

# OverDrive

Public API Guide

Version 1.2

**ROSS**



# Thank You for Choosing Ross

You've made a great choice. We expect you will be very happy with your purchase of Ross Technology.

Our mission is to:

1. Provide a Superior Customer Experience
  - offer the best product quality and support
2. Make Cool Practical Technology
  - develop great products that customers love

Ross has become well known for the Ross Video Code of Ethics. It guides our interactions and empowers our employees. I hope you enjoy reading it below.

If anything at all with your Ross experience does not live up to your expectations be sure to reach out to us at [solutions@rossvideo.com](mailto:solutions@rossvideo.com).



David Ross

CEO, Ross Video

[david.ross@rossvideo.com](mailto:david.ross@rossvideo.com)

## Ross Video Code of Ethics

Any company is the sum total of the people that make things happen. At Ross, our employees are a special group. Our employees truly care about doing a great job and delivering a high quality customer experience every day. This code of ethics hangs on the wall of all Ross Video locations to guide our behavior:

1. We will always act in our customers' best interest.
3. We will do our best to understand our customers' requirements.
4. We will not ship crap.
5. We will be great to work with.
6. We will do something extra for our customers, as an apology, when something big goes wrong and it's our fault.
7. We will keep our promises.
8. We will treat the competition with respect.
9. We will cooperate with and help other friendly companies.
10. We will go above and beyond in times of crisis. If there's no one to authorize the required action in times of company or customer crisis - do what you know in your heart is right. (You may rent helicopters if necessary.)



# OverDrive Public API Guide

- Ross Part Number: 7900DR-021-1.2
- Release Date: January 3, 2025. Printed in Canada.
- Software Issue: OverDrive v23.6 or higher

The information contained in this Guide is subject to change without notice or obligation.

## Copyright

© 2016 - 2025 Ross Video Limited. Ross® and any related marks are trademarks or registered trademarks of Ross Video Limited. All other trademarks are the property of their respective companies. PATENTS ISSUED and PENDING. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without the prior written permission of Ross Video. While every precaution has been taken in the preparation of this document, Ross Video assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein.

## Patents

Patent numbers 4,205,346; 5,115,314; 5,280,346; 5,561,404; 7,034,886; 7,508,455; 7,602,446; 7,834,886; 7,914,332; 8307284, 2039277; 1237518; 1127289 and other patents pending.

## Notice

The material in this manual is furnished for informational use only. It is subject to change without notice and should not be construed as commitment by Ross Video Limited. Ross Video Limited assumes no responsibility or liability for errors or inaccuracies that may appear in this manual.

## Company Address

Ross Video Limited	Ross Video Incorporated
8 John Street	P.O. Box 880
Iroquois, Ontario	Ogdensburg, New York
Canada, K0E 1K0	USA 13669-0880
<hr/>	
General Business Office:	(+1) 613 - 652 - 4886
Fax:	(+1) 613 - 652 - 4425
Technical Support:	(+1) 613 - 652 - 4886
After Hours Emergency:	(+1) 613 - 349 - 0006
E-mail (Technical Support):	techsupport@rossvideo.com
E-mail (General Information):	solutions@rossvideo.com
Website:	<a href="http://www.rossvideo.com">http://www.rossvideo.com</a>

# Contents

Overdrive Public API Services .....	3
API PATH .....	3
HTTP Responses .....	3
REST API Endpoint Definitions .....	4
MOS NRCS Configuration Edit Endpoint .....	4
MOS Shot - Get All Available MOS Shot Items Endpoint.....	5
MOS Shot - Get Available MOS Shot Folders Endpoint .....	7
ProjectServer - Publish GlobalConfigs Endpoint.....	9
ProjectServer - Deploy GlobalConfigs Endpoint .....	10
ProjectServer - Retrieve a List of All Shows in ProjectServer Available for Loading to the Plugin Endpoint.....	11
ProjectServer - Request a Show to be Loaded/Reloaded for the Plugin Endpoint.....	12
Troubleshooting .....	14



# Overdrive Public API Services

This technical document presents the public REST API endpoints that are available for customers to customize their OverDrive system. These Public APIs are in addition to the existing FloorDirector API endpoints. REST API (Representational State Transfer Application Programming Interface) is a set of standard web protocols used to interact with a software application or a web resource over the internet. The presented endpoints allow customers to automate various configuration settings of the system.

