TransAct Packager API Developer's Reference Guide

Release 5.4

RGB Networks, Inc.
390 West Java Drive
Sunnyvale, CA 94089
Support Tel: 877-RGB-NETW
Fax: (408) 701-2710
www.rgbnetworks.com

TransAct Packager API Developer's Reference Guide, Release 5.4
Document part number: 250-0301-01, Rev A
Printed 9/22/14

Notice
RGB Networks provides this document without warranty of any kind, either implied or expressed, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. RGB Networks has made every attempt to ensure the accuracy and completeness of information in this document at the time of publication. As we continuously improve and add features to our products, RGB Networks reserves the right to revise this document without prior notification of such revision or change. Variations in network design or environment are outside the control of RGB Networks. You may verify product specifications and obtain assistance selecting the appropriate solution for your situation by contacting RGB Networks.

Trademarks
RGB Networks, *TransAct Encoder/Transcoder, TransAct Commander,* and *TransAct Packager* are trademarks of RGB Networks, Inc. All other company, brand, and product names are trademarks or registered trademarks of their respective holders. The products described are covered by one or more U.S. and foreign patents pending. The TransAct *Encoder/Transcoder*, *Commander*, and *Packager* are protected by U.S. Patents. 7,818,355; 8,180,920. Other US and foreign patents pending.

TransAct Packager API Developer's Reference Guide document history

Part Number	Software Release	Printed Date	Changes
250-0301-01 rev A	5.4	09/19/2014	• Updated API parameters, method calls and responses for supported 5.4-related feature changes and additions. • Added sysconfig.license.update method call • Updated API deprecated calls
250-0285-01 rev A	5.3	6/30/2014	• Updated API parameters, method calls and responses for supported 5.3-related feature changes and additions. • Added configuration.jitp.source.server.add method call • Removed erroneous API deprecation call
250-0264-01 rev A	5.2	3/18/2014	• Updated API parameters, method calls and responses for supported 5.2-related feature changes & additions. • Removed references to 5.0 and 5.1 differences
250-0252-01 rev A	5.0.1 - 5.1	12/20/2013	Production release - title change only. No content changes
Pre-release rev A	5.0.1-5.1	12/17/2013	New Document

Table of Contents

Chapter 1: Introduction 9
In This Chapter 9
Document Organization 10
Document Audience 10
Related Documentation 10
Document Conventions 10
Graphics Used 11
Acronyms Used 11

Chapter 2: Overview 14
In This Chapter: 14
Application Development with RGB TransAct Software 14
XML-RPC Basics 15
Call / Response Methods 15
Multi-call Requests 17
SSL vs. Non-SSL Modes 17
Formulating Method Calls to Expected Number of Parameters 17
More Information 18

Chapter 3: Release Differential 19
In This Chapter: 19
New Supported APIs for Release 5.4 19
Modified Frequently Used APIs for Release 5.4 19
configuration.audiomap.add / modify / show 19
configuration.input.directory.add / modify / show 19
configuration.jitp.profile.modify 20
configuration.output.directory.add / modify / show 20
configuration.package.add / modify 20
sysconfig.keyserver.add / modify / show 20
sysconfig.license.update 20
Deprecated Frequently Used APIs from Release 5.3 20
sysconfig.redundancy.add 20
sysconfig.redundancy.configure 20
sysconfig.redundancy.remove 20
sysconfig.redundancy.show 20

Chapter 4: Frequently Used APIs 21
In This Chapter: 21
configuration.audiomap.add 22
Method Help Text 22
Return Value 22
Parameter Descriptors (3) 22
Sample Request 22
Sample Response 23
configuration.audiomap.rule.add 23
Method Help Text 23

Return Value . . . 23
Parameter Descriptors (11) . . . 23
Sample Request . . . 25
Sample Response . . . 26
configuration.audiomap.rule.modify . . . 28
Method Help Text . . . 28
Return Value . . . 28
Parameter Descriptors (11) . . . 28
Sample Request . . . 28
Sample Response . . . 29
configuration.audiomap.show . . . 30
Method Help Text . . . 30
Return Value . . . 30
Parameter Descriptors (3) . . . 30
Sample Request . . . 30
Sample Response . . . 31
configuration.input.group.add . . . 35
Method Help Text . . . 36
Return Value . . . 36
Parameter Descriptors (3) . . . 36
Sample Request . . . 36
Sample Response . . . 37
configuration.input.group.remove . . . 39
Method Help Text . . . 39
Return Value . . . 39
Parameter Descriptors (3) . . . 39
Sample Request . . . 40
Sample Response . . . 40
configuration.input.group.show . . . 41
Method Help Text . . . 41
Return Value . . . 41
Parameter Descriptors (3) . . . 41
Sample Request - only one stream selected . . . 41
Sample Response - only one stream returned . . . 42
Sample Response - all streams selected . . . 54
configuration.input.group.stream.add . . . 55
Method Help Text . . . 55
Return Value . . . 56
Parameter Descriptors (20) . . . 56
Sample Request . . . 59
Sample Response . . . 62
configuration.input.group.stream.redetect . . . 64
Method Help Text . . . 64
Return Value . . . 64
Parameter Descriptors (5) . . . 65
Sample Request . . . 65
Sample Response . . . 66
configuration.input.group.stream.show . . . 66
Method Help Text . . . 66
Return Value . . . 66
Parameter Descriptors (5) . . . 66
Sample Request - for configuration option (default) . . . 67

