port properties for a specified shape.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetShapeRequest>
      <enh:ShapeTypeID>0GRM364</enh:ShapeTypeID>
      <enh:RequestedDeviceProperties>
        <enh:SlotOrPortShape/>
      </enh:RequestedDeviceProperties>
    </enh:GetShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Shape>
        <sa:ShapeTypeID>0GRM364</sa:ShapeTypeID>
        <sa:Slots>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#1</sa:SlotName>
            <sa:LSlot>LSlot#1</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>92</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#2</sa:SlotName>
            <sa:LSlot>LSlot#2</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>661</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#3</sa:SlotName>
            <sa:LSlot>LSlot#3</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>1230</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
          <sa:SlotShape>
            <sa:Aspect>front</sa:Aspect>
            <sa:SlotName>Slot#4</sa:SlotName>
            <sa:LSlot>LSlot#4</sa:LSlot>
            <sa:SlotOriginPosition>
              <sa:Xcoord>1799</sa:Xcoord>
              <sa:Ycoord>44</sa:Ycoord>
            </sa:SlotOriginPosition>
          </sa:SlotShape>
        </sa:Slots>
        <sa:Ports>
          <sa:PortShape>
            <sa:Aspect>back</sa:Aspect>
          </sa:PortShape>
        </sa:Ports>
      </sa:Shape>
    </sa:GetShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

<sa:PortID>14181</sa:PortID>
<sa:PortName>Cable#24</sa:PortName>
<sa:LPort>LPort#1</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>115</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14185</sa:PortID>
  <sa:PortName>Cable#23</sa:PortName>
  <sa:LPort>LPort#2</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>200</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14189</sa:PortID>
  <sa:PortName>Cable#22</sa:PortName>
  <sa:LPort>LPort#3</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>282</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14193</sa:PortID>
  <sa:PortName>Cable#21</sa:PortName>
  <sa:LPort>LPort#4</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>370</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14197</sa:PortID>
<sa:PortName>Cable#20</sa:PortName>
<sa:LPort>LPort#5</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>455</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14201</sa:PortID>
  <sa:PortName>Cable#19</sa:PortName>
  <sa:LPort>LPort#6</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>540</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14205</sa:PortID>
  <sa:PortName>Cable#18</sa:PortName>
  <sa:LPort>LPort#7</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>678</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14209</sa:PortID>
  <sa:PortName>Cable#17</sa:PortName>
  <sa:LPort>LPort#8</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>763</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14213</sa:PortID>
<sa:PortName>Cable#16</sa:PortName>
<sa:LPort>LPort#9</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>848</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14217</sa:PortID>
  <sa:PortName>Cable#15</sa:PortName>
  <sa:LPort>LPort#10</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>933</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14221</sa:PortID>
  <sa:PortName>Cable#14</sa:PortName>
  <sa:LPort>LPort#11</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1018</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14225</sa:PortID>
  <sa:PortName>Cable#13</sa:PortName>
  <sa:LPort>LPort#12</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1105</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14129</sa:PortID>
<sa:PortName>Cable#12</sa:PortName>
<sa:LPort>LPort#13</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>1250</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14133</sa:PortID>
  <sa:PortName>Cable#11</sa:PortName>
  <sa:LPort>LPort#14</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1335</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14137</sa:PortID>
  <sa:PortName>Cable#10</sa:PortName>
  <sa:LPort>LPort#15</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1420</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14141</sa:PortID>
  <sa:PortName>Cable#9</sa:PortName>
  <sa:LPort>LPort#16</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1507</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```

```

<sa:PortID>14145</sa:PortID>
<sa:PortName>Cable#8</sa:PortName>
<sa:LPort>LPort#17</sa:LPort>
<sa:PortOriginPosition>
  <sa:Xcoord>1590</sa:Xcoord>
  <sa:Ycoord>92</sa:Ycoord>
</sa:PortOriginPosition>
<sa:PortType>dataport</sa:PortType>
<sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14149</sa:PortID>
  <sa:PortName>Cable#7</sa:PortName>
  <sa:LPort>LPort#18</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1678</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14153</sa:PortID>
  <sa:PortName>Cable#6</sa:PortName>
  <sa:LPort>LPort#19</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1820</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14157</sa:PortID>
  <sa:PortName>Cable#5</sa:PortName>
  <sa:LPort>LPort#20</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1906</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>

```



```

    <sa:PortID>14161</sa:PortID>
    <sa:PortName>Cable#4</sa:PortName>
    <sa:LPort>LPort#21</sa:LPort>
    <sa:PortOriginPosition>
      <sa:Xcoord>1990</sa:Xcoord>
      <sa:Ycoord>92</sa:Ycoord>
    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14165</sa:PortID>
  <sa:PortName>Cable#3</sa:PortName>
  <sa:LPort>LPort#22</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>2075</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14169</sa:PortID>
  <sa:PortName>Cable#2</sa:PortName>
  <sa:LPort>LPort#23</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>2162</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
<sa:PortShape>
  <sa:Aspect>back</sa:Aspect>
  <sa:PortID>14173</sa:PortID>
  <sa:PortName>Cable#1</sa:PortName>
  <sa:LPort>LPort#24</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>2250</sa:Xcoord>
    <sa:Ycoord>92</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:PortShape>
</sa:Ports>
</sa:Shape>

```

```

</sa:GetShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.6 QueryShape

QueryShape requests all properties of device shapes in the device library using the full text search. The QueryString value is the Lucene type syntax string.

If manufacturer, productLine, asset type name and model number are phrases, you must use quotation marks (") to surround them. The query search returns all shapes that contain these phrases as specified. If the field name contains white space, you must use the back slash (\) to escape the white space. The Lucene search returns all the shapes that contain the field or terms/phrases value that is specified in the QueryString.

Wildcard (?, *) - can only be used in a one word term, not within phrases.

The following is a list of supported terms, phrases, fields and field values.

- type.manufacturer:manufacturer (search for device shapes by device manufacturer), for example: type.manufacturer:IBM
- type.productLine:product line (search for device shapes by device product line), for example: type.productLine:pdu
- type.assetClass:asset type name (search for device shapes by device type - Display, Rack Cabinet, KVM Switch,...), for example: type.assetClass:Display
- type.model:model number sea (search for device shapes by model number), for example: type.model:"7014 T00 38U"

For each shape in the result list, only five properties are returned (ShapeTypeID, Manufacturer, Model, ProductLine and AssetType).

Required input:

- Authentication token: Session ID
- QueryString: Lucene type query string syntax

2.6.1 Query shape through manufacturer

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>

```

```

<soapenv:Body>
  <enh:QueryShapeRequest>
    <enh:QueryString>type.manufacturer:Sun</enh:QueryString>
  </enh:QueryShapeRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.manufacturer:Sun</sa:QueryString>
      <sa:Shapes>
        <sa:Shape>
          <sa:ShapeTypeID>SUN175</sa:ShapeTypeID>
          <sa:Manufacturer>SUN Microsystems</sa:Manufacturer>
          <sa:Model>Enterprise Series-Module 2</sa:Model>
          <sa:ProductLine>Enterprise</sa:ProductLine>
          <sa:AssetType>Module</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>A002978</sa:ShapeTypeID>
          <sa:Manufacturer>SUN Microsystems</sa:Manufacturer>
          <sa:Model>VSM5</sa:Model>
          <sa:ProductLine>STORAGETEK</sa:ProductLine>
          <sa:AssetType>Storage System</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>A003606</sa:ShapeTypeID>
          <sa:Manufacturer>SUN Microsystems</sa:Manufacturer>
          <sa:Model>ENTERPRISE M9000-32 SEHASY21Z</sa:Model>
          <sa:ProductLine>ENTERPRISE</sa:ProductLine>
          <sa:AssetType>Server</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>A004641</sa:ShapeTypeID>
          <sa:Manufacturer>SUN Microsystems</sa:Manufacturer>
          <sa:Model>STORAGETEK SL500 DRIVE EXPANSION</sa:Model>
          <sa:ProductLine>STORAGETEK</sa:ProductLine>
          <sa:AssetType>Storage System</sa:AssetType>
        </sa:Shape>
        .....
      </sa:Shapes>
    </sa:QueryShapeResponse>

```

```
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.6.2 Query shape through model number

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryShapeRequest>
      <enh:QueryString>type.model:"7014 T00 38U"</enh:QueryString>
    </enh:QueryShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.model:"7014 T00 38U"</sa:QueryString>
      <sa:Shapes>
        <sa:Shape>
          <sa:ShapeTypeID>IBM707</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7014 T00 38U</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Rack Cabinet</sa:AssetType>
        </sa:Shape>
      </sa:Shapes>
    </sa:QueryShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.6.3 Query shape through product line

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryShapeRequest>
      <enh:QueryString>type.productLine:RS-6000</enh:QueryString>
    </enh:QueryShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.productLine:RS-6000</sa:QueryString>
      <sa:Shapes>
        <sa:Shape>
          <sa:ShapeTypeID>IBM707</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7014 T00 38U</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Rack Cabinet</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>IBM708</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7026-M80</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Server</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>IBM590</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7014-T42 42U</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Rack Cabinet</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>IBMM440</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7025-6F1</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Server</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>IBM710</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>P-Series 7026-H80</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Server</sa:AssetType>
        </sa:Shape>
        <sa:Shape>
          <sa:ShapeTypeID>IBM709</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7025-F80</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Server</sa:AssetType>
        </sa:Shape>
      </sa:Shapes>
    </sa:QueryShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    </sa:Shape>
    <sa:Shape>
      <sa:ShapeTypeID>IBM930</sa:ShapeTypeID>
      <sa:Manufacturer>IBM</sa:Manufacturer>
      <sa:Model>P-Series 7026-H50</sa:Model>
      <sa:ProductLine>RS-6000</sa:ProductLine>
      <sa:AssetType>Server</sa:AssetType>
    </sa:Shape>
  </sa:Shapes>
</sa:QueryShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.6.4 Query shape through asset type

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryShapeRequest>
      <enh:QueryString>type.assetClass:Server</enh:QueryString>
    </enh:QueryShapeRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.assetClass:Server</sa:QueryString>
      <sa:Shapes>
        <sa:Shape>
          <sa:ShapeTypeID>A000075</sa:ShapeTypeID>
          <sa:Manufacturer>Hewlett-Packard</sa:Manufacturer>
          <sa:Model>NETSERVER LH3 V2</sa:Model>
        </sa:Shape>
      </sa:Shapes>
    </sa:QueryShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

        <sa:ProductLine>NETSERVER</sa:ProductLine>
        <sa:AssetType>Server</sa:AssetType>
    </sa:Shape>
    <sa:Shape>
        <sa:ShapeTypeID>A002190</sa:ShapeTypeID>
        <sa:Manufacturer>Network Appliance</sa:Manufacturer>
        <sa:Model>NETCACHE C1100 V2</sa:Model>
        <sa:ProductLine>NETCACHE</sa:ProductLine>
        <sa:AssetType>Server</sa:AssetType>
    </sa:Shape>
    <sa:Shape>
        <sa:ShapeTypeID>HEPD317</sa:ShapeTypeID>
        <sa:Manufacturer>Hewlett-Packard</sa:Manufacturer>
        <sa:Model>c3000</sa:Model>
        <sa:ProductLine>C-Class</sa:ProductLine>
        <sa:AssetType>Server</sa:AssetType>
    </sa:Shape>
    .....
    </sa:Shapes>
</sa:QueryShapeResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.6.5 Query shape through parameters

You can run a query shape request for any combination of the following parameters:

- Manufacturer
- Model
- Product line
- Asset type

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>53a5c219-228c-4b98-9435-478e33ce8640</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:QueryShapeRequest>
      <enh:QueryString>type.manufacturer:IBM type.model:"7014 T00 38U" type.productLine:RS-