## API PATH

The base path will be set to `http://{OD-HOST}/server/rest/api/public/*`

## HTTP Responses

The following HTTP response codes will apply to all requests to the API services:

- 400 Bad Request (the provided data is invalid)
- 401 Unauthorized
- 404 Not Found (Wrong URL)
- 406 Unacceptable (When client does not accept application/xml)
- 500 Internal Server Error
- 503 Service Unavailable

# REST API Endpoint Definitions

## MOS NRCS Configuration Edit Endpoint

<b>Description</b>	Given an Nrcs Configuration Name, this endpoint edits Nrcs Configuration fields: <b>Nrcs IDs, Nrcs hosts, and MOS IDs.</b> Customers call this endpoint to automate modifying their MOS NRCS settings when they want to swap settings. This action will restart all configured MOS Gateways.
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/mosnracs/editNrcsServerConfig</code>
<b>HTTP Method</b>	POST
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key
<b>Headers</b>	[Content-Type: application/x-www-form-urlencoded]
<b>Constraints</b>	Enable the Advanced Configuration: <b>Enable Public API [503 Otherwise].</b> <b>API Key Associated to User with Admin Permissions</b> or Higher.
<b>Success Response Code</b>	200
<b>Error Response Code</b>	400 Bad Request (the provided data is invalid) 401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 404 Not Found (Wrong URL) 500 Internal Server Error 503 Service Unavailable
<b>Sample Payload</b>	[Content-Type: application/x-www-form-urlencoded] nrcsConfigName:inception primaryNrcsId:inception primaryNrcsHost:inceptionrd primaryMosId:OD.DEV.TEST redundantNrcsId: redundantNrcsHost: redundantMosId:
<b>Sample Response</b>	[Status: 200 OK] { "success": "success" }

## MOS Shot - Get All Available MOS Shot Items Endpoint

<b>Description</b>	Returns the MOS object representation of all the shots and templates in the OverDrive database.
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/mos/shots</code>
<b>HTTP Method</b>	GET
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Headers</b>	Accept: application/xml [Mandatory]
<b>Constraints</b>	Enable the Advanced Configuration: <b>Enable Public API [503 Otherwise]</b> . <b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher.
<b>Query Parameters</b>	<ul style="list-style-type: none"> <li><b>folder</b> [optional] — if provided, returns only shots and templates that exist inside the provided folder (excluding subfolders).  <b>Example</b> <code>http://{{OD-HOST}}/server/rest/api/public/mos/shots?folder=MyFolder</code></li> <li><b>nrcsConfig</b> [optional] — if provided, the response will use the MOS ID from the provided NRCS Configuration, for example: <code>&lt;mosID&gt;NRCS_CONFIG_MOS_ID&lt;/mosID&gt;</code>.  When this value is empty or not provided, the default NRCS Configuration's MOS ID will be used.  <b>Example</b> <code>http://{{OD-HOST}}/server/rest/api/public/mos/shots?nrcsConfig=myConfig</code></li> <li><b>show</b> [optional] — if provided, response will contain shot/template information related to the provided show's name.  This parameter is only supported by licenses that allow multiple show deployments such as Standalone+ProjectServer or CentralServer. Calling the endpoint with this parameter on licenses that do not support multiple show deployments will result in a 400 BAD REQUEST response. Additionally, providing an empty value on supported licenses will result in a response containing shot/template information related to the default show.  <b>Example</b> <code>http://{{OD-HOST}}/server/rest/api/public/mos/shots?show=myShowName</code></li> </ul>
<b>Success Response Code</b>	200, 204 (No Content)
<b>Error Response Code</b>	400 Bad Request (the provided data is invalid, the server is not configured for multi-show deployments, or the requested show does not exist) 401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 403 Forbidden when CentralServer Node/Not supported for multi-show deployments 404 Not Found (Wrong URL) 406 Unacceptable (When client does not accept application/xml) 409 Conflict when a show is not yet loaded 500 Internal Server Error 503 Service Unavailable (Public API is not enabled)
<b>Sample Payload</b>	<pre>GET /server/rest/api/public/mos/shots HTTP/1.1 Host: {{OD-HOST}} Accept: application/xml x-api-key: .....</pre>