Sample Response - displaying configuration option (default) 68
configuration.jitp.profile.add 72
Method Help Text 72
Return Value 72
Parameter Descriptors (3) 72
Sample Request 72
Sample Response 73
configuration.jitp.profile.modify 73
Method Help Text 73
Return Value 73
Parameter Descriptors (13) 73
Sample Request 75
Sample Response 76
configuration.jitp.profile.show 77
Method Help Text 77
Return Value 77
Parameter Descriptors (3) 77
Sample Request 77
Sample Response 78
configuration.jitp.source.server.add 88
Method Help Text 88
Return Value 89
Parameter Descriptors (3) 89
Sample Request 90
Sample Response 91
configuration.output.directory.add 93
Method Help Text 93
Return Value 93
Parameter Descriptors (15) 93
Sample Request 95
Sample Response 97
configuration.output.directory.remove 99
Method Help Text 99
Return Value 99
Parameter Descriptors (3) 99
Sample Request 99
Sample Response 100
configuration.output.directory.show 100
Method Help Text 100
Return Value 100
Parameter Descriptors (3) 101
Sample Request 101
Sample Response 101
configuration.output.format.dash.modify 104
Method Help Text 104
Return Value 104
Parameter Descriptors (6) 104
Sample Request 105
Sample Response 106
configuration.output.format.hls.modify 106
Method Help Text 106
Return Value 107

Parameter Descriptors (15) . . . 107
Sample Request . . . 110
Sample Response . . . 112
configuration.package.add . . . 112
Method Help Text . . . 112
Return Value . . . 112
Parameter Descriptors (39) . . . 113
Sample Request . . . 120
Sample Response . . . 124
configuration.package.remove . . . 130
Method Help Text . . . 130
Return Value . . . 130
Parameter Descriptors (3) . . . 130
Sample Request . . . 130
Sample Response . . . 131
configuration.package.show . . . 131
Method Help Text . . . 131
Return Value . . . 131
Parameter Descriptors (4) . . . 131
Sample Request - configuration . . . 131
Sample Response - configuration . . . 132
configuration.package.start . . . 142
Method Help Text . . . 142
Return Value . . . 142
Parameter Descriptors (3) . . . 143
Sample Request . . . 143
Sample Response . . . 143
configuration.package.stop . . . 144
Method Help Text . . . 144
Return Value . . . 144
Parameter Descriptors (3) . . . 144
Sample Request . . . 144
Sample Response . . . 145
configuration.session.show . . . 146
Method Help Text . . . 146
Return Value . . . 146
Parameter Descriptors (7) . . . 146
Sample Request . . . 146
Sample Response . . . 147
sysconfig.database.threshold.set . . . 159
Method Help Text . . . 159
Return Value . . . 159
Parameter Descriptors (6) . . . 159
Sample Request . . . 159
Sample Response . . . 160
sysconfig.keyserver.add . . . 161
Method Help Text . . . 161
Return Value . . . 161
Parameter Descriptors (18) . . . 161
Sample Request . . . 164
Sample Response . . . 166
sysconfig.keyserver.remove . . . 166

Method Help Text . . . 166
Return Value . . . 166
Parameter Descriptors (3) . . . 167
Sample Request . . . 167
Sample Response . . . 167
sysconfig.keyserver.show . . . 168
Method Help Text . . . 168
Return Value . . . 168
Parameter Descriptors (3) . . . 168
Sample Request . . . 168
Sample Response . . . 169
sysconfig.license.update . . . 177
Method Help Text . . . 177
Return Value . . . 177
Parameter Descriptors . . . 178
Sample Request . . . 178
Sample Response . . . 179
sysconfig.restart . . . 179
Method Help Text . . . 179
Return Value . . . 179
Parameter Descriptors (2) . . . 179
Sample Request . . . 179
Sample Response . . . 180

Chapter 5: Contacting RGB Customer Support . . . 181
Contacting RGB Customer Support . . . 181
Information Required for Troubleshooting . . . 181

CHAPTER 1

Introduction

RGB Networks' TransAct *Packager* enables adaptive streaming and video delivery to mobile devices, PCs, and set-top boxes in a cost-effective, distributed deployment architecture. TransAct *Packager* ingests H.264 encoded video streams carried in an MPEG-2 transport stream (TS) and produces segmented output in various protocols[1].

Additionally, *Packager* can encrypt content using a variety of methods and is integrated with leading DRM[2] vendors and key exchange servers.

TransAct *Packager* is offered as either a software license or an appliance. The software license-only solution can be downloaded, or optionally shipped on a DVD, and allows customers to deploy on their choice of server-based hardware platform running Linux CentOS[3]. Note that performance will be impacted by the hardware platform running the software. Running on an RGB supported appliance – the TransAct Application Media Server (AMS) – *Packager* provides a minimum MTBF of 100,000 hours as the AMS is an extremely durable hardware appliance requiring minimal ongoing maintenance.

Figure 1. RGB TransAct Application Media Server

This *TransAct Packager API Developer's Reference Guide* describes how to use *Packager*'s application programming interface (API) to develop applications for configuration and management of *Packager*'s software.

In This Chapter

This chapter contains the following sections:

- "Document Organization," next.
- "Document Audience" on page 10.
- "Related Documentation" on page 10.
- "Document Conventions" on page 10.
- "Graphics Used" on page 11.
- "Acronyms Used" on page 11.

1. This release supports the following output formats: Apple HTTP Live Streaming (HLS), Microsoft Smooth Streaming (MSS), Microsoft Smooth Streaming - remote, MPEG Dash, Adobe HTTP Dynamic Streaming (HDS), Adobe RTMP, and Adobe HTTP Dynamic Streaming - HTTP File Format (HDS-HTTP)
2. This release supports the following DRM servers: Verimatrix HLS, Buy DRM, CKM, Nagravision (Nagra), Internal HLS, Verimatrix Playready, Internal Flash Access, Latens, Secure Media, Conax, Irdeto, Internal Playready, NDS/Cisco, RgbAPI, Mezzanine, and KPN.
3. Refer to the Release Notes for compatible versions of CentOS.

Document Organization

This guide is organized as follows:

- Chapter 1, "Introduction," (this chapter) describes the contents and conventions used in the *TransAct Packager API Developer's Reference Guide*.
- Chapter 2, "Overview," provides a detailed description of the most commonly used API calls for the *Packager* software application.
- Chapter 3, "Release Differential," provides a comparison of modified API calls between the prior software release and the current release.
- Chapter 4, "Frequently Used APIs," describes method calls of *Packager*'s most frequently used APIs, including method help, field parameters, and sample call and response.
- Chapter 5, "Contacting RGB Customer Support," provides information for contacting RGB Customer Support.