```



```
6000</enh:QueryString>
  </enh:QueryShapeRequest>
</soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:QueryShapeResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:QueryString>type.manufacturer:IBM type.model:"7014 T00 38U" type.productLine:RS-
6000</sa:QueryString>
      <sa:Shapes>
        <sa:Shape>
          <sa:ShapeTypeID>IBM707</sa:ShapeTypeID>
          <sa:Manufacturer>IBM</sa:Manufacturer>
          <sa:Model>7014 T00 38U</sa:Model>
          <sa:ProductLine>RS-6000</sa:ProductLine>
          <sa:AssetType>Rack Cabinet</sa:AssetType>
        </sa:Shape>
      </sa:Shapes>
    </sa:QueryShapeResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.7 ListAssetTypes

ListAssetType requests predefined asset type names in the device library.

Required Input: N/A

Optional Input: N/A

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b92faccc-5ee9-49be-8c93-7949ee1de5fa</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
```

```

    <enh:ListAssetTypesRequest/>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:ListAssetTypesResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetTypes>
        <sa:AssetType>Rack Cabinet</sa:AssetType>
        <sa:AssetType>UPS</sa:AssetType>
        <sa:AssetType>Patch Panel</sa:AssetType>
        <sa:AssetType>Switch</sa:AssetType>
        <sa:AssetType>Power Distribution Unit</sa:AssetType>
        <sa:AssetType>Module</sa:AssetType>
        <sa:AssetType>Appliance</sa:AssetType>
        <sa:AssetType>Management Unit</sa:AssetType>
        <sa:AssetType>Battery Enclosure</sa:AssetType>
        <sa:AssetType>Cable Manager</sa:AssetType>
        <sa:AssetType>SENSORS_TEMPERATURE</sa:AssetType>
        <sa:AssetType>Cooling System</sa:AssetType>
        <sa:AssetType>SENSOR</sa:AssetType>
        <sa:AssetType>Tower</sa:AssetType>
        <sa:AssetType>Display</sa:AssetType>
        <sa:AssetType>Firewall</sa:AssetType>
        <sa:AssetType>Router</sa:AssetType>
        <sa:AssetType>Blank Panel</sa:AssetType>
        <sa:AssetType>KVM Switch</sa:AssetType>
        <sa:AssetType>Desktop</sa:AssetType>
        <sa:AssetType>Server</sa:AssetType>
        <sa:AssetType>Storage System</sa:AssetType>
        <sa:AssetType>Test Equipment</sa:AssetType>
        <sa:AssetType>Placeholder</sa:AssetType>
      </sa:AssetTypes>
    </sa:ListAssetTypesResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.8 ListPortTypes

ListPortTypes requests all predefined port type names in the device library.

Required Input: N/A

Optional Input: N/A

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b92facc-5ee9-49be-8c93-7949ee1de5fa</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:ListPortTypesRequest/>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:ListPortTypesResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:PortTypes>
        <sa:PortType>DATAPORT</sa:PortType>
        <sa:PortType>UNKNOWN</sa:PortType>
        <sa:PortType>PLUG_SOCKET</sa:PortType>
        <sa:PortType>MODULE_SLOT</sa:PortType>
      </sa:PortTypes>
    </sa:ListPortTypesResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

2.9 ListPlans

ListPlans requests get all active plans.

Required Input: N/A

Optional Input: N/A

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
```

```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>235e9444-d414-46cc-b92f-01c10fc95838</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh>ListPlansRequest/>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa>ListPlansResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Plans>
        <sa:Plan>
          <sa:PlanID>1511470</sa:PlanID>
          <sa:PlanName>Sand Box</sa:PlanName>
        </sa:Plan>
        <sa:Plan>
          <sa:PlanID>1564003</sa:PlanID>
          <sa:PlanName>Plan-1</sa:PlanName>
        </sa:Plan>
        <sa:Plan>
          <sa:PlanID>1566508</sa:PlanID>
          <sa:PlanName>65721774</sa:PlanName>
        </sa:Plan>
        <sa:Plan>
          <sa:PlanID>1567467</sa:PlanID>
          <sa:PlanName>Conflict-Test</sa:PlanName>
        </sa:Plan>
        <sa:Plan>
          <sa:PlanID>1567975</sa:PlanID>
          <sa:PlanName>RCC-RoomA</sa:PlanName>
        </sa:Plan>
        <sa:Plan>
          <sa:PlanID>1868263</sa:PlanID>
          <sa:PlanName>Permanent TSB</sa:PlanName>
        </sa:Plan>
      </sa:Plans>
    </sa>ListPlansResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

2.10 GetPlan

GetPlan requests properties of a plan.

Required input: at least one PlanID or PlanName:

- Authentication token: Session ID
- PlanID: Plan ID
- PlanName: Plan Name

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>235e9444-d414-46cc-b92f-01c10fc95838</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:GetPlanRequest>
      <enh:PlanID>1567993</enh:PlanID>
      <enh:PlanName/>
    </enh:GetPlanRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetPlanResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Plan>
        <sa:PlanID>1567975</sa:PlanID>
        <sa:PlanName>RCC-RoomA</sa:PlanName>
        <sa:Tiles>
          <sa:Tile>
            <sa:TileID>1567993</sa:TileID>
            <sa:TileWidth>1.97</sa:TileWidth>
            <sa:TileHeight>1.97</sa:TileHeight>
            <sa:TileGridOrigin>top_left</sa:TileGridOrigin>
            <sa:FirstColPartialTileWidth>0.00</sa:FirstColPartialTileWidth>
            <sa:FirstColPartialTileHeight>1.44</sa:FirstColPartialTileHeight>
            <sa:TileOriginX>0.07</sa:TileOriginX>
          </sa:Tile>
        </sa:Tiles>
      </sa:Plan>
    </sa:GetPlanResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

<sa:TileOriginY>0.07</sa:TileOriginY>
<sa:TileAngle>0.00</sa:TileAngle>
<sa:TileVertexPoints>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568011</sa:TileVertexID>
    <sa:TilePointX>91.54</sa:TilePointX>
    <sa:TilePointY>75.13</sa:TilePointY>
    <sa:TilePointOrder>4</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568010</sa:TileVertexID>
    <sa:TilePointX>91.54</sa:TilePointX>
    <sa:TilePointY>62.01</sa:TilePointY>
    <sa:TilePointOrder>3</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568008</sa:TileVertexID>
    <sa:TilePointX>89.57</sa:TilePointX>
    <sa:TilePointY>-0.16</sa:TilePointY>
    <sa:TilePointOrder>1</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568007</sa:TileVertexID>
    <sa:TilePointX>-0.16</sa:TilePointX>
    <sa:TilePointY>-0.16</sa:TilePointY>
    <sa:TilePointOrder>0</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568012</sa:TileVertexID>
    <sa:TilePointX>89.57</sa:TilePointX>
    <sa:TilePointY>75.13</sa:TilePointY>
    <sa:TilePointOrder>5</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568014</sa:TileVertexID>
    <sa:TilePointX>-0.16</sa:TilePointX>
    <sa:TilePointY>90.03</sa:TilePointY>
    <sa:TilePointOrder>7</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568013</sa:TileVertexID>
    <sa:TilePointX>89.57</sa:TilePointX>
    <sa:TilePointY>90.03</sa:TilePointY>
    <sa:TilePointOrder>6</sa:TilePointOrder>
  </sa:TileVertexPoint>
  <sa:TileVertexPoint>
    <sa:TileVertexID>1568009</sa:TileVertexID>
    <sa:TilePointX>89.57</sa:TilePointX>

```

```

        <sa:TilePointY>62.01</sa:TilePointY>
        <sa:TilePointOrder>2</sa:TilePointOrder>
    </sa:TileVertexPoint>
</sa:TileVertexPoints>
</sa:Tile>
</sa:Tiles>
<sa:Walls>
    <sa:Wall>
        <sa:WallID>1568015</sa:WallID>
        <sa:WallThickness>0.33</sa:WallThickness>
        <sa:WallPerimeterIsClosed>yes</sa:WallPerimeterIsClosed>
        <sa:WallOriginX>-0.16</sa:WallOriginX>
        <sa:WallOriginY>-0.16</sa:WallOriginY>
        <sa:WallAngle>0.00</sa:WallAngle>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568036</sa:WallVertexID>
            <sa:WallPointX>-0.16</sa:WallPointX>
            <sa:WallPointY>-0.16</sa:WallPointY>
            <sa:WallPointOrder>0</sa:WallPointOrder>
        </sa:WallVertexPoint>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568038</sa:WallVertexID>
            <sa:WallPointX>89.57</sa:WallPointX>
            <sa:WallPointY>62.01</sa:WallPointY>
            <sa:WallPointOrder>2</sa:WallPointOrder>
        </sa:WallVertexPoint>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568042</sa:WallVertexID>
            <sa:WallPointX>89.57</sa:WallPointX>
            <sa:WallPointY>90.03</sa:WallPointY>
            <sa:WallPointOrder>6</sa:WallPointOrder>
        </sa:WallVertexPoint>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568037</sa:WallVertexID>
            <sa:WallPointX>89.57</sa:WallPointX>
            <sa:WallPointY>-0.16</sa:WallPointY>
            <sa:WallPointOrder>1</sa:WallPointOrder>
        </sa:WallVertexPoint>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568041</sa:WallVertexID>
            <sa:WallPointX>89.57</sa:WallPointX>
            <sa:WallPointY>75.13</sa:WallPointY>
            <sa:WallPointOrder>5</sa:WallPointOrder>
        </sa:WallVertexPoint>
        <sa:WallVertexPoint>
            <sa:WallVertexID>1568039</sa:WallVertexID>
            <sa:WallPointX>91.54</sa:WallPointX>
            <sa:WallPointY>62.01</sa:WallPointY>
    </sa:Wall>
</sa:Walls>

```

```

    <sa:WallPointOrder>3</sa:WallPointOrder>
  </sa:WallVertexPoint>
  <sa:WallVertexPoint>
    <sa:WallVertexID>1568043</sa:WallVertexID>
    <sa:WallPointX>-0.16</sa:WallPointX>
    <sa:WallPointY>90.03</sa:WallPointY>
    <sa:WallPointOrder>7</sa:WallPointOrder>
  </sa:WallVertexPoint>
  <sa:WallVertexPoint>
    <sa:WallVertexID>1568040</sa:WallVertexID>
    <sa:WallPointX>91.54</sa:WallPointX>
    <sa:WallPointY>75.13</sa:WallPointY>
    <sa:WallPointOrder>4</sa:WallPointOrder>
  </sa:WallVertexPoint>
</sa:Wall>
</sa:Walls>
<sa:Windows>
  <sa:Window>
    <sa:WindowID>1870021</sa:WindowID>
    <sa:WindowThickness>0.33</sa:WindowThickness>
    <sa:WindowWidth>4.00</sa:WindowWidth>
    <sa:WindowOriginX>35.00</sa:WindowOriginX>
    <sa:WindowOriginY>90.00</sa:WindowOriginY>
    <sa:WindowAngle>0.00</sa:WindowAngle>
  </sa:Window>
  <sa:Window>
    <sa:WindowID>1870044</sa:WindowID>
    <sa:WindowThickness>0.33</sa:WindowThickness>
    <sa:WindowWidth>4.00</sa:WindowWidth>
    <sa:WindowOriginX>60.39</sa:WindowOriginX>
    <sa:WindowOriginY>90.03</sa:WindowOriginY>
    <sa:WindowAngle>0.00</sa:WindowAngle>
  </sa:Window>
</sa:Windows>
<sa:Doors>
  <sa:Door>
    <sa:DoorID>1568044</sa:DoorID>
    <sa:DoorThickness>0.33</sa:DoorThickness>
    <sa:DoorWidth>3.28</sa:DoorWidth>
    <sa:DoorOriginX>-0.16</sa:DoorOriginX>
    <sa:DoorOriginY>6.17</sa:DoorOriginY>
    <sa:DoorAngle>90.00</sa:DoorAngle>
    <sa:DoorSwingInside>no</sa:DoorSwingInside>
    <sa:DoorSwingLeft>yes</sa:DoorSwingLeft>
    <sa:DoubleDoor>no</sa:DoubleDoor>
  </sa:Door>
  <sa:Door>
    <sa:DoorID>1568054</sa:DoorID>