## Sample Response

```
[Status: 200 OK]
<?xml version="1.0" encoding="UTF-8"?>
<mosList>
  <mos>
    <mosID>DEV.OD.MSHULTZ</mosID>
    <itemID>0</itemID>
    <mosAbstract>Primary Shot - Ross Video - Audio AFV: Default</mosAbstract>
    <objSlug>Primary Shot - Ross Video - Audio AFV: Default</objSlug>
    <mosPlugInID>Ross.Inception</mosPlugInID>
    <objID>f11192cb73a14116</objID>
    <mosItemEditorProgID>RossClem.RossEditor</mosItemEditorProgID>
    <objDur>1</objDur>
    <objTB>60</objTB>
    <mosExternalMetadata>
      <mosScope>PLAYLIST</mosScope>
      <mosSchema>http:'rossvideo.com/schemas/MOS/external/1.0</mosSchema>
      <mosPayload>
        <shotID>25</shotID>
        <dbAppVersion>
          <major>23</major>
          <minor>6</minor>
          <revision>0</revision>
          <build>0</build>
        </dbAppVersion>
        <dbTemplate>
          <templateNumber>100</templateNumber>
          <shotName>Primary Shot</shotName>
          <imageUrl>/icons/_RossAura/Anchors/CTalentLS.png</imageUrl>
          <transition>
            <id>1</id>
            <name>Cut</name>
          </transition>
          <mleList>
            <id>42</id>
          </mleList>
          <afvLevel>-1</afvLevel>
          <floorDirectorCueNote/>
          <floorDirectorCueNoteEnabled>>false</floorDirectorCueNoteEnabled>
          <secondaryEvent>>false</secondaryEvent>
          <folders>Alpha</folders>
        </dbTemplate>
        <icon>/icons/_RossAura/Anchors/CTalentLS.png</icon>
      </mosPayload>
    </mosExternalMetadata>
  </mos>
</mosList>
```

## MOS Shot - Get Available MOS Shot Folders Endpoint

<b>Description</b>	Returns all shot folders as displayed in the plugin, or by querying subfolders of a folder by its folder path.
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/mos/shots/folders</code>
<b>HTTP Method</b>	GET
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Headers</b>	[Content-Type: application/xml]
<b>Constraints</b>	Calling system be licensed as <b>Standalone+ProjectServer</b> or <b>CentralServer</b> . Enable the Advanced Configuration: <b>Enable Public API [503 Otherwise]</b> . <b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher.
<b>Query Parameters</b>	<ul style="list-style-type: none"> <li>• <b>subFoldersOf</b> [optional] — if provided, returns only the direct folders that exist inside the provided folder. If left empty, or set to "/", it will return the root folders only. If left unprovided, it will return all folders that exist including their sub directories.  <b>Example</b> <code>http://{{OD-HOST}}/server/rest/api/public/mos/shots/folders?subFoldersOf={{FOLDER_PATH}}</code></li> <li>• <b>show</b> [optional] — if provided, returns only the folders that exist inside the provided show if loaded and synchronized. If left empty, it will return the default show only.  <b>Example</b> <code>http://{{OD-HOST}}/server/rest/api/public/mos/shots/folders?show={{SHOW_NAME}}</code></li> </ul>
<b>Success Response Code</b>	200, 204 (No Content)
<b>Error Response Code</b>	400 Bad Request (the provided data is invalid, or the requested show does not exist) 401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 403 Forbidden when CentralServer Node/Not supported for multi-show deployments 404 Not Found (Wrong URL) 406 Unacceptable (When client does not accept application/xml) 409 Conflict when a show is not yet loaded 500 Internal Server Error 503 Service Unavailable (Public API is not enabled)
<b>Sample Payload</b>	GET /server/rest/api/public/mos/shots/folders HTTP/1.1 Host: {{OD-HOST}} Accept: application/xml x-api-key: •••••

