

# **DeviceAdminService API**

## DeviceAdminService API

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# Glossary

Device Interface	This represents the external interface to a device.
Device Interface API	The API accepted by the device on its external interface
DeviceAdminService API	The API accepted by the device on its external interface for DeviceAdminService

# Introduction

This document contains the description of the device interface API for deviceadmin services

# Chapter 1. Discovery API

API Calls used in Discovery process

## GetDevice

Returns the Device information in RAW format.

### Example 1.1. GetDeviceRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='GET' requestName='Device'
    userJID='user@localhost/pc' requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceRequestData/>
  </Data>
</Request>
```

### Example 1.2. GetDeviceResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='GET' requestName='Device'
    userJID='user@localhost/pc' requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceResponseData>
      <Device title='' type='' state='' password='' ownerUserJID=''>
        <Groups />
        <DevicePrivateData />
        <TemplateNID />
        <PortList />
        <DeviceConfig> <!-- Device specific response --> </DeviceConfig>
        <DeviceStatus> <!-- Device specific response --> </DeviceStatus>
        <DeviceList />
      </Device>
    </GetDeviceResponseData>
  </Data>
</Response>
```

# SetDeviceConfig

update the device with given config

- *Dirty*: possible values are *CLEAN/ADD/MODIFY/DELETE*. (Applies the config only if *Dirty!=CLEAN*)
  - *CLEAN*: No update required
  - *ADD*: Add given entry to table. Example: Adding a route to route table.
  - *MODIFY*: Modifies the given config. Example: Updating exiting route config
  - *DELETE*: Deletes the given entry from table. Example: deleting a route from route table

## Example 1.3. SetDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SetDeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <SetDeviceConfigRequestData doNotSaveToFlash='true/false'>
      <DeviceConfig Dirty="CLEAN">
        <ServiceElementsConfig>
          <XMPPAgentServiceConfig Dirty="MODIFY">
            <Enable>true</Enable>
            <XMPPServer>0.0.0.0</XMPPServer>
            <DeviceName>xp2001</DeviceName>
            <DevicePassword>Ipsv1234</DevicePassword>
            <Domain>default</Domain>
            <ServiceDomain>default</ServiceDomain>
          </XMPPAgentServiceConfig>
          <NetworkElementsConfig>
            <RouteTableConfig Dirty="MODIFY">
              <RouteEntry Dirty="MODIFY" ListIndex="1">
                <Destination>0.0.0.0</Destination>
                <Netmask>0.0.0.0</Netmask>
                <Gateway>192.168.1.1</Gateway>
              </RouteEntry>
            </RouteTableConfig>
            <EthernetPortTableConfig>
              <EthernetPortConfig Dirty="MODIFY" ListIndex="1">
                <PortID>1</PortID>
                <EnableInterface>true</EnableInterface>
                <IsPrimary>true</IsPrimary>
                <EnableMulticast>false</EnableMulticast>
                <IPConfig>
                  <UseDHCP>false</UseDHCP>
                </IPConfig>
              </EthernetPortConfig>
            </EthernetPortTableConfig>
          </NetworkElementsConfig>
        </ServiceElementsConfig>
      </DeviceConfig>
    </SetDeviceConfigRequestData>
  </Data>
</Request>
```



```
        <IPAddress>192.168.1.196</IPAddress>
        <Netmask>255.255.0.0</Netmask>
    </IPConfig>
</EthernetPortConfig>
</EthernetPortTableConfig>
</NetworkElementsConfig>
</ServiceElementsConfig>
</DeviceConfig>
</SetDeviceConfigRequestData>
</Data>
</Request>
```

#### Example 1.4. SetDeviceConfigResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SetDeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <SetDeviceConfigResponse/>
  </Data>
</Response>
```

# Chapter 2. DeviceConfig API

API Calls used to update Device Config From Clients/AppController or publish the Config to App Controller

## GetDeviceConfig

Returns the Deviceconfig information

### Example 2.1. GetDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='GET'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceConfigRequestData/>
  </Data>
</Request>
```

### Example 2.2. GetDeviceConfigResponse

Returns device configuration information