```



```

    <sa:DoorThickness>0.33</sa:DoorThickness>
    <sa:DoorWidth>3.28</sa:DoorWidth>
    <sa:DoorOriginX>66.11</sa:DoorOriginX>
    <sa:DoorOriginY>-0.16</sa:DoorOriginY>
    <sa:DoorAngle>180.00</sa:DoorAngle>
    <sa:DoorSwingInside>yes</sa:DoorSwingInside>
    <sa:DoorSwingLeft>no</sa:DoorSwingLeft>
    <sa:DoubleDoor>no</sa:DoubleDoor>
  </sa:Door>
  <sa:Door>
    <sa:DoorID>1568064</sa:DoorID>
    <sa:DoorThickness>0.33</sa:DoorThickness>
    <sa:DoorWidth>5.91</sa:DoorWidth>
    <sa:DoorOriginX>89.57</sa:DoorOriginX>
    <sa:DoorOriginY>86.91</sa:DoorOriginY>
    <sa:DoorAngle>90.00</sa:DoorAngle>
    <sa:DoorSwingInside>yes</sa:DoorSwingInside>
    <sa:DoorSwingLeft>no</sa:DoorSwingLeft>
    <sa:DoubleDoor>yes</sa:DoubleDoor>
  </sa:Door>
  <sa:Door>
    <sa:DoorID>1568074</sa:DoorID>
    <sa:DoorThickness>0.33</sa:DoorThickness>
    <sa:DoorWidth>3.28</sa:DoorWidth>
    <sa:DoorOriginX>3.77</sa:DoorOriginX>
    <sa:DoorOriginY>90.03</sa:DoorOriginY>
    <sa:DoorAngle>0.00</sa:DoorAngle>
    <sa:DoorSwingInside>yes</sa:DoorSwingInside>
    <sa:DoorSwingLeft>yes</sa:DoorSwingLeft>
    <sa:DoubleDoor>no</sa:DoubleDoor>
  </sa:Door>
</sa:Doors>
</sa:Plan>
</sa:GetPlanResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

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3 ENHANCED ASSET MANIPULATION APIS

The Enhanced Asset Manipulations APIs are used to manage assets such as placing or moving assets or setting asset properties.

3.1 SetAssetEnhanced

The following request is an example of how to set a name, derate properties and user-defined properties for a specified asset.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID

Optional input:

- Properties:
 - Name: asset name. Name has a maximum character limit of 255.
 - Derate:

Heat:

---Units: BTU/Hr, kW

---Value: (set to a desired number value)

---IsAggregate: true or false

Weight:

---Units: lbs, kg

---Value: (set to a desired number value)

---IsAggregate: true or false

Power:

---Units: watts, kW

---Value: (set to a desired number value)

---IsAggregate: true or false

- UDP: User-defined properties

Label: label of user-defined property. The label is case sensitive.

Value: value of user-defined property

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
```

```

    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>76a5cf5c-3cd3-475a-b6da-0ef184a2082f</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:SetAssetEnhancedRequest>
      <enh:AssetID>1490343</enh:AssetID>
      <enh:Properties>
        <enh:Name>Server name test</enh:Name>
        <enh:Derate>
          <enh:Power>
            <enh:Units>watts</enh:Units>
            <enh:Value>35</enh:Value>
            <enh:IsAggregate>>false</enh:IsAggregate>
          </enh:Power>
        </enh:Derate>
        <enh:UDP>
<!-- The label is case sensitive -->
          <enh:Label>IP address</enh:Label>
          <enh:Value>10.207.1.101</enh:Value>
        </enh:UDP>
      </enh:Properties>
    </enh:SetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:SetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset>
        <sa:AssetID>1490343</sa:AssetID>
        <sa:Properties>
          <sa:Name>Server name test</sa:Name>
          <sa:Derate>
            <sa:Power>
              <sa:Units>watts</sa:Units>
              <sa:Value>35</sa:Value>
              <sa:IsAggregate>>false</sa:IsAggregate>
            </sa:Power>
          </sa:Derate>
          <sa:UDP>

```

```

        <sa:Label>IP address</sa:Label>
        <sa:Value>10.207.1.101</sa:Value>
    </sa:UDP>
</sa:Properties>
</sa:Asset>
<sa:Success/>
</sa:SetAssetEnhancedResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.2 UnsetAssetEnhanced

The following request is an example of removing derate properties and user-defined properties from a specified asset.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID

Optional input:

- Derate:
 - Label: always includes heat, power and/or weight properties
- UDP: User-defined properties
 - Label: label of user-defined property. The label is case sensitive.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>41ef7ec9-64d7-4d67-98d0-753fb8368ff5</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:UnsetAssetEnhancedRequest>
      <enh:AssetID>1491517</enh:AssetID>
      <enh:UDP>
<!-- The label is case sensitive -->
        <enh:Label>IP address</enh:Label>
      </enh:UDP>
      <enh:Derate>
<!-- The label is case sensitive -->
        <enh:Label>Weight</enh:Label>
      </enh:Derate>
    </enh:UnsetAssetEnhancedRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:UnsetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1491517</sa:AssetID>
      <sa:Success/>
    </sa:UnsetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.3 AddAsset

The following is an example of how to add a new asset. If AssetName is not defined in the request, Data Center Planner assigns the AssetName. It can be a duplicate.

The following operations can be performed using AddAsset:

- Add a new asset to a specified plan
- Add a new asset to a specified asset

- Add a new asset to a specified shelf space
- Add a new asset to inventory

3.3.1 Add asset to plan

Required input:

- Authentication token: Session ID
- ShapeTypeID: Shape identifier
- Plan: Provide at least one of the following two parameters:
 - PlanID:
 - PlanName:

Optional input:

- Location:

Xcoord: X coordinates. If not provided, set a random value between 0 and 10% times the width of the plan as the default.

Ycoord: Y coordinates. If not provided, set a random value between 0 and 10% times the height of the plan as the default.

MountingRotation: If not provided, 0 is set as the default value.

- Name: Name has a maximum character limit of 255.
- Derate:

Heat:

---Units: BTU/Hr, kW

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Weight:

--- Units: lbs, kg

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Power:

--- Units: watts, kW

---Value: (set to a desired number value)

--- IsAggregate: true or false

- UDP: User-defined properties
 - Label: label of user-defined property
 - Value: value of user-defined property

3.3.2 Default location

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>9b7dd8d7-7162-4df2-930d-1e967561d1c8</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddAssetRequest>
      <enh:ShapeTypeID>A003603</enh:ShapeTypeID>
      <enh:Plan>
        <enh:PlanName>SH-Plan</enh:PlanName>
      </enh:Plan>
    </enh:AddAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1312995</sa:AssetID>
      <sa:AssetName>external rack cabinet1</sa:AssetName>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```


3.3.3 Specific location

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>9b7dd8d7-7162-4df2-930d-1e967561d1c8</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddAssetRequest>
      <enh:ShapeTypeID>A003603</enh:ShapeTypeID>
      <enh:Plan>
        <enh:PlanName>SH-Plan</enh:PlanName>
      </enh:Plan>
      <enh:Location>
        <enh:Xcoord>10</enh:Xcoord>
        <enh:Ycoord>5.4</enh:Ycoord>
        <enh:MountingRotation>30</enh:MountingRotation>
      </enh:Location>
    </enh:AddAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1312998</sa:AssetID>
      <sa:AssetName>external rack cabinet2</sa:AssetName>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.3.4 Add asset to asset

Required input:

- Authentication token: Session ID
- ShapeTypeID: Shape identifier

- ContainerID: ID of container type asset
- Location:
 - MountingOrientation: Choices are: front facing/front mounted, rear facing/front mounted, front facing/rear mounted and rear facing/rear mounted.
 - SlotName: The name of the first slot where the new asset is placed.
 - LSlot: Instead of SlotName. The logical slot of the first slot where the new asset is placed.

Optional input:

- Location:

MountingRotation: If not provided, 0 is set as the default value. Choices are: 0, 90, 180 and 270. For rack mounted asset, the choices are: 0 and 180.

- Name: Name has a maximum character limit of 255.
- Derate:

Heat:

--- Units: BTU/Hr, kW

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Weight:

--- Units: lbs, kg

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Power:

--- Units: watts, kW

--- Value: (set to a desired number value)

--- IsAggregate: true or false

- UDP: User-defined properties

Label: label of user-defined property

Value: value of user-defined property

3.3.5 Default value

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
```

```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>f0a1dfd0-d731-4caf-ae2f-076694cd5f28</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:AddAssetRequest>
    <enh:ShapeTypeID>A000097</enh:ShapeTypeID>
    <enh:ContainerID>1306687</enh:ContainerID>
    <enh:Location>
      <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
      <enh:SlotName>Slot#1</enh:SlotName>
    </enh:Location>
  </enh:AddAssetRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1306713</sa:AssetID>
      <sa:AssetName>external server 1</sa:AssetName>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.3.6 Specific rotation

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>f0a1dfd0-d731-4caf-ae2f-076694cd5f28</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>

```

```

<enh:AddAssetRequest>
  <enh:ShapeTypeID>A000097</enh:ShapeTypeID>
  <enh:ContainerID>1306687</enh:ContainerID>
  <enh:Location>
    <enh:MountingRotation>180</enh:MountingRotation>
    <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
    <enh:SlotName>Slot#1</enh:SlotName>
  </enh:Location>
</enh:AddAssetRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1306713</sa:AssetID>
      <sa:AssetName>external server2</sa:AssetName>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.3.7 Add asset to shelf space

The following request is an example of adding an asset to shelf space.

Required input:

Authentication token: Session ID

- ShapeTypeID: Shape identifier
- ContainerID: ID of shelf space
- Location:
 - MountingOrientation: two choices (front facing/front mounted and front facing/rear mounted).

Optional input:

- Location:
 - MountingRotation: If not provided, 0 is set as the default value. Choices are: 0, 90, 180 and 270.
- Name: Name has a maximum character limit of 255.
- Derate:
 - Heat:
 - Units: BTU/Hr, kW

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Weight:

--- Units: lbs, kg

--- Value: (set to a desired number value)

--- IsAggregate: true or false

Power:

--- Units: watts, kW

--- Value: (set to a desired number value)

--- IsAggregate: true or false

- UDP: User-defined properties
 - Label: label of user-defined property
 - Value: value of user-defined property

3.3.8 Default value

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>f0a1dfd0-d731-4caf-ae2f-076694cd5f28</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddAssetRequest>
      <enh:ShapeTypeID>A000097</enh:ShapeTypeID>
      <enh:ContainerID>1306809</enh:ContainerID>
      <enh:Location>
        <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
      </enh:Location>
    </enh:AddAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1306821</sa:AssetID>
      <sa:AssetName>external server3</sa:AssetName>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.3.9 Specific rotation

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>f0a1dfd0-d731-4caf-ae2f-076694cd5f28</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddAssetRequest>
      <enh:ShapeTypeID>A000097</enh:ShapeTypeID>
      <enh:ContainerID>1306809</enh:ContainerID>
      <enh:Location>
        <enh:MountingRotation>180</enh:MountingRotation>
        <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
      </enh:Location>
    </enh:AddAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1306821</sa:AssetID>
```

```

    <sa:AssetName>external server4</sa:AssetName>
    <sa:Success/>
  </sa:AddAssetResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.3.10 Add asset to inventory

Required input:

- Authentication token: Session ID
- ShapeTypeID: Shape identifier

Optional input:

- Name: Name has a maximum character limit of 255.

- Derate:

Heat:

---Units:BTU/Hr,

---Value: (set to a desired number value)

---IsAggregate: true or false

Weight:

---Units: lbs, kg

---Value: (set to a desired number value)

---IsAggregate: true or false

Power:

---Units:watts, kw

---Value: (set to a desired number value)

---IsAggregate: true or false

- UDP: User-defined properties

Label: label of user-defined property

Value: value of user-defined property

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-

```

```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>f17273cd-5c60-4b15-85c4-c1fab5e96162</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:AddAssetRequest>
    <enh:ShapeTypeID>A003603</enh:ShapeTypeID>
    <enh:Name>Rack Cabinet 2</enh:Name>
    <enh:UDP>
      <enh:Label>serial number</enh:Label>
      <enh:Value>S100002</enh:Value>
    </enh:UDP>
  </enh:AddAssetRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1307453</sa:AssetID>
      <sa:AssetName>Rack Cabinet 2</sa:AssetName>
      <sa:UDP>
        <sa:Label>serial number</sa:Label>
        <sa:Value>S100002</sa:Value>
      </sa:UDP>
      <sa:Success/>
    </sa:AddAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.3.11 Add asset with specific properties

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wss="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>f0a1dfd0-d731-4caf-ae2f-076694cd5f28</wsse:Identifier>

```



```

    </wsse:SecurityContextToken>
  </wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:AddAssetRequest>
    <enh:ShapeTypeID>A003603</enh:ShapeTypeID>
    <enh:Plan>
      <enh:PlanName>HSV-Plan</enh:PlanName>
    </enh:Plan>
    <enh:Name>Rack Cabinet 1</enh:Name>
    <enh:Derate>
      <enh:Heat>
        <enh:Units>kW</enh:Units>
        <enh:Value>1</enh:Value>
        <enh:IsAggregate>>true</enh:IsAggregate>
      </enh:Heat>
      <enh:Power>
        <enh:Units>kW</enh:Units>
        <enh:Value>2.1</enh:Value>
        <enh:IsAggregate>>false</enh:IsAggregate>
      </enh:Power>
    </enh:Derate>
    <enh:UDP>
      <enh:Label>serial number</enh:Label>
      <enh:Value>S100001</enh:Value>
    </enh:UDP>
  </enh:AddAssetRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1306687</sa:AssetID>
      <sa:AssetName>Rack Cabinet 1</sa:AssetName>
      <sa:Derate>
        <sa:Heat>
          <sa:Units>kW</sa:Units>
          <sa:Value>1</sa:Value>
          <sa:IsAggregate>>true</sa:IsAggregate>
        </sa:Heat>
        <sa:Power>
          <sa:Units>kilowatts</sa:Units>
          <sa:Value>2.1</sa:Value>