Document Audience

This guide is for application developers and system administrators who are responsible for integrating existing systems with *Packager*. You should be familiar with general video and networking practices and terminology, and should be familiar with XML-RPC software development. You should also be familiar with Linux-based operating systems and its command line interface.

Related Documentation

- *TransAct Packager User Guide, Release 5.4.*
- *TransAct Packager Software Installation and Upgrade Guide, Release 5.4*

Document Conventions

Table 1 provides an easy way to recognize important information in this user guide.

Table 1. Document Conventions

When you see:	It means:
	**Notes** are indicated by the icon shown at left, and point out information that may not be part of the text but provide tips and other helpful advice.
	**Cautions** are indicated by the icon on the left, and let you know that an action may have undesirable consequences if the instructions are not followed correctly. Cautions also indicate that failure to follow guidelines could cause damage to equipment or loss of data.
	**Warnings** are indicated by the icon on the left, and indicate that failure to take the necessary precautions or to follow guidelines could cause harm to equipment and personnel.
Clicking any blue link takes you to the item to which the link refers.	

Graphics Used

In some cases, the screens shown in this manual may have been slightly modified after the manual was released, or may appear slightly different on different browsers.

All efforts have been made to ensure that the latest images are used. In all cases, the functionality described is current at the time of writing.

Acronyms Used

Table 2 provides is a list of acronyms commonly used in ad insertion and adaptive bitrate streaming. Note that some of these acronyms may not be used in this user guide

Table 2. Video Processing and Adaptive Bitrate Streaming Acronyms

Acronym	Meaning
AAC	Advanced Audio Coding
ABR	Adaptive Bitrate
AC3	Audio Coding Version 3 (Dolby Digital 5.1, or DD)
ADM	Ad Management Service (function of AWE)
ADS	Ad Decision Service
AIM	Ad Insertion in Multi Screen (RGB term)
AMS	Application Media Server (RGB term)
API	Application Programming Interface
AU	Access Unit
Avail	Available opportunity for ad placement
AWE	Ad Workflow Engine (RGB term)
B-Frame	Bidirectional compression picture frame
CDN	Content Delivery Network
CIFS	Common Internet Files System (Microsoft based)
CNS	Content Name Server
CR	Continuous Recording
DAI	Digital Ad Insertion
DD	Dolby Digital (same as AC3)
DD+	Dolby Digital Plus (same as E-AC-3)
DASH	Dynamic Adaptive Streaming over HTTP
DMA	Designated Market Area
DMM	Dynamic Manifest Manipulation
DRM	Digital Rights Management
DTS	Decoding Time Stamp
DTS	Digital Theater Systems
DVR	Digital Video Recorder

Table 2. Video Processing and Adaptive Bitrate Streaming Acronyms

Acronym	Meaning
E-AC-3	Enhanced Audio Coding 3 (Dolby Digital Plus 7.1, or DD+)
EBP	Encoder Boundary Point
EIDR	Entertainment Identifier Registry (CableLabs sponsored registry for TV & movie programming)
ENC	Encoder
ES	Elementary Stream
ESAM	Event Signaling and Messaging
GOP	Group of Pictures
GPFS	General Parallel File System
GUI	Graphical User Interface
HDS	HTTP Dynamic Streaming (Adobe)
HD	High Definition
HLS	HTTP Live Streaming (Apple)
HRD	Hypothetical Reference Decoder
HTTP	Hypertext Transfer Protocol
IAB	Interactive Advertising Bureau
IDR	Instantaneous Decoder Refresh
I-Frame	Intracoded compression picture frame
IIS	Internet Information Services (Microsoft based)
JIT	Just-in-time (RGB term)
JITP	Just-in-time Packaging (RGB term)
KMS	Key Management Server
MBR	Multi-Bit Rate
MSS	Microsoft Smooth Streaming (HTTP based)
NAS	Network Attached Storage
nDVR	Network cloud-based digital video recording
NFS	Network File System (Linux based)
NTP	Network Time Protocol
PAT	Program Association Table
PCM	Pulse Code Modulation
PCR	Program Clock Reference
PES	Packetized Elementary Stream
P-Frame	Predicted compression picture frame
PID	Packet ID
PMT	Program Map Table
PO	Placement Opportunity (aka. ad-break, avail)
POIS	Placement Opportunity Information Service
PRRS	Playlist Rebuilder, Redirection Server (Now referred to as PS)
PS	Playlist Server (formerly referred to as PRRS)

Table 2. Video Processing and Adaptive Bitrate Streaming Acronyms

Acronym	Meaning
PTS	Presentation Time Stamp
RTMP	Real Time Messaging Protocol
SAP	Stream Access Point
SD	Standard Definition
SIS	Subscriber Information Service
SSM	Source Specific Multicast
TAC	TransAct Commander (RGB)
TAP	TransAct *Packager* (RGB)
TAT	TransAct Encoder/Transcoder (RGB)
TS	Transport Stream
UDP	User Datagram Protocol
URI	Universal Resource Identifier (contains URL & URN)
URL	Universal Resource Locator (always a URI)
URN	Universal Resource Name (not necessarily a URI)
UPID	Unique Program ID
UUID	Universally Unique Identifier (See RFC 4122)
VAST	Video Ad Serving Template
VES	Video Elementary Stream
VMG	Video Multiprocessing Gateway (RGB)
VOD	Video on Demand
XML	Extensible Markup Language
XML-RPC	Extensible Markup Language - Remote Procedure Call

CHAPTER 2

Overview

This chapter provides information about developing applications that access the RGB TransAct *Packager* software using its XML-RPC Application Programming Interface (API).