**Sample Response**

[Status: 200 OK]

```
<folderList>
  <folder name="Folder">
    <folder name="FolderInsideFolder"/>
    <folder name="FolderInsideFolder1"/>
    <folder name="FolderInsideFolder3"/>
      <folder name="SubFolderInsideFolder3"/>
    </folder>
  </folder>
</folderList>
```

## ProjectServer - Publish GlobalConfigs Endpoint

<b>Description</b>	<p>When called, and connected to ProjectServer, will trigger the current system settings to be published as a GlobalConfiguration to ProjectServer.</p> <p><b>Note:</b> a success response only means that the request was accepted, and the publishing process has started. Please allow at least 30 seconds to complete.</p>
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/projectserver/publishGlobalConfig</code>
<b>HTTP Method</b>	POST
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Parameters</b>	<code>overwriteExistingUserSettings = true/false</code> . It is optional with default value false.
<b>Headers</b>	<code>[Content-Type: application/x-www-form-urlencoded]</code>
<b>Constraints</b>	<p>Calling system be licensed as <b>Standalone+ProjectServer</b> or <b>CentralServer</b>.</p> <p>Enable the Advanced Configuration: <b>Enable Public API [503 Otherwise]</b>.</p> <p><b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher.</p>
<b>Success Response Code</b>	200
<b>Error Response Code</b>	<p>400 Bad Request (the provided data is invalid)</p> <p>401 Unauthorized (Invalid session or request to retrieve root user from non-root user)</p> <p>403 Forbidden (Invalid license type applied i.e. CentralServer node on the calling machine, <b>Standalone+ProjectServer</b> or <b>CentralServer</b> required)</p> <p>404 Not Found (Wrong URL)</p> <p>500 Internal Server Error</p> <p>503 Service Unavailable (ProjectServer feature is not enabled for the current license)</p>
<b>Sample Payload</b>	<code>[Content-Type: application/x-www-form-urlencoded]</code> <code>overwriteExistingUserSettings: true</code>
<b>Sample Response</b>	<pre>[Status: 200 OK] {   "success": "Publish request submitted for global config, response: REQUEST_ACKNOWLEDGED" }</pre>

## ProjectServer - Deploy GlobalConfigs Endpoint

<b>Description</b>	When called (and connected to ProjectServer) will trigger the current system settings to be deployed as a GlobalConfiguration from ProjectServer <b>Note:</b> a success response only means the request has been accepted and the deploy process has started. Please allow at least 30 seconds to complete.
<b>URL</b>	http://{{OD-HOST}}/server/rest/api/public/projectserver/deployGlobalConfig
<b>HTTP Method</b>	POST
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Parameters</b>	overwriteExistingUserSettings = true/false. It is optional with default value false.
<b>Headers</b>	[Content-Type: application/x-www-form-urlencoded]
<b>Constraints</b>	Calling system be licensed as <b>Standalone+ProjectServer</b> or <b>CentralServer</b> . Enable the Advanced Configuration: <b>Enable Public API [503 Otherwise]</b> . <b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher.
<b>Success Response Code</b>	200
<b>Error Response Code</b>	400 Bad Request (the provided data is invalid) 401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 404 Not Found (Wrong URL) 500 Internal Server Error 503 Service Unavailable (ProjectServer feature is not enabled for the current license)
<b>Sample Payload</b>	[Content-Type: none]
<b>Sample Response</b>	[Status: 200 OK] { "success": "Deploy request submitted for global config, response: REQUEST_ACKNOWLEDGED" }

## ProjectServer - Retrieve a List of All Shows in ProjectServer Available for Loading to the Plugin Endpoint

<b>Description</b>	Retrieve a list of all shows in ProjectServer available for loading to plugin.
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/projectserver/plugin/listShows</code>
<b>HTTP Method</b>	GET
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Headers</b>	[Content-Type: application/x-www-form-urlencoded]
<b>Constraints</b>	Enable the Advanced Configuration: <b>Enable Public API</b> [503 Otherwise]. <b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher.
<b>Success Response Code</b>	200
<b>Error Response Code</b>	401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 404 Not Found (Wrong URL) 500 Internal Server Error 503 Service Unavailable (Public API is not enabled, PS Feature not licensed)
<b>Sample Response</b>	<pre>[Status: 200 OK]  [   {     "showId": "8",     "name": "Broadway Extravaganza",     "status": "SYNCHRONIZED"   },   {     "showId": "10",     "name": "EveningNews",     "status": "STAGING_IN_PROGRESS"   },   {     "showId": "11",     "name": "CARBTEST SHOW",     "status": "UNKNOWN"   },   ... ]</pre>