```

```

        <sa:IsAggregate>>false</sa:IsAggregate>
    </sa:Power>
</sa:Derate>
<sa:UDP>
<sa:Label>serial number</sa:Label>
    <sa:Value>S100001</sa:Value>
</sa:UDP>
<sa:Success/>
</sa:AddAssetResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.4 MoveAsset

MoveAsset is used to move an existing asset in one of the following ways:

- Move an asset to a specified plan:
 - Move an asset from one location to another location in the same plan.
 - Move an asset from one plan to another plan.
 - Move an asset from inventory to a plan.
- Move an asset to a specified asset:
 - Move an asset from one slot to another slot in the same container type asset.
 - Move an asset from one container type asset to another container type asset.
 - Move an asset from inventory to a container type asset.
- Move an asset to a specified shelf space:
 - Move an asset from one slot or shelf space to another shelf space in the same container type asset.
 - Move an asset from one asset to a shelf space that belongs to another asset.
 - Move an asset from inventory to a shelf space.

3.4.1 Move asset to plan

Required input:

- Authentication token: Session ID
- AssetID: Asser ID
- Plan: Provide at least one of the following two parameters:
 - PlanID: Plan ID
 - PlanName: Plan Name

Optional input:

- Location:
 - Xcoord: X coordinates. If not provided, set a random value between 0 and 10% times the width of the plan as the default.
 - Ycoord: Y coordinates. If not provided, set a random value between 0 and 10% times the height of the plan as the default.

- MountingRotation: If not provided, 0 is set as the default value.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>ca2a5135-77aa-4430-ba6d-025e8e492cdc</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:MoveAssetRequest>
      <enh:AssetID>1492271</enh:AssetID>
      <enh:Plan>
        <enh:PlanID/>
        <enh:PlanName>Sand Box</enh:PlanName>
      </enh:Plan>
      <enh:Location>
        <enh:Xcoord>10</enh:Xcoord>
        <enh:Ycoord>15</enh:Ycoord>
        <enh:MountingRotation>150</enh:MountingRotation>
      </enh:Location>
    </enh:MoveAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:MoveAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1492271</sa:AssetID>
      <sa:AssetName>Rack Cabinet 5</sa:AssetName>
      <sa:Success/>
    </sa:MoveAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.4.2 Move asset to asset

Required input:

- Authentication token: Session ID

- AssetID: Asset ID
- ContainerID: ID of container type asset
- Location:
 - MountingOrientation: four choices (front facing/front mounted, rear facing/front mounted, front facing/rear mounted and rear facing/rear mounted).
 - SlotName: The name of the first slot where the new asset is placed
 - LSlot: Instead of SlotName. The logical slot of the first slot where the new asset is placed.

Optional input:

- Location:

MountingRotation: If not provided, 0 is set as the default value. Choices are: 0, 90, 180 and 270. For a rack-mounted asset, the choices are: 0 and 180.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>ca2a5135-77aa-4430-ba6d-025e8e492cdc</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:MoveAssetRequest>
      <enh:AssetID>1492434</enh:AssetID>
      <enh:ContainerID>1492271</enh:ContainerID>
      <enh:Location>
        <enh:MountingRotation>0</enh:MountingRotation>
        <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
        <enh:SlotName>Slot#4</enh:SlotName>
      </enh:Location>
    </enh:MoveAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:MoveAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1492434</sa:AssetID>
      <sa:AssetName>Server 4</sa:AssetName>
    </sa:MoveAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

    <sa:Success/>
  </sa:MoveAssetResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.4.3 Move asset to shelf space

Required input:

- Authentication token: Session ID
- AssetID: Asset ID
- ContainerID: ID of shelf space
- Location:
 - MountingOrientation: two choices (front facing/front mounted and front facing/rear mounted).

Optional input:

- Location:

MountingRotation: If not provided, 0 is set as the default value. Choices are: 0, 90, 180 and 270.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>1fa40ab9-5bca-4726-9f07-89578ba30cc0</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:MoveAssetRequest>
      <enh:AssetID>1492825</enh:AssetID>
      <enh:ContainerID>1492844</enh:ContainerID>
      <enh:Location>
        <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
      </enh:Location>
    </enh:MoveAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:MoveAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1492825</sa:AssetID>
      <sa:AssetName>Server 4</sa:AssetName>
      <sa:Success/>
    </sa:MoveAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.5 DeactivateAsset

The following request is an example of how to move an asset from a plan to inventory or delete an asset permanently.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID

Optional input:

- Destination: inventory/permanently. Default is inventory.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>f7502923-51db-4f26-b890-5018e33c2f38</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:DeactivateAssetRequest>
      <enh:AssetID>1487860</enh:AssetID>
      <enh:Destination>inventory</enh:Destination>
    </enh:DeactivateAssetRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:DeactivateAssetResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1487860</sa:AssetID>
      <sa:AssetName>Rack Cabinet 4</sa:AssetName>
      <sa:Success/>
    </sa:DeactivateAssetResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.6 Instantiate Template

The following requests are examples of placing assets that instantiated from a defined template into a plan or inventory. The name of the new assigned asset copies the name of the template and its child template name by default.

The following operations can be performed using the InstantiateTemplate request.

- Instantiate template to plan
- Instantiate template to asset
- Instantiate template to shelf space
- Instantiate template to inventory

NOTE: The assigned AssetID of the template is provided in the response for the InstantiateTemplate requests. This AssetID should be captured and used with the GetAssetContainerDetails requests in order to capture the assigned AssetIDs of all the child assets associated with this template.

3.6.1 Instantiate template to plan

Required input:

- Authentication token: Session ID
- TemplateName: The highest level asset name
- Plan: Provide at least one of the following parameters:
 - PlanID
 - PlanName

Optional input:

- Location:
 - Xcoord: X coordinates. If not provided, set a random value between 0 and 10% times the width of the plan as the default.
 - Ycoord: Y coordinates. If not provided, set a random value between 0 and 10% times the height of the plan as the default.
 - MountingRotation: If not provided, 0 is set as the default value.

NOTE: The assigned AssetID of the placed template provided in the response must be used with the GetAssetContainmentDetails request to obtain the assigned AssetIDs of all the child assets associated with this template.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>b31a455c-61d8-4cf1-8644-7e8ee2eaf5bc</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:InstantiateTemplateRequest>
      <enh:TemplateName>R4P42-Template</enh:TemplateName>
      <enh:Plan>
        <enh:PlanID/>
        <enh:PlanName>HSV-Plan</enh:PlanName>
      </enh:Plan>
      <enh:Location>
        <enh:Xcoord>20</enh:Xcoord>
        <enh:Ycoord>15</enh:Ycoord>
        <enh:MountingRotation>0</enh:MountingRotation>
      </enh:Location>
    </enh:InstantiateTemplateRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:InstantiateTemplateResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:TemplateName>R4P42-Template</sa:TemplateName>
      <sa:AssetID>1434858</sa:AssetID>
    <!-- Copy from Template Name -->
      <sa:AssetName>R4P42-Template</sa:AssetName>
      <sa:Success/>
    </sa:InstantiateTemplateResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```


3.6.2 Instantiate template to asset

Required input:

- Authentication token: Session ID
- TemplateName: The highest level asset name.
- ContainerID: ID of container type asset
- Location:
 - MountingOrientation: Choices are: front facing/front mounted, rear facing/front mounted, front facing/rear mounted and rear facing/rear mounted.
 - SlotName: The name of the first slot where the new asset is placed.
 - LSlot: Instead of SlotName. The logical slot of the first slot where the new asset is placed.

Optional input:

- Location:

MountingRotation: If not provided, 0 is set as the default value. The choices are 0, 90, 180 and 270. For rack-mounted assets, the choices are: 0 and 180.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>4349582d-f794-46e4-9fe9-d78eabae9507</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:InstantiateTemplateRequest>
      <enh:TemplateName>UCS C210 M1-Template</enh:TemplateName>
      <enh:ContainerID>1434858</enh:ContainerID>
      <enh:Location>
        <enh:MountingRotation>0</enh:MountingRotation>
        <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
        <enh:SlotName>Slot#45</enh:SlotName>
      </enh:Location>
    </enh:InstantiateTemplateRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:InstantiateTemplateResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:TemplateName>UCS C210 M1-Template</sa:TemplateName>
      <sa:AssetID>1434987</sa:AssetID>
    <!-- Copy from Template Name -->
      <sa:AssetName>UCS C210 M1-Template</sa:AssetName>
      <sa:Success/>
    </sa:InstantiateTemplateResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.6.3 Instantiate template to shelf space

Required input:

- Authentication token: Session ID
- TemplateName: The highest level asset name
- ContainerID: ID of shelf space
- Location:
 - MountingOrientation: The choices are front facing/front-mounted and front facing/rear-mounted.

Optional input:

- Location:

MountingRotation: If not provided, 0 is set as the default value. The choices are: 0, 90, 18 and 270.

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>63322068-0256-4845-8143-391f22d3f61e</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:InstantiateTemplateRequest>
      <enh:TemplateName>UCS C210 M1-Template</enh:TemplateName>
      <enh:ContainerID>1435070</enh:ContainerID>
```

```

    <enh:Location>
      <enh:MountingRotation>0</enh:MountingRotation>
      <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
    </enh:Location>
  </enh:InstantiateTemplateRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:InstantiateTemplateResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:TemplateName>UCS C210 M1-Template</sa:TemplateName>
      <sa:AssetID>1435085</sa:AssetID>
    <!-- Copy from Template Name -->
      <sa:AssetName>UCS C210 M1-Template</sa:AssetName>
      <sa:Success/>
    </sa:InstantiateTemplateResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.6.4 Instantiate template to inventory

Required input:

- Authentication token: Session ID
- TemplateName: The highest level asset name.

Optional input: N/A

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>63322068-0256-4845-8143-391f22d3f61e</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:InstantiateTemplateRequest>
      <enh:TemplateName>UCS C210 M1-Template</enh:TemplateName>
    </enh:InstantiateTemplateRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

```

    </enh:InstantiateTemplateRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:InstantiateTemplateResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:TemplateName>UCS C210 M1-Template</sa:TemplateName>
      <sa:AssetID>1435164</sa:AssetID>
      <!-- Copy from Template Name -->
      <sa:AssetName>UCS C210 M1-Template</sa:AssetName>
      <sa:Success/>
    </sa:InstantiateTemplateResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.7 AddAssetToZeroU

The following request is an example of adding an asset to the zero U space of a rack cabinet asset.

Required input:

- Authentication token: Session ID
- ShapeTypeID: Shape identifier
- RackID: Rack ID
- RackCorner: Front left, front right, back left or back right

Optional input:

- MountingRotation: If not provided, 0 is set as the default value.
- Name: Name has a maximum character limit of 255.
- Derate:
 - Heat:
 - Units: BTU/Hr, kW
 - Value: (set to a desired number value)
 - IsAggregate: true or false
 - Weight:
 - Units: lbs, kg
 - Value: (set to a desired number value)
 - IsAggregate: true or false

- Power:
 - Units: watts, kW
 - Value: (set to a desired number value)
 - IsAggregate: true or false
- UDP: User-defined properties
 - label of user-defined property
 - Value: value of user-defined property

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>>803c3b1b-9726-4a82-8511-1712b8126498</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddAssetToZeroURequest>
      <enh:ShapeTypeID>A000097</enh:ShapeTypeID>
      <enh:RackID>1491762</enh:RackID>
      <enh:RackComer>front left</enh:RackComer>
      <enh:MountingRotation>90</enh:MountingRotation>
      <enh:Name>Server 3</enh:Name>
      <enh:UDP>
        <enh:Label>serial number</enh:Label>
        <enh:Value>S200003</enh:Value>
      </enh:UDP>
    </enh:AddAssetToZeroURequest>
  </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddAssetToZeroUResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1492003</sa:AssetID>
      <sa:AssetName>Server 3</sa:AssetName>
      <sa:UDP>
        <sa:Label>serial number</sa:Label>
      </sa:UDP>
    </sa:AddAssetToZeroUResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

```

    <sa:Value>S200003</sa:Value>
  </sa:UDP>
  <sa:Success/>
</sa:AddAssetToZeroUResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.8 MoveAssetToZeroU

The following request is an example of moving an existing asset to zero U space of a rack cabinet asset.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID
- RackID: Rack ID
- RackCorner: front left, front right, back left or back right

Optional input:

- MountingRotation: If not provided, 0 is set as the default value.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices"> <soapenv:Header>
  <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
    <wsse:SecurityContextToken>
      <wsse:Identifier>6976851f-bcd9-41b7-a3e7-8ba421277de9</wsse:Identifier>
    </wsse:SecurityContextToken>
  </wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:MoveAssetToZeroURequest>
    <enh:AssetID>1434257</enh:AssetID>
    <enh:RackID>1434050</enh:RackID>
    <enh:RackCorner>front right</enh:RackCorner>
    <enh:MountingRotation>90</enh:MountingRotation>
  </enh:MoveAssetToZeroURequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>