```
<Response>
  <Header serviceName='DeviceAdmin' type='GET'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceConfigResponseData>
      <DeviceConfig>
        <SystemElementsConfig Dirty="CLEAN">
          <!-- Choice of device specific System Info -->
        </SystemElementsConfig>
        <ServiceElementsConfig Dirty="CLEAN">
          <!-- Choice of device specific Services-->
        </ServiceElementsConfig>
        <NetworkElementsConfig Dirty="CLEAN">
          <!-- Network Config Common for all devices-->
        </NetworkElementsConfig>
      </DeviceConfig>
    </GetDeviceConfigResponseData>
  </Data>
</Response>
```

```
        </NetworkElementsConfig>
        <StorageElementsConfig Dirty="CLEAN">
            <!-- Common for all DMS and MS Devices-->
        </StorageElementsConfig>
        <AVCodecElementsConfig Dirty="CLEAN">
            <!-- Choice of device specific AVCodec Elements -->
        </AVCodecElementsConfig>
    </DeviceConfig>
</GetDeviceConfigResponseData>
</Data>
</Response>
```

## PutDeviceConfig

update device with given config

### Example 2.3. PutDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='PUT'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <PutDeviceConfigRequestData/>
  </Data>
</Request>
```

### Example 2.4. PutDeviceConfigResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='PUT'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <PutDeviceConfigResponse/>
  </Data>
</Response>
```

# PostDeviceConfig

Use this call if you want to add a entry to table. For example, adding route table entry or adding new LUT

## Example 2.5. PostDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='POST'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <PostDeviceConfigRequestData/>
  </Data>
</Request>
```

## Example 2.6. PostDeviceConfigResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='POST'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <PostDeviceConfigResponse/>
  </Data>
</Response>
```

# DeleteDeviceConfig

Use this call if you want to delete a entry from table. For example, deleting route table entry or deleting LUT

## Example 2.7. DeleteDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='DELETE'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
```

```
<ClientData>cd123</ClientData>
<ClientCallback></ClientCallback>
</Header>
<Data>
  <DeleteDeviceConfigRequestData/>
</Data>
</Request>
```

### Example 2.8. DeleteDeviceConfigResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='DELETE'
    requestName='DeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <DeleteDeviceConfigResponse/>
  </Data>
</Response>
```

## SetDeviceConfig

Updates the given Configuration

- *Dirty*: possible values are *CLEAN/ADD/MODIFY/DELETE*. (Applies the config only if *Dirty!=CLEAN*)
  - *CLEAN*: No update required
  - *ADD*: Add given entry to table. Example: Adding a route to route table.
  - *MODIFY*: Modifies the given config. Example: Updating exiting route config
  - *DELETE*: Deletes the given entry from table. Example: deleting a route from route table
- *doNotSaveToFlash*: (optional) if true it will not update the given configuration to flash. Default value is false

### Example 2.9. SetDeviceConfigRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SetDeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
```

```
<ClientData>cd123</ClientData>
<ClientCallback></ClientCallback>
</Header>
<Data>
  <SetDeviceConfigRequestData doNotSaveToFlash='true/false'>
    <DeviceConfig Dirty="CLEAN">
      <SystemElementsConfig Dirty="CLEAN">
        <!-- Choice of device specific System Info -->
      </SystemElementsConfig>
      <ServiceElementsConfig Dirty="CLEAN">
        <!-- Choice of device specific Services-->
      </ServiceElementsConfig>
      <NetworkElementsConfig Dirty="CLEAN">
        <!-- Network Config Common for all devices-->
      </NetworkElementsConfig>
      <StorageElementsConfig Dirty="CLEAN">
        <!-- Common for all DMS and MS Devices-->
      </StorageElementsConfig>
      <AVCodecElementsConfig Dirty="CLEAN">
        <!-- Choice of device specific AVCodec Elements -->
      </AVCodecElementsConfig>
    </DeviceConfig>
  </SetDeviceConfigRequestData>
</Data>
</Request>
```