Note: *Several acronyms are used throughout this chapter. You may wish to refer to Table 2, "Video Processing and Adaptive Bitrate Streaming Acronyms," on page 11 for their meanings.*

In This Chapter:

- "Application Development with RGB TransAct Software," next.
- "XML-RPC Basics" on page 15.

Application Development with RGB TransAct Software

Applications can be developed to access TransAct *Packager* software using the XML-RPC API. XML-RPC is a specification with a set of implementations that allow software running on disparate operating systems to make HTTP transport procedure calls using XML encoding over the Internet. XML-RPC is designed for simple ease of use while allowing for the transmission, processing, and receipt of complex data structures.

The TransAct *Packager* API (*TAP API)* provides XML-RPC[1] bindings that can be executed using a variety of scripting and programming languages, including Shell, Perl, PHP, Java, JavaScript, C, C++ and VisualBasic.

Note: *Packager software is built on a Linux operating system. All references to directories and commands within the Packager application are based on the command line interface (CLI) and require a solid familiarity with Linux tools.*

Overall, the *TAP API* is separated into three main method branches:

- **configuration**—methods used to configure inputs and streams, manage inbound and outbound directories, and configure workflows for linear and JIT packaging.
- **sysconfig**—methods used to manage network settings, user accounts, keyservers, and system maintenance, such as software upgrades.
- **reports**—methods used to manage logs, events, and monitor system statistics.

1. The *TAP API* uses HTTP-POST requests in the XML-RPC message. The body of the request and the response are formatted in XML. Refer to http://www.xmlrpc.com/spec for information about the XML-RPC specification.

XML-RPC Basics

The basics of XML-RPC are fairly simple and briefly described in this section.

Call / Response Methods

In essence, XML-RPC consists of two types of communication: *Method Calls* and *Method Responses*. A method call uses HTTP-POST to send an XML nested value request to the *Packager* application to set and/or return values. A method response contains the nested XML response of the information requested from the method call.

Below is a sample method call for viewing input group configuration.

Table 3. Method Call Sample — configuration.input.group.show

Method Call Sample

```
<?xml version="1.0"?>
<methodCall>
 <methodName>configuration.input.group.show</methodName>
  <params>
   <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Below is the sample method response from the show input group method call above.

Note: *Method responses do not contain the name of the method call.*

Table 4. Method Response Sample — configuration.input.group.show

Method Response XML Code

```
<?xml version="1.0"?>
<methodResponse>[a]
 <params>
  <param>
   <value>
    <array>
     <data>
      <value>
       <struct>
        <member>
         <name>001:1:inputGID:Input Stream Group</name>
          <value>
           <i4>1</i4>
          </value>
        </member>
        <member>
         <name>002:1:name:Name</name>
          <value>
            <string>HD1_KXAN_NBC_7.101</string>
          </value>
        </member>
        <member>
         <name>003:1:inputStream:Input Stream</name>
          <value>
            <i4>1</i4>
          </value>
        </member>
        <member>
          <name>004:1:enabledCnt:Enabled</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
        </struct>
```