```

```

<SOAP-ENV:Body>
  <sa:MoveAssetToZeroUResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
    <sa:AssetID>1434257</sa:AssetID>
    <sa:AssetName>Server 2</sa:AssetName>
    <sa:Success/>
  </sa:MoveAssetToZeroUResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

3.9 InstantiateTemplateToZeroU

This API places assets that instantiated from the defined template into zero U space.

Required input:

- Authentication token: Session ID
- TemplateName: The highest level asset name.
- RackID:
- RackCorner: front left, front right, back left or back right

Optional input:

- MountingRotation: If not provided, 0 is set as the default value.

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>63322068-0256-4845-8143-391f22d3f61e</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:InstantiateTemplateToZeroURequest>
      <enh:TemplateName>UCS C210 M1-Template</enh:TemplateName>
      <enh:RackID>1434858</enh:RackID>
      <enh:RackComer>front left</enh:RackComer>
      <enh:MountingRotation>0</enh:MountingRotation>
    </enh:InstantiateTemplateToZeroURequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:InstantiateTemplateToZeroUResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:TemplateName>UCS C210 M1-Template</sa:TemplateName>
      <sa:AssetID>1435231</sa:AssetID>
    <!-- Copy from Template Name -->
      <sa:AssetName>UCS C210 M1-Template</sa:AssetName>
      <sa:Success/>
    </sa:InstantiateTemplateToZeroUResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

3.9.1 AddShelfSpace

The following request is an example of adding shelf space to a rack cabinet asset.

Required input:

- Authentication token: Session ID
- RackID: Shape identifier
- MountingOrientation: Choices are front facing/front-mounted and front facing/rear-mounted.
- SlotName: The name of the first slot where the new asset is placed.
- LSlot: Instead of SlotName. The logical slot of the first slot where the new asset is placed.
- ConsumedRU: The number of rack units that are consumed.

Optional input: N/A

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>803c3b1b-9726-4a82-8511-1712b8126498</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddShelfSpaceRequest>
      <enh:ShapeTypeID>1491762</enh:ShapeTypeID>
      <enh:SlotName>Slot#6</enh:SlotName>
      <enh:MountingOrientation>front facing/front mounted</enh:MountingOrientation>
      <enh:ConsumedRU>2</enh:ConsumedRU>
```



```
</enh:AddShelfSpaceRequest>  
</soapenv:Body>  
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">  
  <SOAP-ENV:Header/>  
  <SOAP-ENV:Body>  
    <sa:AddShelfSpaceResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">  
      <sa:ShelfSpaceID>1491943</sa:ShelfSpaceID>  
      <sa:AssetName>external server 3</sa:AssetName>  
      <sa:Success/>  
    </sa:AddShelfSpaceResponse>  
  </SOAP-ENV:Body>  
</SOAP-ENV:Envelope>
```

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4 PORT CONNECTION APIS

The Port Connection APIs are used to manage port connections.

4.1 AddConnection

The following are examples of how to connect two available ports. If the Connection Name and/or Cable Name are not defined in the request, a Connection Name and/or Cable Name is assigned. The names can be duplicates.

Required input:

- Authentication token: Session ID
- Asset1ID: Asset one ID
- Port1: Provide at least one of the following: PortID, PortName or LPort.
 - PortID:
 - PortName: Port name. Defined by the DCP device library.
 - LPort: Logical port name. Defined by the Enhanced WS logical port algorithm.
 - PortLocation: front or back
- Asset2ID: Asset two ID
- Port2:
 - PortID: Port ID
 - PortName: Port name. Defined by the DCP device library.
 - LPort: Logical port name. Defined by the Enhanced WS logical port algorithm.
 - PortLocation: front or back

Optional input:

- ConnectionName: The name of this connection. It has a maximum character limit of 255.
- CableName: The cable name of this connection. If not present, the default value is set to "Default". It has a maximum character limit of 255.

4.1.1 Add connection through PortID

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddConnectionRequest>
```

```

<enh:ConnectionName>Connection 2</enh:ConnectionName>
<enh:CableName>cable 2</enh:CableName>
<enh:Asset1ID>1434106</enh:Asset1ID>
<enh:Port1>
  <enh:PortID>26225</enh:PortID>
  <enh:PortLocation>front</enh:PortLocation>
</enh:Port1>
<enh:Asset2ID>1434257</enh:Asset2ID>
<enh:Port2>
  <enh:PortID>26225</enh:PortID>
  <enh:PortLocation>front</enh:PortLocation>
</enh:Port2>
</enh:AddConnectionRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Connection>
        <sa:ConnectionName>Connection 2</sa:ConnectionName>
        <sa:CableName>cable 2</sa:CableName>
        <sa:Asset1ID>1434106</sa:Asset1ID>
        <sa:Port1>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26225</sa:PortID>
          <sa:PortName>US2</sa:PortName>
          <sa:LPort>LPort#3</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>2003</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port1>
        <sa:Asset2ID>1434257</sa:Asset2ID>
        <sa:Port2>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26225</sa:PortID>
          <sa:PortName>US2</sa:PortName>
          <sa:LPort>LPort#3</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>2003</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
        </sa:Port2>
      </sa:Connection>
    </sa:AddConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
    </sa:Port2>
</sa:Connection>
<sa:Success/>
</sa:AddConnectionResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.1.2 Add connection through PortName

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddConnectionRequest>
      <enh:ConnectionName>Connection 0</enh:ConnectionName>
      <enh:CableName>cable 0</enh:CableName>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:PortName>VII</enh:PortName>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:PortName>VII</enh:PortName>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:AddConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>

```

```

<SOAP-ENV:Body>
  <sa:AddConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
    <sa:Connection>
      <sa:ConnectionName>Connection 0</sa:ConnectionName>
      <sa:CableName>cable 0</sa:CableName>
      <sa:Asset1ID>1434106</sa:Asset1ID>
      <sa:Port1>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26181</sa:PortID>
        <sa:PortName>VII</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1686</sa:Xcoord>
          <sa:Ycoord>152</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port1>
      <sa:Asset2ID>1434257</sa:Asset2ID>
      <sa:Port2>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26181</sa:PortID>
        <sa:PortName>VII</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1686</sa:Xcoord>
          <sa:Ycoord>152</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port2>
    </sa:Connection>
    <sa:Success/>
  </sa:AddConnectionResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.1.3 Add connection through LPort

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:AddConnectionRequest>
      <enh:ConnectionName>Connection 1</enh:ConnectionName>
      <enh:CableName>cable 1</enh:CableName>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:AddConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:AddConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Connection>
        <sa:ConnectionName>Connection 1</sa:ConnectionName>
        <sa:CableName>cable 1</sa:CableName>
        <sa:Asset1ID>1434106</sa:Asset1ID>
        <sa:Port1>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26193</sa:PortID>
          <sa:PortName>US1</sa:PortName>
          <sa:LPort>LPort#2</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>1923</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port1>
        <sa:Asset2ID>1434257</sa:Asset2ID>
        <sa:Port2>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26193</sa:PortID>
          <sa:PortName>US1</sa:PortName>
          <sa:LPort>LPort#2</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>1923</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port2>
      </sa:Connection>
      <sa:Success/>
    </sa:AddConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4.2 UpdateConnection

The following are examples of how to update the connection name and/or cable name for existing connections.

Required input:

- Authentication token: Session ID
- Asset1ID: Asset one ID

- Port1: Provide at least one of the following: PortID, PortName or LPort.
 - PortID:
 - PortName: Port name. Defined by the Data Center Planner device library.
 - LPort: Logical port name. Defined by the Enhanced WS logical port algorithm.
 - PortLocation: front or back
- Asset2ID: Asset two ID
- Port2:
 - PortID:
 - PortName: Port name. Defined by the Data Center Planner device library.
 - LPort: Logical port name. Defined by the Enhanced WS logical port algorithm.
 - PortLocation: front or back

Optional input:

- ConnectionName: The name of this connection. If present (blank node or a specified value), update it. If not present (does not append to this node), ignore it. It has a maximum character limit of 255.
- CableName: The cable name of this connection. If present (blank node or a specified value), update it. If not present (does not append to this node), ignore it. It has a maximum character limit of 255.