### Example 2.10. SetDeviceConfigResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SetDeviceConfig' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <SetDeviceConfigResponse/>
  </Data>
</Response>
```

### Example 2.11. Enable DHCP to get local ipaddress

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SetDeviceConfig' userJID='user@localhost/pc'
    requestNID='1234'>
```

```
<ClientData>cd123</ClientData>
<ClientCallback></ClientCallback>
</Header>
<Data>
  <SetDeviceConfigRequestData doNotSaveToFlash='true/false'>
    <DeviceConfig Dirty="CLEAN">
      <NetworkElementsConfig Dirty="CLEAN">
        <EthernetPortTableConfig>
          <EthernetPortConfig Dirty="MODIFY" ListIndex="1">
            <PortID>1</PortID>
            <EnableInterface>true</EnableInterface>
            <IsPrimary>true</IsPrimary>
            <EnableMulticast>true</EnableMulticast>
            <MTU>1500</MTU>
            <IPConfig>
              <UseDHCP>true</UseDHCP>
              <IPAddress>169.254.0.1</IPAddress>
              <Netmask>255.255.0.0</Netmask>
            </IPConfig>
          </EthernetPortConfig>
        </EthernetPortTableConfig>
      </NetworkElementsConfig>
    </DeviceConfig>
  </SetDeviceConfigRequestData>
</Data>
</Request>
```

# Chapter 3. DeviceStatus API

API Calls used to publish the device status to AppController

## GetDeviceStatus

Returns current status of device

### Example 3.1. GetDeviceStatusRequest

```
<Request>
<Header serviceName='DeviceAdmin' type='GET'
requestName='DeviceStatus' userJID='user@localhost/pc'
requestNID='1234'>
  <ClientData>cd123</ClientData>
  <ClientCallback></ClientCallback>
</Header>
<Data>
  <GetDeviceStatusRequestData/>
</Data>
</Request>
```

### Example 3.2. GetDeviceStatusResponse

```
<Response>
<Header serviceName='DeviceAdmin' type='GET'
requestName='DeviceStatus' userJID='user@localhost/pc'
requestNID='1234' state='200'>
  <ClientData>cd123</ClientData>
  <ClientCallback></ClientCallback>
</Header>
<Data>
  <GetDeviceStatusResponseData>
<DeviceStatus>
  <SystemElementsStatus>
    <!-- Choice of device specific System Status -->
  </SystemElementsStatus>
  <ServiceElementsStatus>
    <!-- Choice of device specific Services status -->
  </ServiceElementsStatus>
  <NetworkElementsStatus>
    <NATZoneTableStatus Queryable="true" State="OK">
      <ParametersList>
        <Parameters>
          <Parameter name="" type="Float" units="" source=""></
Parameter>
```



```
        </Parameters>
      </ParametersList>
    </NATZoneTableStatus>
    <EthernetPortTableStatus>
      <EthernetPortStatus Queryable="true" State="OK">
        <ParametersList>
          <Parameters>
            <Parameter name="" type="Float" units="" source=""></
Parameter>
          </Parameters>
        </ParametersList>
      </EthernetPortStatus>
    </EthernetPortTableStatus>
    <!-- Network Status Common for all devices -->
  </NetworkElementsStatus>
  <StorageElementsStatus>
    <!-- Common for all DMS and MS Devices -->
  </StorageElementsStatus>
  <AVCodecElementsStatus>
    <!-- Choice of device specific AVCodec Elements -->
  </AVCodecElementsStatus>
</DeviceStatus>
</GetDeviceStatusResponseData>
</Data>
</Response>
```

# Chapter 4. DeviceCommand API

API Calls used to run commands on devices like Upgrade, Reboot, RevertDefault, SaveToFlash