```
          </value>
        </data>
      </array>
    </value>
  </param>
 </params>
</methodResponse>
```

a. Note that the API method name is not included in method responses.

Multi-call Requests

Multi-call requests can run several methods at a time. Generally, one method call is issued at a time, but certain APIs can make use of multi-call commands; this depends on the script used to parse the XML data, which can be written in various coding languages.

Various API tools are capable of monitoring multi-calls; if you are using one of these tools you will see the sysconfig.multicall method, which is issued automatically at regular intervals for the *Packager* GUI as a keep-alive signal.

Multi-call commands are outside the scope of this user guide and are therefore not described herein.

SSL vs. Non-SSL Modes

RGB's XML-RPC server will run in either SSL[2] or non-SSL mode. When running in SSL mode, *all* exchanges between client and server will be encrypted.

Formulating Method Calls to Expected Number of Parameters

When formulating method calls, it is important to understand that the method call you create must match the expected number of parameters.

For example, the tables below depict the `configuration.output.directory.add` method call, which, for this release, contains 15 parameters (Table A). As can be seen in the **Usage** column, only some of the 15 parameters are actually required for all types of directories created. Other parameters are contextual in that certain directory types may or may not require a particular parameter in order to function properly. Still other parameters are either inapplicable or have been deprecated. However, the formulated method call must still contain 15 parameters with either valid values or empty strings, regardless of a specific operator's deployment configuration (Table B).

XML-RPC expects to see placeholders for Params' 8-13. In the case of Table C, by using only 9 arguments (1-7 & 14-15) instead of the expected 15, parameters 14 and 15 would be seen as 8 and 9,

2. Secure sockets layer is an Internet protocol that uses two cryptographic keys for transmitting data: a public key (known to everyone) and a private key (known only to the recipient). SSL requires that the URL employing the protocol begin with *https* instead of *http*.

and, as far as XML-RPC is concerned, parameters 10-15 are not present. This will not result in a successful method call.

Table A: Expected Method Call Parameters

Param #	Param Name	Param Type	Usage
1	username	string	required
2	password	string	required
3	dirname	string	required
4	fsType	integer	required
5	host	string	required
6	remoteDir	string	contextual
7	mountOps	string	contextual
8	usage	integer	deprecated
9	sourceDelete	integer	n/a
10	priority	integer	n/a
11	remoteDomain	string	contextual
12	remoteUser	string	contextual
13	remotePassword	string	contextual
14	localDirSize	integer	contextual
15	loopDevice	integer	contextual

Table B: User Configured Parameters - Correct

Param #	Param Name	Param Type	Usage
1	username	admin	required
2	password	ripcode!	required
3	dirname	nfs10	required
4	fsType	1	required
5	host	10.10.88.15	required
6	remoteDir	/data/nfs10	contextual
7	mountOps	soft,vers=3	contextual
8	usage	0	deprecated
9	sourceDelete	0	n/a
10	priority	1	n/a
11	remoteDomain	Empty	contextual
12	remoteUser	Empty	contextual
13	remotePassword	Empty	contextual
14	localDirSize	10	contextual
15	loopDevice	300	contextual

Table C: User Configured Parameters - Incorrect

Param #	Param Name	Param Type	Usage
1	username	admin	required
2	password	ripcode!	required
3	dirname	nfs10	required
4	fsType	1	required
5	host	10.10.88.15	required
6	remoteDir	/data/nfs10	contextual
7	mountOps	soft,vers=3	contextual
14	localDirSize	10	contextual
15	loopDevice	300	contextual

More Information

More information about coding with XML-RPC and for various environments can be found at the links below:

http://www.xmlrpc.com/spec for more information

http://www.faqs.org/docs/Linux-HOWTO/XML-RPC-HOWTO.html

CHAPTER 3

Release Differential

This chapter provides API method call differences between the prior release of *Packager* (Release 5.3) and the current release (Release 5.4).

In This Chapter:

- "New Supported APIs for Release 5.4," next.
- "Modified Frequently Used APIs for Release 5.4" on page 19.
- "Deprecated Frequently Used APIs from Release 5.3" on page 20.

New Supported APIs for Release 5.4

The following new APIs are supported in Release 5.4[1]:

Note: *The new API methods listed above are not described in Chapter 4, "Frequently Used APIs". If you require a full description of the API (including parameters and method calls / responses), please contact RGB Customer Support.*

Modified Frequently Used APIs for Release 5.4

The following frequently used APIs (as listed in Chapter 4, "Frequently Used APIs") have been modified with either new fields or different functionality for Release 5.4.

Note: *This list does not contain all APIs that have been changed for the entire system; rather, it contains changes to the affected APIs described in this manual.*

configuration.audiomap.add / modify / show

Affected fields:

1. `audioBitrate_low` — range change. Up to `24500000` bps now.
2. `audioBitrate_high` — range change. Up to `24500000` bps now.

configuration.input.directory.add / modify / show

Affected fields:

1. `fsType` — added new file type of `GPFS (5)`

1. This list does *not* include existing APIs with new fields; it only contains new supported API method calls that were not in prior releases.

configuration.jitp.profile.modify

Affected fields:

1. `keyServerVendor` — added `KPN (16)` option
2. `keyRotation` — new field

configuration.output.directory.add / modify / show

Affected fields:

1. `fsType` — added new file type of `GPFS (5)`

configuration.package.add / modify

Affected fields:

1. `redundancyPeer` — new field
2. `keyServerVendor` — added `KPN (16)` option

sysconfig.keyserver.add / modify / show

Affected fields:

1. `keyServerVendor` — added `KPN (16)` option

sysconfig.license.update

New method call added to document.

Deprecated Frequently Used APIs from Release 5.3

For Release 5.4 the following APIs have been removed:

sysconfig.redundancy.add

All redundancy configuration is now done from the configuration.package menu.

sysconfig.redundancy.configure

All redundancy configuration is now done from the configuration.package menu.

sysconfig.redundancy.remove

All redundancy configuration is now done from the configuration.package menu.

sysconfig.redundancy.show

All redundancy configuration is now done from the configuration.package menu.

CHAPTER 4

Frequently Used APIs

This chapter contains a list of most frequently used APIs, including a sample call request and a sample call response for each method. A brief description is provided for each API listing, followed by a table (if relevant) containing numeric value inputs for a variable field. For a complete description of usage and fields for a particular API call, please refer to the *TransAct Packager User Guide, Release 5.4*.

For ease of navigation, the APIs described in this chapter are listed in alphabetical order rather than the order in which *Packager* must be configured.

In This Chapter:

1. "configuration.audiomap.add," next.
2. "configuration.audiomap.rule.add" on page 23.
3. "configuration.audiomap.rule.modify" on page 28.
4. "configuration.audiomap.show" on page 30.
5. "configuration.input.group.add" on page 35.
6. "configuration.input.group.remove" on page 39.
7. "configuration.input.group.show" on page 41.
8. "configuration.input.group.stream.add" on page 55.
9. "configuration.input.group.stream.redetect" on page 64.
10. "configuration.input.group.stream.show" on page 66.
11. "configuration.jitp.profile.add" on page 72.
12. "configuration.jitp.profile.modify" on page 73.
13. "configuration.jitp.profile.show" on page 77.
14. "configuration.jitp.source.server.add" on page 88
15. "configuration.output.directory.add" on page 93.
16. "configuration.output.directory.remove" on page 99.
17. "configuration.output.directory.show" on page 100.
18. "configuration.output.format.dash.modify" on page 104.
19. "configuration.output.format.hls.modify" on page 106.
20. "configuration.package.add" on page 112.
21. "configuration.package.remove" on page 130.
22. "configuration.package.show" on page 131.
23. "configuration.package.start" on page 142.
24. "configuration.package.stop" on page 144.
25. "configuration.session.show" on page 146.
26. "sysconfig.database.threshold.set" on page 159.
27. "sysconfig.keyserver.add" on page 161.
28. "sysconfig.keyserver.remove" on page 166.
29. "sysconfig.keyserver.show" on page 168.
30. "sysconfig.license.update" on page 177.
31. "sysconfig.restart" on page 179.

1. configuration.audiomap.add

This method adds an audio map template. Up to eight (8) audio map rules can be applied per template.

Method Help Text

```
Help:
This method adds an audio mapping rule set for use in workflows
```

Return Value

```
Return:
nil
```

Parameter Descriptors (3)

Refer to Table 1 for a complete list of parameter descriptors.

Table 1. config.audiomap.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
name	string	n/a	Enter a name that will define the audio map template (up to 23 characters).

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.audiomap.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>any</string>
      </value>
    </param>
  </params>
```

```
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

2. configuration.audiomap.rule.add

This method adds an audio map rule to an audio map template. A rule consists of several configurable input audio conditions that, when met, will produce a specified output audio publishing option. Audio map rules are applied on an exclusive basis, which means that once the rule conditions are met for the highest priority rule, no further rules are processed for the matching input audio track.

Method Help Text