4.2.1 Update connection through PortID

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:UpdateConnectionRequest>
      <enh:ConnectionName>Connection Name 0</enh:ConnectionName>
      <enh:CableName>Cable Name 0</enh:CableName>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:PortID>26225</enh:PortID>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:PortID>26225</enh:PortID>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:UpdateConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

```

    </enh:Port2>
  </enh:UpdateConnectionRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:UpdateConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Connection>
        <sa:ConnectionName>Connection Name 0</sa:ConnectionName>
        <sa:CableName>Cable Name 0</sa:CableName>
        <sa:Asset1ID>1434106</sa:Asset1ID>
        <sa:Port1>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26225</sa:PortID>
          <sa:PortName>US2</sa:PortName>
          <sa:LPort>LPort#3</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>2003</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port1>
        <sa:Asset2ID>1434257</sa:Asset2ID>
        <sa:Port2>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26225</sa:PortID>
          <sa:PortName>US2</sa:PortName>
          <sa:LPort>LPort#3</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>2003</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port2>
      </sa:Connection>
      <sa:Success/>
    </sa:UpdateConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.2.2 Update connection through PortName

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:UpdateConnectionRequest>
      <enh:ConnectionName>Connection Name 1</enh:ConnectionName>
      <enh:CableName>Cable Name 1</enh:CableName>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:PortName>VII</enh:PortName>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:PortName>VII</enh:PortName>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:UpdateConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:UpdateConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Connection>
        <sa:ConnectionName>Connection Name 1</sa:ConnectionName>
        <sa:CableName>Cable Name 1</sa:CableName>
        <sa:Asset1ID>1434106</sa:Asset1ID>
        <sa:Port1>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26181</sa:PortID>
          <sa:PortName>VII</sa:PortName>
          <sa:LPort>LPort#1</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>1686</sa:Xcoord>
            <sa:Ycoord>152</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port1>
        <sa:Asset2ID>1434257</sa:Asset2ID>
        <sa:Port2>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26181</sa:PortID>
          <sa:PortName>VII</sa:PortName>
          <sa:LPort>LPort#1</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>1686</sa:Xcoord>
            <sa:Ycoord>152</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port2>
      </sa:Connection>
      <sa:Success/>
    </sa:UpdateConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4.2.3 Update connection through LPort

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
```

```

    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>a0069172-d595-4823-bc06-ecb9a57da5a3</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:UpdateConnectionRequest>
      <enh:ConnectionName>Connection Name 2</enh:ConnectionName>
      <enh:CableName>Cable Name 2</enh:CableName>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:UpdateConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:UpdateConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Connection>
        <sa:ConnectionName>Connection Name 2</sa:ConnectionName>
        <sa:CableName>Cable Name 2</sa:CableName>
        <sa:Asset1ID>1434106</sa:Asset1ID>
        <sa:Port1>
          <sa:Aspect>FRONT</sa:Aspect>
          <sa:PortID>26193</sa:PortID>
          <sa:PortName>US1</sa:PortName>
          <sa:LPort>LPort#2</sa:LPort>
          <sa:PortOriginPosition>
            <sa:Xcoord>1923</sa:Xcoord>
            <sa:Ycoord>167</sa:Ycoord>
          </sa:PortOriginPosition>
          <sa:PortType>dataport</sa:PortType>
          <sa:PortGender>female</sa:PortGender>
        </sa:Port1>
      </sa:Connection>
    </sa:UpdateConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

<sa:Asset2ID>1434257</sa:Asset2ID>
<sa:Port2>
  <sa:Aspect>FRONT</sa:Aspect>
  <sa:PortID>26193</sa:PortID>
  <sa:PortName>US1</sa:PortName>
  <sa:LPort>LPort#2</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1923</sa:Xcoord>
    <sa:Ycoord>167</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:Port2>
</sa:Connection>
<sa:Success/>
</sa:UpdateConnectionResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.3 RemoveConnection

The following are examples of how to disconnect two connected ports.

Required input:

- Authentication token: Session ID
- Asset1ID: Asset one ID
- Port1: Provide at least one of the following: PortID, PortName or LPort.
 - PortID:
 - PortName: Port name. Defined by device library.
 - LPort: Logical port name. Defined by Enhanced WS logical port algorithm.
 - PortLocation: front or back
- Asset2ID: Asset two ID
- Port2:
 - PortID:
 - PortName: Port name. Defined by the device library.
 - LPort: Logical port name. Defined by the Enhanced WS logical port algorithm.
 - PortLocation: front or back

Optional input: N/A

4.3.1 Remove connection through PortID

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:RemoveConnectionRequest>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:PortID>26225</enh:PortID>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:PortID>26225</enh:PortID>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:RemoveConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:RemoveConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset1ID>1434106</sa:Asset1ID>
      <sa:Port1>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26225</sa:PortID>
        <sa:PortName>US2</sa:PortName>
        <sa:LPort>LPort#3</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>2003</sa:Xcoord>
          <sa:Ycoord>167</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port1>
      <sa:Asset2ID>1434257</sa:Asset2ID>
      <sa:Port2>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26225</sa:PortID>
        <sa:PortName>US2</sa:PortName>
        <sa:LPort>LPort#3</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>2003</sa:Xcoord>
          <sa:Ycoord>167</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port2>
      <sa:Success/>
    </sa:RemoveConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4.3.2 Remove connection through PortName

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
```



```

    </wsse:SecurityContextToken>
  </wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:RemoveConnectionRequest>
    <enh:Asset1ID>1434106</enh:Asset1ID>
    <enh:Port1>
      <enh:PortName>VII</enh:PortName>
      <enh:PortLocation>front</enh:PortLocation>
    </enh:Port1>
    <enh:Asset2ID>1434257</enh:Asset2ID>
    <enh:Port2>
      <enh:PortName>VII</enh:PortName>
      <enh:PortLocation>front</enh:PortLocation>
    </enh:Port2>
  </enh:RemoveConnectionRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:RemoveConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset1ID>1434106</sa:Asset1ID>
      <sa:Port1>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26181</sa:PortID>
        <sa:PortName>VII</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1686</sa:Xcoord>
          <sa:Ycoord>152</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port1>
      <sa:Asset2ID>1434257</sa:Asset2ID>
      <sa:Port2>
        <sa:Aspect>FRONT</sa:Aspect>
        <sa:PortID>26181</sa:PortID>
        <sa:PortName>VII</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1686</sa:Xcoord>
          <sa:Ycoord>152</sa:Ycoord>
        </sa:PortOriginPosition>
      </sa:Port2>
    </sa:RemoveConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    </sa:PortOriginPosition>
    <sa:PortType>dataport</sa:PortType>
    <sa:PortGender>female</sa:PortGender>
  </sa:Port2>
  <sa:Success/>
</sa:RemoveConnectionResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.3.3 Remove connection through LPort

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:RemoveConnectionRequest>
      <enh:Asset1ID>1434106</enh:Asset1ID>
      <enh:Port1>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port1>
      <enh:Asset2ID>1434257</enh:Asset2ID>
      <enh:Port2>
        <enh:LPort>LPort#2</enh:LPort>
        <enh:PortLocation>front</enh:PortLocation>
      </enh:Port2>
    </enh:RemoveConnectionRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:RemoveConnectionResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Asset1ID>1434106</sa:Asset1ID>
    </sa:RemoveConnectionResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

<sa:Port1>
  <sa:Aspect>FRONT</sa:Aspect>
  <sa:PortID>26193</sa:PortID>
  <sa:PortName>US1</sa:PortName>
  <sa:LPort>LPort#2</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1923</sa:Xcoord>
    <sa:Ycoord>167</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:Port1>
<sa:Asset2ID>1434257</sa:Asset2ID>
<sa:Port2>
  <sa:Aspect>FRONT</sa:Aspect>
  <sa:PortID>26193</sa:PortID>
  <sa:PortName>US1</sa:PortName>
  <sa:LPort>LPort#2</sa:LPort>
  <sa:PortOriginPosition>
    <sa:Xcoord>1923</sa:Xcoord>
    <sa:Ycoord>167</sa:Ycoord>
  </sa:PortOriginPosition>
  <sa:PortType>dataport</sa:PortType>
  <sa:PortGender>female</sa:PortGender>
</sa:Port2>
<sa:Success/>
</sa:RemoveConnectionResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.4 PortLock

The following are examples of how to lock or unlock available ports.

Required input:

- Authentication token: Session ID
- AssetID: Asset ID
- Port1: Provide at least one of the following: PortID, PortName or LPort.
 - PortID: Port ID
 - PortName: Port name. Defined by device library.
 - LPort: Logical port name. Defined by Enhanced WS logical port algorithm.
 - PortLocation: front or back

Optional input:

- Locked: true or false. Default is true.

4.4.1 Lock a port through PortName

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:PortLockRequest>
      <enh:AssetID>1434106</enh:AssetID>
      <enh:Port>
        <enh:PortName>INPUT_2</enh:PortName>
        <enh:PortLocation>back</enh:PortLocation>
        <enh:Locked>true</enh:Locked>
      </enh:PortLockRequest>
    </soapenv:Body>
</soapenv:Envelope>
```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26124</sa:PortID>
        <sa:PortName>INPUT_2</sa:PortName>
        <sa:LPort>LPort#2</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>2158</sa:Xcoord>
          <sa:Ycoord>199</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>plug/socket</sa:PortType>
        <sa:PortGender>male</sa:PortGender>
      </sa:Port>
      <sa:Locked>true</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4.4.2 Lock a port through PortID

Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:PortLockRequest>
      <enh:AssetID>1434106</enh:AssetID>
      <enh:Port>
        <enh:PortID>26100</enh:PortID>
        <enh:PortLocation>back</enh:PortLocation>
      </enh:Port>
      <enh:Locked>true</enh:Locked>
    </enh:PortLockRequest>
```

```

</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26100</sa:PortID>
        <sa:PortName>INPUT_1</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1838</sa:Xcoord>
          <sa:Ycoord>199</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>plug/socket</sa:PortType>
        <sa:PortGender>male</sa:PortGender>
      </sa:Port>
      <sa:Locked>true</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.4.3 Lock a port through LPort

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
      secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:PortUnlockRequest>
      <enh:AssetID>1434106</enh:AssetID>
      <enh:Port>

```

```

    <enh:LPort>LPort#3</enh:LPort>
    <enh:PortLocation>back</enh:PortLocation>
  </enh:Port>
  <enh:Locked>>true</enh:Locked>
</enh:PortLockRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26120</sa:PortID>
        <sa:PortName>VI2</sa:PortName>
        <sa:LPort>LPort#3</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>865</sa:Xcoord>
          <sa:Ycoord>322</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port>
      <sa:Locked>>true</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.4.4 Unlock a port through PortName

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
      secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>

```

```

</soapenv:Header>
<soapenv:Body>
  <enh:PortLockRequest>
    <enh:AssetID>1434106</enh:AssetID>
    <enh:Port>
      <enh:PortName>INPUT_2</enh:PortName>
      <enh:PortLocation>back</enh:PortLocation>
    </enh:Port>
    <enh:Locked>>false</enh:Locked>
  </enh:PortLockRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26124</sa:PortID>
        <sa:PortName>INPUT_2</sa:PortName>
        <sa:LPort>LPort#2</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>2158</sa:Xcoord>
          <sa:Ycoord>199</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>plug/socket</sa:PortType>
        <sa:PortGender>male</sa:PortGender>
      </sa:Port>
      <sa:Locked>>false</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.4.5 Unlock a port through PortID

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-

```



```

secext-1.0.xsd">
  <wsse:SecurityContextToken>
    <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
  </wsse:SecurityContextToken>
</wsse:Security>
</soapenv:Header>
<soapenv:Body>
  <enh:PortLockRequest>
    <enh:AssetID>1434106</enh:AssetID>
    <enh:Port>
      <enh:PortID>26100</enh:PortID>
      <enh:PortLocation>back</enh:PortLocation>
    </enh:Port>
    <enh:Locked>>false</enh:Locked>
  </enh:PortLockRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26100</sa:PortID>
        <sa:PortName>INPUT_1</sa:PortName>
        <sa:LPort>LPort#1</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>1838</sa:Xcoord>
          <sa:Ycoord>199</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>plug/socket</sa:PortType>
        <sa:PortGender>male</sa:PortGender>
      </sa:Port>
      <sa:Locked>>false</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

4.4.6 Unlock a port through LPort

Request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:enh="http://dvr.avocent.com/enhanced-webservices">
  <soapenv:Header>
    <wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-
secext-1.0.xsd">
      <wsse:SecurityContextToken>
        <wsse:Identifier>661987cc-adf3-40e2-a4c7-3162063e769d</wsse:Identifier>
      </wsse:SecurityContextToken>
    </wsse:Security>
  </soapenv:Header>
  <soapenv:Body>
    <enh:PortLockRequest>
      <enh:AssetID>1434106</enh:AssetID>
      <enh:Port>
        <enh:LPort>LPort#3</enh:LPort>
        <enh:PortLocation>back</enh:PortLocation>
      </enh:Port>
      <enh:Locked>>false</enh:Locked>
    </enh:PortLockRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

Response

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:PortLockResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:AssetID>1434106</sa:AssetID>
      <sa:Port>
        <sa:Aspect>BACK</sa:Aspect>
        <sa:PortID>26120</sa:PortID>
        <sa:PortName>VI2</sa:PortName>
        <sa:LPort>LPort#3</sa:LPort>
        <sa:PortOriginPosition>
          <sa:Xcoord>865</sa:Xcoord>
          <sa:Ycoord>322</sa:Ycoord>
        </sa:PortOriginPosition>
        <sa:PortType>dataport</sa:PortType>
        <sa:PortGender>female</sa:PortGender>
      </sa:Port>
      <sa:Locked>>false</sa:Locked>
      <sa:Success/>
    </sa:PortLockResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

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5 CONFLICTS AND ERROR MESSAGES

The following section describes the conflict logging and error reporting associated with the Enhanced Web Service APIs.

5.1 Conflict Log

A conflict can occur when a user is managing an asset using the Data Center Planner GUI at the same time the same asset is being managed through the web services interface. When a conflict occurs, Data Center Planner logs the information associated with the conflict behavior. The conflict log follows the existing log solution and the conflict cases follow the existing conflict solution. The following lists conflict log properties and the values or formats:

- Configuration file: deployment\src\main\webapp\WEB-INF\log4j.properties
- Conflict log file: \${AMP_HOME}\logs\dvr_enhancedws.log
- Log information for each behavior: Date, Time, Session ID, User Name, AssetID, Asset Name, WS class name, method name and conflict message.

If the web service needs to perform a group of assets at one time, only log the highest level Asset ID and Asset Name. The Enhanced WS does not need all child asset IDs.

- Log Format: %d{yyyy-MM-dd HH:mm:ss} - %-5p - %m%n

Error message format

The following are the supported error message formats:

- SessionID[%s], UserName[%s], PlanID[%s], PlanName[%s], %s#%s -- %s
- SessionID[%s], UserName[%s], AssetID[%s], AssetName[%s], %s#%s -- %s
- SessionID[%s], UserName[%s], Asset1ID[%s], Asset1Name[%s], Port1Name[%s], Port1Location [%s], Asset2ID[%s], Asset2Name[%s], Port2Name[%s], Port2Location[%s], %s#%s -- %s
- SessionID[%s], UserName[%s], AssetID[%s], AssetName[%s], PortName[%s], PortLocation[%s], %s#%s -- %s

Example: Error message for a missing asset

2012-10-03 17:09:16 - ERROR – SessionID[235e9444-d414-46cc-b92f-01c10fc95838], UserName[admin], AssetID[1306779], AssetName[firewall 6], EnhancedWebServiceImpl#setAssetEnhancedRequest -- The assets do not exist.

The following commands record the conflict log:

- SetAssetEnhanced
- UnsetAssetEnhanced
- AddAsset
- MoveAsset
- DeactivateAsset
- InstantiateTemplate
- AddAssetToZeroU
- MoveAssetToZeroU
- InstantiateTemplateToZeroU

- AddShelfSpace
- AddConnection
- UpdateConnection
- RemoveConnection
- PortLock

5.2 Error Response

When an error condition occurs associated with a web services API request, the response includes an error code and message.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <sa:GetAssetEnhancedResponse xmlns:sa="http://dvr.avocent.com/enhanced-webservices">
      <sa:Error>
        <sa:ErrorCode>10001</sa:ErrorCode>
        <sa:ErrorMessage>Session has expired.</sa:ErrorMessage>
      </sa:Error>
    </sa:GetAssetEnhancedResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

5.3 Error Code and Message Perimeters

Table 5.1 Error Code and Message Parameters

ERROR CODE	ERROR MESSAGE	PARAMETERS
10001	Session has expired.	
10002	You have exceeded your number of sessions.	
20001	Please check your Data Center Planner license.	
30001	User {0} insufficient rights for {1}#{2}.	parameter 1: user name parameter 2: simple class name parameter 3: method name
30002	User {0} does not have read rights for object {1}.	parameter 1: user name parameter 2: asset/shelf space id
30003	User {0} does not have write access for object {1}.	parameter 1: user name parameter 2: asset/shelf space id
30004	User {0} does not have full edit rights for the plan {1}.	parameter 1: user name parameter 2: plan name
40001	Asset ID is required.	
40002	Invalid Asset ID specified.	
40003	Shape Type ID is required.	
40004	Shape not found.	
40005	Invalid asset type specified.	
40006	Query string is required.	