## ProjectServer - Request a Show to be Loaded/Reloaded for the Plugin Endpoint

<b>Description</b>	Returns all shot folders as displayed in the plugin, or by querying subfolders of a folder by its folder path.
<b>URL</b>	<code>http://{{OD-HOST}}/server/rest/api/public/projectserver/plugin/loadShow</code>
<b>HTTP Method</b>	POST
<b>Authentication Method</b>	Pass an OverDrive User API Key through the header X-API-Key.
<b>Headers</b>	[Content-Type: application/x-www-form-urlencoded]
<b>Constraints</b>	Enable the Advanced Configuration: <b>Enable Public API</b> [503 Otherwise]. <b>API Key</b> Associated to User with <b>Admin Permissions</b> or Higher. <b>API Key</b> Associated to User with <b>Newsroom Plugin Edit Access</b> enabled. Cannot be performed on a <b>CentralServer Node OverDrive</b> system or else will return a 403 Forbidden (response below), as nodes are not capable of handling multi-show deployments.
<b>Form Data Parameters</b>	<ul style="list-style-type: none"><li><b>show</b> — the name of the show we are trying to load in the plugin, if it is already loaded it will attempt to re-load the show.</li></ul>
<b>Success Response Code</b>	200
<b>Error Response Code</b>	400 Bad Request (the provided data is invalid, or the requested show does not exist) 401 Unauthorized (Invalid session or request to retrieve root user from non-root user) 403 Forbidden (the server is not configured for multi-show deployments) 404 Not Found (Wrong URL) 500 Internal Server Error 503 Service Unavailable (Public API is not enabled)
<b>Sample Payload</b>	[Content-Type: application/x-www-form-urlencoded] show : OdExtravaganza

## Sample Response

```
[Status: 200 OK]
{
  "success": "Show Deployment in Progress - see /plugin/listShows for
more information"
}

[Status: 401 UNAUTHORIZED]
{
  "errors": "Unauthorized. Invalid API key from X-API-Key header."
}

[Status: 400 BAD REQUEST] (no show name provided)
{
  "errors": "A show name must be provided when calling this endpoint"
}

[Status: 400 BAD REQUEST] (Invalid show name provided)
{
  "errors": "'Invalid Show' is not a valid show name, verify input."
}

[Status: 403 FORBIDDEN] (Load Show Called from CentralServer Node System)
{
  "errors": "The server is not configured for multi-show deployments."
}

[Status: 503 SERVICE UNAVAILABLE] (Server already performing a task
currently (i.e is currently loading a show)
{
  "errors": "The server is currently busy, please try again later. See
OverDrive logs for more information"
}
```

# Troubleshooting

Some of the potential error messages that the Public API endpoints may return are listed in the following table, along with information to help resolve the issue:

Error Messages	Troubleshooting Information
"error": "Service Unavailable"	Enable the <b>Enable Public API</b> check box in the <b>Server Related Properties</b> section of the <b>OverDrive Server &gt; Configuration &gt; Server &gt; Advanced Configuration</b> web page.
"errors": "Unauthorized. Invalid Session Token"	In the POST request, verify that you included a header called "x-api-key" that contains a valid API key.
"errors": "Unauthorized. Invalid API key from X-API- Key header."	In the POST request, verify that you entered a well-formed API key from an OverDrive user in the header called "x-api-key".
"errors": "Unauthorized. The endpoint is restricted to ADMIN users."	In the POST request, the used API key must belong to a user with root or administrative privileges.
"error": "Invalid License Type - Publish GlobalConfigs requires a CentralServer or Standalone+ProjectServer license"	A CentralServer Node cannot publish global configurations. Verify that you are sending the publish request to an OverDrive Server with a CentralServer or Standalone+ProjectServer license.