```
Help:
This method adds a rule to determine how an output audio track will be pub-
lished when all specified input audio conditions are met.
NOTE: If package-level redundancy is in use, all parameters in this menu,
including the rule Name, must match on both Packagers in the same N+1 redun-
dancy group.
```

Return Value

```
Return:
nil
```

Parameter Descriptors (11)

Refer to Table 2 for a complete list of parameter descriptors.

Table 2. config.audiomap.rule.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
name	string	n/a	Enter name of the audio map template for which to create or modify the rule (up to 23 characters).

Table 2. config.audiomap.rule.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
priority	integer	1 = 1 (highest priority) 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 (lowest priority)	Enter the Numeric Selector representing the order in which rules are evaluated against the audio input tracks, 1 being the first (or highest priority) and 8 being the last (or lowest). Once a rule matches an audio track, no subsequent rules will be evaluated. *Note*: Priority should be configured from most specific audio characteristics (highest priority) to least specific audio characteristics (lower priority). *Note*: If the priority you select is in use, then all rule priorities will be shifted down priority level when changes are submitted. For example, assume audiomaps “alpha,” “bravo,” and “charlie” are listed as priorities 1, 2, and 3 respectively. Now assume you wish to add “foxtrot” at rule priority #1. This means that “alpha” shifts to priority 2, “bravo” shifts to priority 3, and “charlie” shifts to priority 4.
exclusive	integer	0 = false 1 = true	Not used for *Packager*
inCodec	integer	0 = any (rule will apply for any audio codec provided it matches all other conditions) 2 = Advanced Audio Coding Low-Complexity (AAC-LC) 11 = Advanced Audio Coding Low-Complexity + SBR (AAC-HE) 12 = Dolby Digital(AC-3) 13 = MPEG-2.5 Audio Layer 3 14 = Advanced Audio Coding Low-Complexity + SBR + PS (AAC-HEv2) 30 = Dolby Digital Plus (E-AC-3)	Enter the *Numeric Selector* representing the input codec to which this rule will apply.
inChannels	integer	0 = any 1 = mono 2 = stereo 6 = 5.1surround	Enter the *Numeric Selector* representing the number of input channels to which this rule will apply.

Table 2. config.audiomap.rule.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`audioBitrate_low`	integer	0 to 640000	Enter the lowest input audio bit rate for which the rule will apply. Acceptable value is any number between 0 and 24500000 bps. *Note*: If you want the rule to apply to an input track of any bit rate range, enter 0 here and 24500000 in the **Audio Bitrate High** field.
`audioBitrate_high`	integer	8000 to 640000	Enter the highest input audio bit rate for which the rule will apply. Acceptable value is any number between 8000 and 24500000 bps. *Note*: If you want the rule to apply to an input track of any bit rate range, enter 24500000 here and 0 in the **Audio Bitrate Low** field
`language`	string	n/a	Enter the language of the audio track for which this rule will apply. • This field may contain only 3 characters and must comply to the ISO639-2 language code standard. The code “any” is a valid entry option and will apply the rule to an audio track of any language.
`outAudioTrack`	integer	0 = Primary 2 = Primary+AudioOnly 4 = AudioOnly 3 = Drop	Enter the *Numeric Selector* representing the type of audio output that will be published when all input conditions have been met.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.audiomap.rule.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
```

```
        <string>any</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>640000</int>
      </value>
    </param>
    <param>
      <value>
        <string>any</string>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
```

```
    <params>
      <param>
        <value>
          <string>Operation successful.</string>
        </value>
      </param>
    </params>
  </methodResponse>
```

3. configuration.audiomap.rule.modify

This method allows you to modify a previously created audio map rule.

Method Help Text

```
Help:
This method modifies a rule to determine how an output audio track will be
published when all specified input audio conditions are met.
NOTE: If package-level redundancy is in use, all parameters in this menu,
including the rule Name, must match on both Packagers in the same N+1 redun-
dancy group.
```

Return Value

```
Return:
nil
```

Parameter Descriptors (11)

Refer to Table 2 for a complete list of parameter descriptors.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.audiomap.rule.modify</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>all</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
    <param>
      <value>
```

```
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>640000</int>
        </value>
      </param>
      <param>
        <value>
          <string>eng</string>
        </value>
      </param>
      <param>
        <value>
          <int>2</int>
        </value>
      </param>
    </params>
  </methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

4. configuration.audiomap.show

This method shows current audio map template and rule configuration.

Method Help Text

```
Help:
This method displays audio mapping rule sets for use in workflows
```

Return Value

```
Return:
nil
```

Parameter Descriptors (3)

Refer to Table 3 for a complete list of parameter descriptors.

Table 3. configuration.audiomap.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
name	string	n/a	Enter the name of the audio map for which to show values (up to 23 characters).

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.audiomap.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string/>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:name:Name</name>
                  <value>
                    <string>aac_eng_Prm_all_Alt</string>
                  </value>
                </member>
                <member>
                  <name>002:1:rules:rules</name>
                  <value>
                    <array>
                      <data>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:priority:Priority</name>
                              <value>
                                <i4>1</i4>
                              </value>
                            </member>
                            <member>
                              <name>003:1:input:Input</name>
                              <value>
                                <struct>
                                  <member>
                                    <name>001:1:inCodec:Input Codec</name>
                                    <value>
                                      <string>aac_lc(2)</string>
                                    </value>
                                  </member>
                                  <member>
                                    <name>002:1:inChannels:Input Channels</
name>
                                    <value>
                                      <string>any(0)</string>
                                    </value>
                                  </member>
                                  <member>
                                  <name>003:1:audioBitrate_low:Audio Bitrate
Low</name>
```