## GetDeviceCommand

Returns the supported commands information

### Example 4.1. GetDeviceCommandRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='GetDeviceCommand' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceCommandRequest/>
  </Data>
</Request>
```

### Example 4.2. GetDeviceCommandResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='GET'
    requestName='DeviceStatus' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <GetDeviceCommandResponseData>
    <DeviceCommand>
      <SystemElementsCommand">
        <!-- Choice of device specific System Info -->
      </SystemElementsCommand>
      <ServiceElementsCommand">
        <!-- Choice of device specific Services-->
      </ServiceElementsCommand>
      <NetworkElementsCommand">
        <!-- Network Config Common for all devices-->
      </NetworkElementsCommand>
      <StorageElementsCommand">
        <!-- Common for all DMS and MS Devices-->
      </StorageElementsCommand>
```

```
<AVCodecElementsCommand">
  <!-- Choice of device specific AVCodec Elements -->
</AVCodecElementsCommand>
</DeviceConfig>
</GetDeviceCommandResponseData>
</Data>
</Response>
```

## ExecuteDeviceCommand

Execute the given action

### Example 4.3. ExecuteDeviceCommandRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='ExecuteDeviceCommand' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <ExecuteDeviceCommandData command=''>
      <CommandParam name='' value=''/>
      <CommandParam name='' value=''/>
      <CommandParam name='' value=''/>
    </ExecuteDeviceCommandData>
  </Data>
</Request>
```

### Example 4.4. ExecuteDeviceCommandResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='ExecuteDeviceCommand' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <ExecuteDeviceCommandData/>
  </Data>
</Response>
```

# Reboot

Reboot the device

## Example 4.5. RebootRequest

```
<Request>
<Header serviceName='DeviceAdmin' type='RPC' requestName='Reboot'
userJID='user@localhost/pc' requestNID='1234'>
  <ClientData>cd123</ClientData>
  <ClientCallback></ClientCallback>
</Header>
<Data>
  <RebootRequestData/>
</Data>
</Request>
```

## Example 4.6. RebootResponse

```
<Response>
<Header serviceName='DeviceAdmin' type='RPC' requestName='Reboot'
userJID='user@localhost/pc' requestNID='1234' state='200'>
  <ClientData>cd123</ClientData>
  <ClientCallback></ClientCallback>
</Header>
<Data>
  <RebootResponseData/>
</Data>
</Response>
```

# Upgrade

Upgrade the device with given software

## Example 4.7. UpgradeRequest

```
<Request>
<Header serviceName='DeviceAdmin' type='RPC' requestName='Upgrade'
userJID='user@localhost/pc' requestNID='1234'>
  <ClientData>cd123</ClientData>
  <ClientCallback></ClientCallback>
</Header>
<Data>
```

```
<UpgradeRequestData url='' />
</Data>
</Request>
```

### Example 4.8. UpgradeResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC' requestName='Upgrade'
    userJID='user@localhost/pc' requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <UpgradeResponseData />
  </Data>
</Response>
```

## RevertToFactoryDefault

Revert the device to factory default box

### Example 4.9. RevertToFactoryDefaultRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='RevertToFactoryDefault' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <RevertToFactoryDefaultRequestData keepMedia=''
      keepNetworkSettings='' />
  </Data>
</Request>
```

### Example 4.10. RevertToFactoryDefaultResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='RevertToFactoryDefault' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
```

```
<ClientData>cd123</ClientData>
<ClientCallback></ClientCallback>
</Header>
  <Data>
    <RevertToFactoryDefaultResponseData/>
  </Data>
</Response>
```

## SaveConfiguration

Save the configuration to flash/harddrive

### Example 4.11. SaveConfigurationRequest

```
<Request>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SaveConfiguration' userJID='user@localhost/pc'
    requestNID='1234'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <SaveConfigurationRequestData/>
  </Data>
</Request>
```

### Example 4.12. SaveConfigurationResponse

```
<Response>
  <Header serviceName='DeviceAdmin' type='RPC'
    requestName='SaveConfiguration' userJID='user@localhost/pc'
    requestNID='1234' state='200'>
    <ClientData>cd123</ClientData>
    <ClientCallback></ClientCallback>
  </Header>
  <Data>
    <SaveConfigurationResponseData/>
  </Data>
</Response>
```