ERROR CODE	ERROR MESSAGE	PARAMETERS
40007	Invalid format of the query string.	
40008	Plan is required.	
40009	Invalid Plan ID specified.	
40010	Container ID is required.	
40011	Invalid Container ID specified.	
40012	Mounting Orientation is required.	
40013	Invalid mounting orientation.	
40014	First slot is required.	
40015	First slot cannot be found.	
40016	Child asset cannot be contained by the parent.	
40017	Template name is required.	
40018	Rack ID is required.	
40019	Invalid rack ID.	
40020	Rack corner is required.	
40021	Invalid rack corner.	
40022	Consumed RU number is required.	
40023	Port Location is required.	
40024	Specified port cannot be found.	
40025	Connection needs two valid assets and ports.	
40026	Connection needs two valid ports.	
40027	Heat, Power or Weight aggregate value is TRUE or FALSE.	
40028	Heat, Power or Weight derate requires Units, Value and is aggregate nodes.	
40029	Unknown property type of {0}.	parameter 1: property label
40030	The string value is too long; the maximum length is 255.	
40031	Bad XML format.	
40032	Invalid consumed RU number.	
40033	Invalid rack cabinet asset specified.	
40034	Invalid mounting rotation specified.	
40035	Current operation does not support the specified rotation. Only supports {0}.	
40036	Current operation does not support the specified orientation. Only supports "front facing/front mounted" or "front facing/rear mounted".	parameter 1: 0, 90, 180 and 270
40037	Invalid Heat Unit.	
40038	Invalid Weight Unit.	
40039	Invalid Power Unit.	
40040	Please check specified first slot, too many slots will be consumed for the asset.	

ERROR CODE	ERROR MESSAGE	PARAMETERS
40041	Heat, Power or Weight Value must be numeric.	
40042	Invalid deactivated destination.	
40043	Unsupported operation.	
40044	Invalid Port ID.	
40045	Port ID, Port Name or L Port is required.	
40046	Invalid Port Type.	
40047	Specified Locked value must be TRUE or FALSE.	
40048	Invalid coordinates specified.	
40049	Invalid Port Location specified. Only front and back are supported.	
50001	The ports are already consumed.	
50002	The port is already consumed.	
50003	A problem exists that prevents renaming this asset.	
50004	The asset's name has been changed.	
50005	The asset's derate has been changed.	
50006	The shelf space does not exist.	
50007	The shelf space is in conflict.	
50008	The shelf space has been changed.	
50009	The rack does not exist.	
50010	Plan does not exist.	
50011	Plan {0} has been deleted.	plan name
50012	Plan {0} does not exist.	plan name
50013	The plan does not exist.	
50014	The object does not exist.	
50015	The object being updated is not on the plan.	
50016	The object being updated does not exist.	
50017	The parent asset does not exist.	
50018	The assets do not exist.	
50019	Asset is in conflict.	
50020	The property is in conflict.	
50021	The properties are in conflict.	
50022	The property does not exist.	
50023	The asset type does not exist.	
50024	The assets do not exist.	
50025	The ports do not exist.	
50026	The connection does not exist.	
50027	The property type does not exist.	

ERROR CODE	ERROR MESSAGE	PARAMETERS
50028	A future task conflicts with this change.	
60001	Container cannot be found.	
60002	Asset cannot be found.	
60003	Template cannot be found.	
60004	The connection already exists.	
60005	Specified slot overlaps consumed slots.	
60006	The port is consumed and cannot be locked.	
60007	The port is consumed and cannot be unlocked.	
60008	The asset is in inventory.	
60009	The port is locked.	
90001	This is only a partial response to the Query Enhanced request. The maximum limit set for this query of {0} assets has been reached.	parameter 1: maximum limit set

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6 LOGICAL SLOT AND PORT NUMBERING METHOD FOR ASSETS

This section explains the logical numbering sequence for slots and ports located in the front or rear of an asset.

6.1 Slot Numbering

For all racks, the slot numbering begins at the top of the rack. In the following figure, this 42U rack, LSlot#1 starts at the top slot and sequentially increments to the final LSlot#42 at the bottom.

Figure 6.1 Rack Logical Slot Numbering

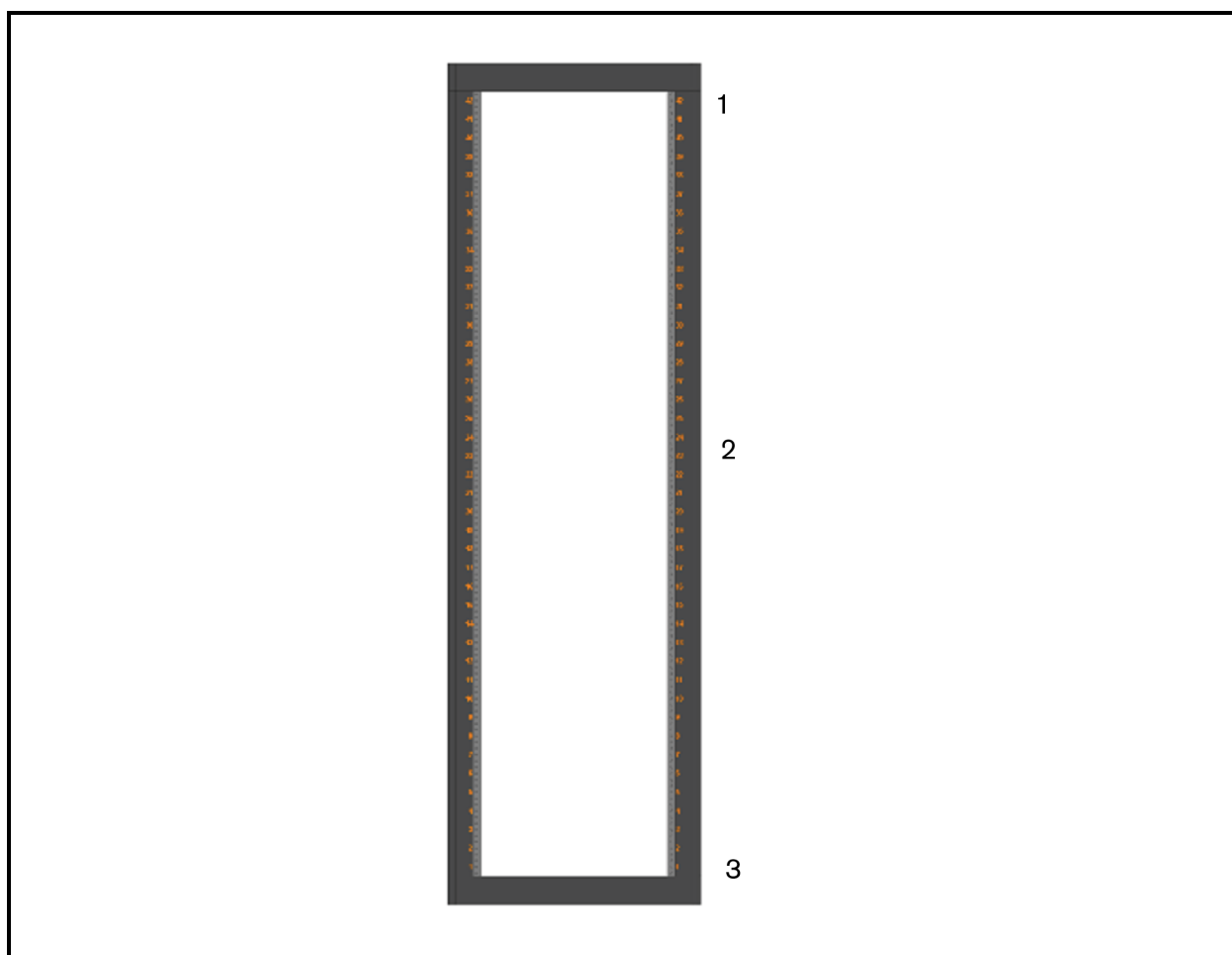


Table 6.1 Rack Logical Slot Numbering

NUMBER	SLOT POSITION
1	LSlot#1
2	LSlot#21
3	LSlot#42

For all other container type assets, excluding racks, front slots are numbered from the origin point in the upper, left corner of the container asset, facing the front of the asset. The following figure shows the slots on the front of a blade server chassis mounted in a rack. The slots on the front are used for front-mounted assets.

The following is the logical slot numbering method:

1. From the origin point, move down in the y direction until you reach the origin point of the first slot. The slot origin point is the upper left corner of the slot body.
2. If there are multiple slot origin points for the y axis location, move away from the container asset origin point in the x direction until you reach the first slot. This becomes LSlot#1.
3. Staying at the same y axis point, continue to move along the x axis until you reach the next module slot. This becomes LSlot#2.
4. Repeat this sequential numbering process for each slot on this y axis until you move past the last slot on the x axis. This completes the first row of slots.
5. Move down in the y direction until you reach the origin point of the next slot. Staying at this y-axis point and returning to the 0 point on the x axis, move down the x axis until you reach the first slot origin point for this given y axis location. This becomes the next sequential slot number from the last slot of the previous row. For this blade server chassis, this is LSlot#9.
6. This logical numbering method continues until all slots on the front-facing side of the container chassis are numbered.

Figure 6.2 Front-facing, Non-rack Container Type Asset Numbering

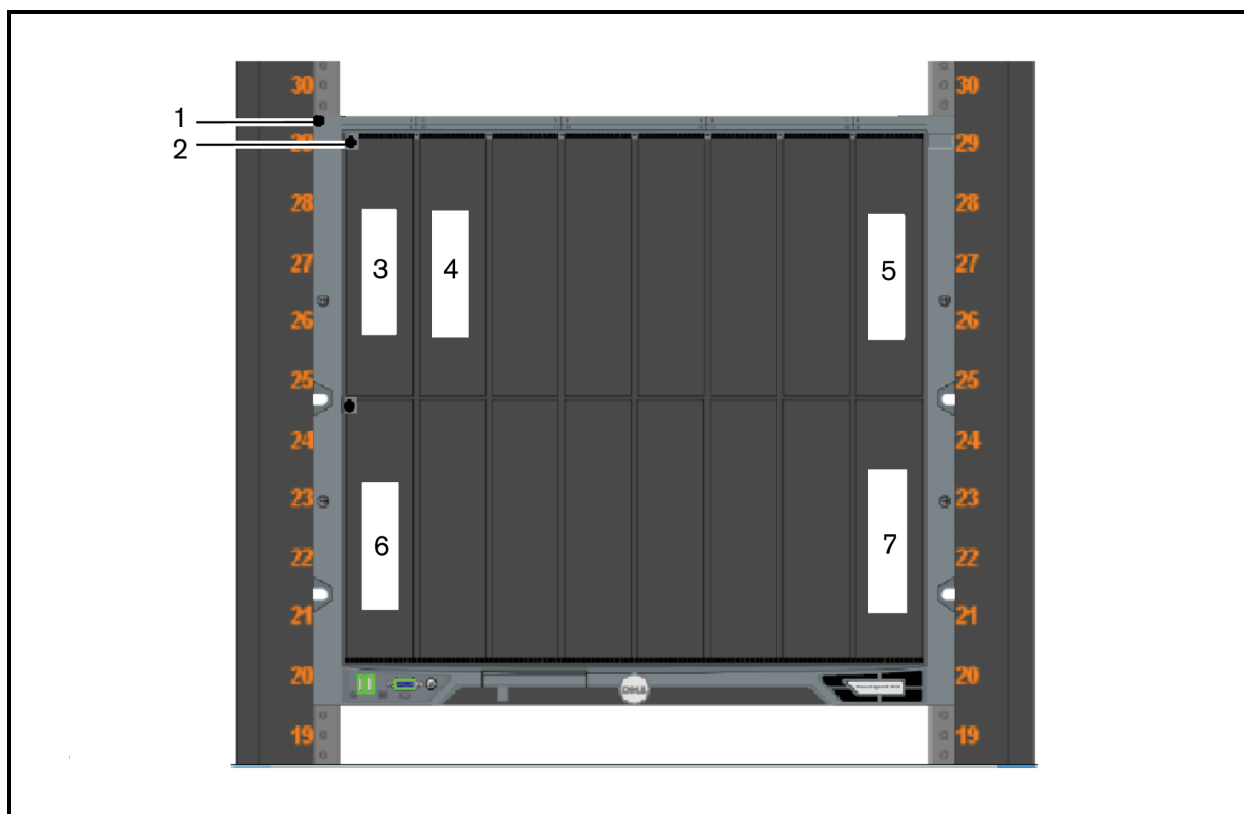


Table 6.2 Front-facing, Non-rack Container Type Asset Numbering

ITEM	SLOT NUMBER
1	Origin point of this blade server chassis (0,0)
2	Origin point of module slot
3	LSlot#1
4	LSlot#2
5	LSlot#8
6	LSlot#9
7	LSlot#16

For all non-rack container type assets with rear slots, use the same numbering method as the front. The first slot is labeled LSlot#1 and is used for rear-mounted assets.