```
                                        <value>
                                          <i4>64000</i4>
                                        </value>
                                      </member>
                                      <member>
                                        <name>004:1:audioBitrate_high:Audio
Bitrate High</name>
                                        <value>
                                          <i4>128000</i4>
                                        </value>
                                      </member>
                                      <member>
                                        <name>005:1:language:Language</name>
                                        <value>
                                          <string>eng</string>
                                        </value>
                                      </member>
                                    </struct>
                                  </value>
                                </member>
                                <member>
                                  <name>004:1:outAudioTrack:Output Publishing
Type</name>
                                  <value>
                                    <string>Primary(0)</string>
                                  </value>
                                </member>
                              </struct>
                            </value>
                          </data>
                        </array>
                      </value>
                    </member>
                  </struct>
                </value>
                <value>
                  <struct>
                    <member>
                      <name>001:1:name:Name</name>
                      <value>
                        <string>all</string>
                      </value>
                    </member>
                    <member>
                      <name>002:1:rules:rules</name>
                      <value>
                        <array>
                          <data>
                            <value>
                              <struct>
```

```
                                <member>
                                  <name>001:1:priority:Priority</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>003:1:input:Input</name>
                                  <value>
                                    <struct>
                                      <member>
                                        <name>001:1:inCodec:Input Codec</name>
                                        <value>
                                          <string>any(0)</string>
                                        </value>
                                      </member>
                                      <member>
                                        <name>002:1:inChannels:Input Channels</
name>
                                        <value>
                                          <string>any(0)</string>
                                        </value>
                                      </member>
                                      <member>
                                     <name>003:1:audioBitrate_low:Audio Bitrate
Low</name>
                                        <value>
                                          <i4>0</i4>
                                        </value>
                                      </member>
                                      <member>
                                        <name>004:1:audioBitrate_high:Audio
Bitrate High</name>
                                        <value>
                                          <i4>640000</i4>
                                        </value>
                                      </member>
                                      <member>
                                        <name>005:1:language:Language</name>
                                        <value>
                                          <string>eng</string>
                                        </value>
                                      </member>
                                    </struct>
                                  </value>
                                </member>
                                <member>
                                  <name>004:1:outAudioTrack:Output Publishing
Type</name>
                                  <value>
```

```
                                    <string>Primary+AudioOnly(2)</string>
                                  </value>
                                </member>
                              </struct>
                            </value>
                          </data>
                        </array>
                      </value>
                    </member>
                  </struct>
                </value>
                <value>
                  <struct>
                    <member>
                      <name>001:1:name:Name</name>
                      <value>
                        <string>any</string>
                      </value>
                    </member>
                    <member>
                      <name>002:1:rules:rules</name>
                      <value>
                        <array>
                          <data>
                            <value>
                              <struct>
                                <member>
                                  <name>001:1:priority:Priority</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>003:1:input:Input</name>
                                  <value>
                                    <struct>
                                      <member>
                                        <name>001:1:inCodec:Input Codec</name>
                                        <value>
                                          <string>any(0)</string>
                                        </value>
                                      </member>
                                      <member>
                                        <name>002:1:inChannels:Input Channels</
name>
                                        <value>
                                          <string>any(0)</string>
                                        </value>
                                      </member>
                                      <member>
```

```
                                    <name>003:1:audioBitrate_low:Audio Bitrate
Low</name>
                                      <value>
                                        <i4>0</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>004:1:audioBitrate_high:Audio
Bitrate High</name>
                                      <value>
                                        <i4>640000</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>005:1:language:Language</name>
                                      <value>
                                        <string>any</string>
                                      </value>
                                    </member>
                                  </struct>
                                </value>
                              </member>
                              <member>
                                <name>004:1:outAudioTrack:Output Publishing
Type</name>
                                <value>
                                  <string>Primary(0)</string>
                                </value>
                              </member>
                            </struct>
                          </value>
                        </data>
                      </array>
                    </value>
                  </member>
                </struct>
              </value>
            </data>
          </array>
        </value>
      </param>
    </params>
</methodResponse>
```

5. configuration.input.group.add

This method adds an input group, which is used for configuring live input streams.

Method Help Text

```
Help:
This method creates a group of input streams.
```

Return Value

```
Return:
int:The DB return code
```

Parameter Descriptors (3)

Refer to Table 4 for a complete list of parameter descriptors.

Table 4. configuration.input.group.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
name	string	n/a	Enter an identifier for the group, up to 40 characters. Only use alpha-numeric characters, periods, underscores, or hyphens.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>HD1_KXAN_NBC_7.101</string>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <struct>
          <member>
            <name>001:1:inputGID:Input Stream Group</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>002:1:name:Name</name>
            <value>
              <string>HD1_KXAN_NBC_7.101</string>
            </value>
          </member>
          <member>
            <name>003:1:inputID1:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>004:1:inputID2:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>005:1:inputID3:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>006:1:inputID4:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>007:1:inputID5:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
```

```
<member>
  <name>008:1:inputID6:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>009:1:inputID7:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>010:1:inputID8:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>011:1:inputID9:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>012:1:inputID10:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>013:1:inputID11:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>014:1:inputID12:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>015:1:inputID13:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>016:1:inputID14:Input Stream ID</name>
```

```
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>017:1:inputID15:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>018:1:inputID16:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
        </struct>
      </value>
    </param>
  </params>
</methodResponse>
```

6. configuration.input.group.remove

This method deletes an existing input group that was created for live streaming inputs.

Method Help Text

```
Help:
This method removes an input group.
```

Return Value

```
Return:
int:DB return code
```

Parameter Descriptors (3)

Refer to Table 5 for a complete list of parameter descriptors.

Table 5. configuration.input.group.remove API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name

Table 5. configuration.input.group.remove API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
password	string	n/a	Enter user password
inputGID	integer	Refer to "configuration.input.group.show" on page 41 to view currently assigned Group ID numbers.	Enter the identifier assigned to the input stream group that you wish to remove.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.remove</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

7. configuration.input.group.show

This method returns values for one or all existing live streaming input groups.