NOTE: The narrow vertically-orientated slots, such as LSlot#7, have slot origin positions slightly lower in the y direction than the origin points for LSlot#4, LSlot#5 and LSlot#6. Therefore, they are numbered as shown in the following figure.

The following figure shows the slot numbering on the rear of the same blade server chassis.

Figure 6.3 Rear-facing, Non-rack Container Type Asset Numbering

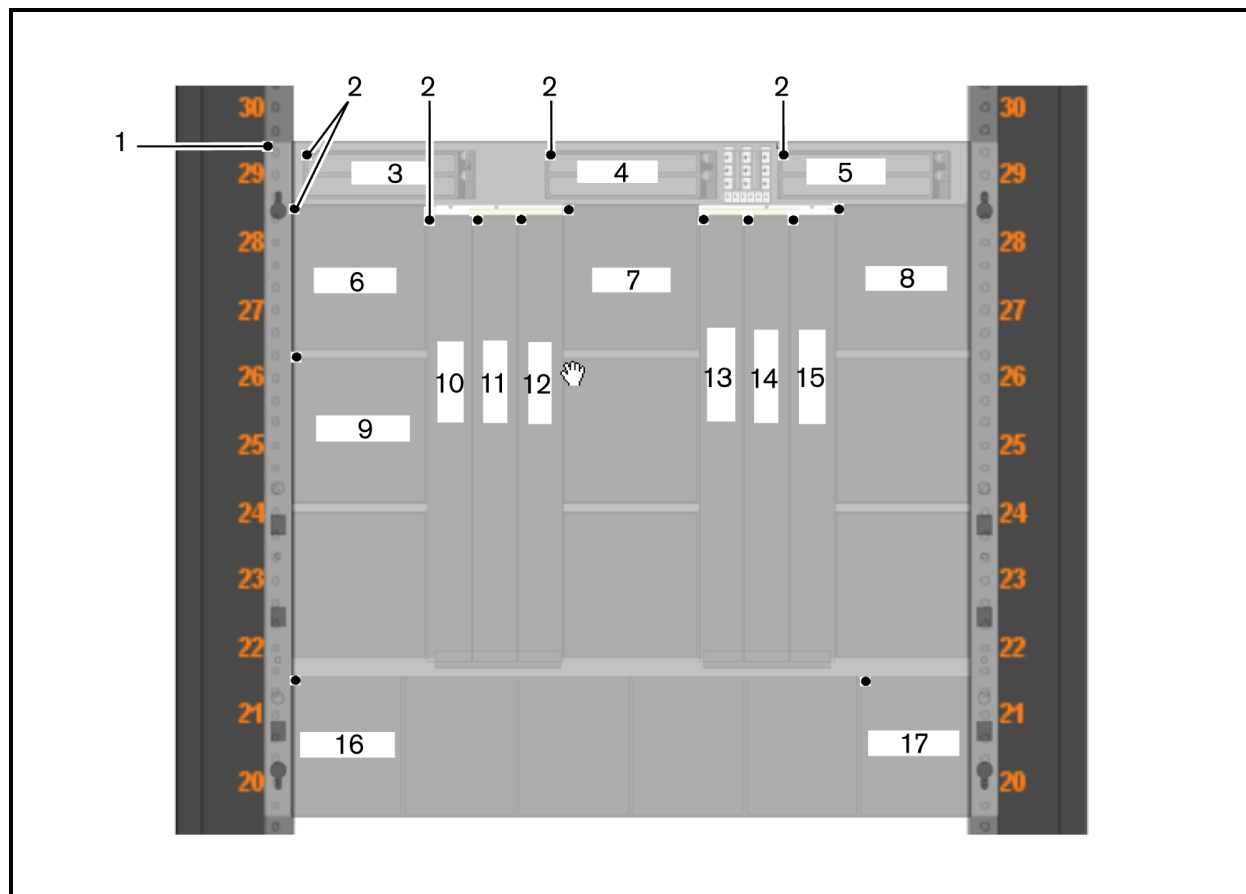


Table 6.3 Rear-facing, Non-rack Container Type Asset Numbering

ITEM	SLOT NUMBER OR NAME
1	Origin point for this blade server chassis, rear view (0,0)
2	Several origin points of the module slots shown
3	LSlot#1
4	LSlot#2
5	LSlot#3
6	LSlot#4
7	LSlot#5
8	LSlot#6
9	LSlot#13
10	LSlot#7
11	LSlot#8
12	LSlot#9
13	LSlot#10
14	LSlot#11
15	LSlot#12
16	LSlot#19
17	LSlot#24

6.2 Port Numbering

Ports are numbered from the origin point located in the upper, left corner of the front-mounted asset. The following figure shows there are three ports located on the front side of this asset.

To assign port numbers:

1. From the asset origin point, move down in the y direction until you reach the origin point of the first port. The port origin point is located at the upper left corner of the port body.
2. If there are multiple port origin points for this y axis location, move away for the container asset origin point in the x direction until you reach the first port. This is LPort#1.
3. Staying at the same y axis point, continue to move along the x axis until you hit the next port. This is LPort#2.
4. Repeat this sequential numbering process for each port on this y axis location until you move past the last port on the x axis. This completes the first row of ports.
5. Move down the y direction until you reach the origin point of the next port. Staying at this y axis point and returning to the 0 point on the x axis, move down the x axis until you reach the first port origin point for this given y axis location. This becomes the next sequential slot number from the last slot of the previous row. For the asset shown, this is LPort#3.
6. This logical numbering scheme continues until all ports on the front-facing side of the asset are numbered.

Figure 6.4 Front-facing Port Numbering

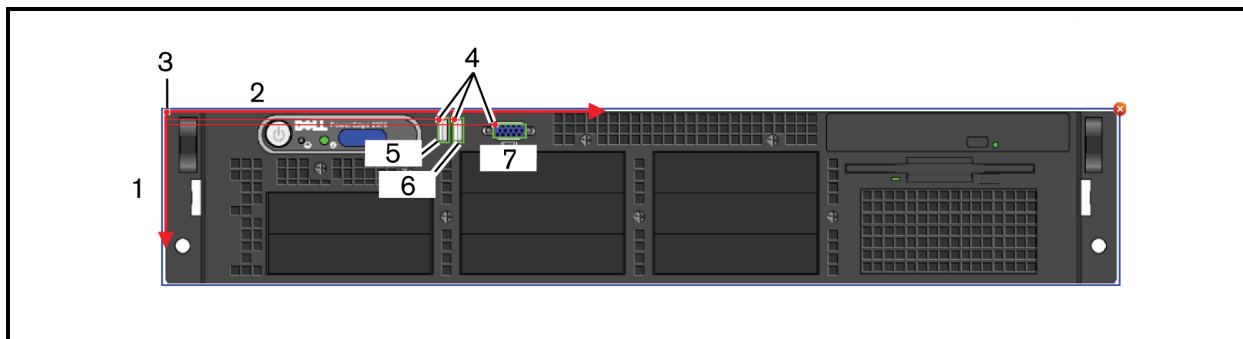


Table 6.4 Front-facing Port Numbering

ITEM	SLOT NUMBER
1	Y Axis
2	X Axis
3	Origin point of this device for front-facing X,Y coordinate system as shown (0,0)
4	Origin points of the ports: 5, 6, 7
5	LPort#1
6	LPort#2
7	LPort#3

For all asset types that have ports on the rear of the asset, use the same method as the front side. The following figure shows the ports on the rear of the asset.

Figure 6.5 Rear-facing Port Numbering

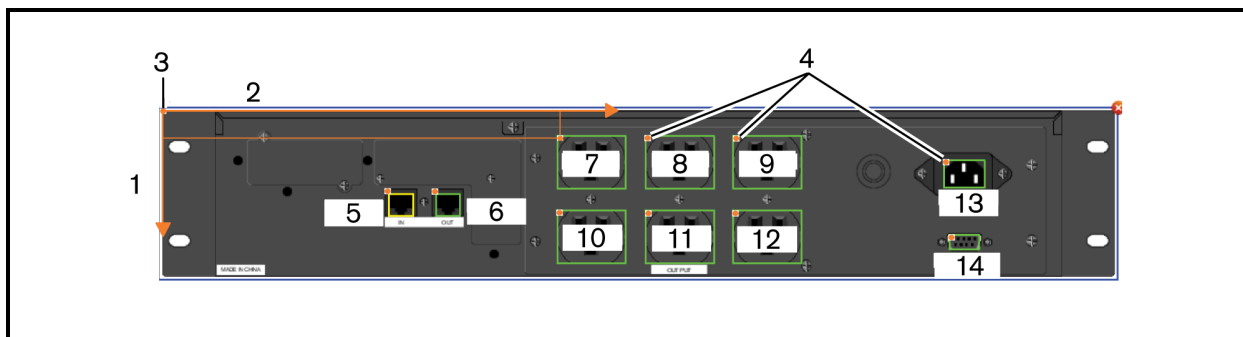


Table 6.5 Rear-facing Port Numbering

ITEM	SLOT NUMBER
1	Y Axis
2	X Axis
3	Origin point of this device for rear-facing X,Y coordinate system as shown (0,0)
4	Origin points of the ports: 8, 9, 13

ITEM	SLOT NUMBER
5	LPort#5
6	LPort#6
7	LPort#1
8	LPort#2
9	LPort#3
10	LPort#7
11	LPort#8
12	LPort#9
13	LPort#4
14	LPort#10

NOTE: The logical port numbering method can be verified by using the origin position data for the ports provided by the GetShape request for the device. Also, the PortType data provided can be used as further confirmation of correct port mapping.

APPENDICIES

Appendix A: Tips

The following is a list of tips when using Enhanced Web Services with Data Center Planner.

Table A.1 Enhanced Web Services Tips

QUESTION OR SCENARIO	TIP
<p>When I imported a remote Enhanced WS wsdl, a Socket Timeout exception occurs.</p> <p>I do not receive a response when I send the Enhanced WS request to a remote Data Center Planner Server and Socket Timeout exception occurs.</p>	<p>Make sure the Data Center Planner was successfully started. If this issue continues, go to \$AMP_HOME/webapp/etc., open "jetty-ssl.xml" and add a note. This changes the handshake time out value to a larger value. The value's unit is milliseconds. <code><Set name="handshakeTimeout">2000</Set></code>.</p> <p>NOTE: Note: If Data Center Planner is installed on Windows OS, the AMP_HOME should be C:\Program Files (x86)\Avocent\Management Platform\. If installed on Linux OS, the AMP_HOME should be usr/local/Avocent/Management Platform/.</p>
<p>A Socket Timeout exception occurs when SOAPUI sends QueryEnhanced/QueryShape request.</p>	<p>Because QueryEnhanced might return a huge amount of data to the client, it takes a long time to transfer data, set a larger value of Socket time out for SOAPUI. Select "File->"Preferences", then, click "HTTP Settings" and input a larger value for "Socket Timeout".</p>
<p>Can several Enhanced WS requests use the same authentication token?</p>	<p>Yes, one client side should use one authentication token. The default maximum number of authentication token is 5, that means one Data Center Planner server allows 5 clients access to it through Enhanced WS. Otherwise, Enhanced WS returns "Session number exceeded" error message. This number is configurable, find the configuration file \$AMP_HOME/conf/extension.xml, below property. You can set another value for testing. You do not need restart Data Center Planner service if you changed this value. <code><target name="EnhancedWSSessionConfig"> <property name="MaxSession" value="5"/> </target></code></p>
<p>How do I use appropriate filtering to limit the size of QueryEnhanced response?</p>	<p>If the Data Center Planner client uses a wildcard search or fuzzy search to retrieve records from Data Center Planner through QueryEnhanced request, it may take a long time, and returns unusable data to client. It is better to use an exact QueryString to retrieve records from Data Center Planner through QueryEnhanced request in order to improve the response time and reduce the size of query response. Try to avoid using wildcard search or fuzzy search.</p>

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