Method Help Text

```
Help:
This method shows an input group.
```

Return Value

```
Return:
nil
```

Parameter Descriptors (3)

Refer to Table 1 for a complete list of parameter descriptors.

Table 6. configuration.input.group.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
inputGID	integer	0 = show all groups	Enter the identifier assigned to the input stream group that you wish to view.

Sample Request - only one stream selected

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response - only one stream returned

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:inputGID:Input Stream Group</name>
                  <value>
                    <i4>1</i4>
                  </value>
                </member>
                <member>
                  <name>002:1:name:Name</name>
                  <value>
                    <string>HD1_KTBC_Fox_6.101</string>
                  </value>
                </member>
                <member>
                  <name>003:1:inputStream:Input Stream</name>
                  <value>
                    <array>
                      <data>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:index:Index</name>
                              <value>
                                <i4>1</i4>
                              </value>
                            </member>
                            <member>
                             <name>002:1:pubVidBitRate:Publishing Video Bit
Rate</name>
                              <value>
                                <i4>0</i4>
                              </value>
                            </member>
                            <member>
                              <name>003:1:monitorOnly:Monitor Only</name>
                              <value>
                                <string>false(0)</string>
                              </value>
                            </member>
                            <member>
```

```
                        <name>005:1:inputID:Input ID</name>
                        <value>
                          <i4>2</i4>
                        </value>
                      </member>
                      <member>
                        <name>006:1:name:Name</name>
                        <value>
                          <string>768x432</string>
                        </value>
                      </member>
                      <member>
                        <name>007:1:host:Host</name>
                        <value>
                          <string>234.5.6.101</string>
                        </value>
                      </member>
                      <member>
                        <name>008:1:port:Port</name>
                        <value>
                          <i4>10002</i4>
                        </value>
                      </member>
                      <member>
                        <name>009:1:interface:Interface</name>
                        <value>
                          <string>any</string>
                        </value>
                      </member>
                      <member>
                        <name>010:1:castType:IP Cast Type</name>
                        <value>
                          <string>multicast</string>
                        </value>
                      </member>
                      <member>
                        <name>011:1:mcastSource1:IGMPv3 Source IP 1</
name>
                        <value>
                          <string/>
                        </value>
                      </member>
                      <member>
                        <name>012:1:mcastSource2:IGMPv3 Source IP 2</
name>
                        <value>
                          <string/>
                        </value>
                      </member>
                      <member>
```

```
                                <name>013:1:mcastSource3:IGMPv3 Source IP 3</
name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                                <name>014:1:mcastSource4:IGMPv3 Source IP 4</
name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                                <name>015:1:protocol:Protocol</name>
                                <value>
                                  <string>udp(4)</string>
                                </value>
                              </member>
                              <member>
                                <name>016:1:container:Container Format</name>
                                <value>
                                  <string>mpeg2_ts(3)</string>
                                </value>
                              </member>
                              <member>
                               <name>017:1:operState:Operational State</name>
                                <value>
                                  <string>enabled(2)</string>
                                </value>
                              </member>
                              <member>
                               <name>018:3:Configuration:Configuration</name>
                                <value>
                                  <struct>
                                    <member>
                                      <name>001:3:program:Program</name>
                                      <value>
                                        <i4>1</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>002:3:videoPID:Video PID</name>
                                      <value>
                                        <i4>101</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>003:3:audioPID:Audio PID</name>
                                      <value>
```

```
                                        <i4>102</i4>
                                      </value>
                                    </member>
                                    <member>
                                   <name>004:3:passData:Pass Data PIDs</name>
                                      <value>
                                        <string>false(0)</string>
                                      </value>
                                    </member>
                                    <member>
                                     <name>005:3:autoDetect:Auto Detect</name>
                                      <value>
                                        <string>false(0)</string>
                                      </value>
                                    </member>
                                  </struct>
                                </value>
                              </member>
                            </struct>
                          </value>
                          <value>
                            <struct>
                              <member>
                                <name>001:1:index:Index</name>
                                <value>
                                  <i4>2</i4>
                                </value>
                              </member>
                              <member>
                               <name>002:1:pubVidBitRate:Publishing Video Bit
      Rate</name>
                                <value>
                                  <i4>0</i4>
                                </value>
                              </member>
                              <member>
                                <name>003:1:monitorOnly:Monitor Only</name>
                                <value>
                                  <string>false(0)</string>
                                </value>
                              </member>
                              <member>
                                <name>005:1:inputID:Input ID</name>
                                <value>
                                  <i4>3</i4>
                                </value>
                              </member>
                              <member>
                                <name>006:1:name:Name</name>
                                <value>
```

```
                                <string>640x360</string>
                              </value>
                            </member>
                            <member>
                              <name>007:1:host:Host</name>
                              <value>
                                <string>234.5.6.101</string>
                              </value>
                            </member>
                            <member>
                              <name>008:1:port:Port</name>
                              <value>
                                <i4>10003</i4>
                              </value>
                            </member>
                            <member>
                              <name>009:1:interface:Interface</name>
                              <value>
                                <string>any</string>
                              </value>
                            </member>
                            <member>
                              <name>010:1:castType:IP Cast Type</name>
                              <value>
                                <string>multicast</string>
                              </value>
                            </member>
                            <member>
                              <name>011:1:mcastSource1:IGMPv3 Source IP 1</
name>
                              <value>
                                <string/>
                              </value>
                            </member>
                            <member>
                              <name>012:1:mcastSource2:IGMPv3 Source IP 2</
name>
                              <value>
                                <string/>
                              </value>
                            </member>
                            <member>
                              <name>013:1:mcastSource3:IGMPv3 Source IP 3</
name>
                              <value>
                                <string/>
                              </value>
                            </member>
                            <member>
```

```
                                <name>014:1:mcastSource4:IGMPv3 Source IP 4</
name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                                <name>015:1:protocol:Protocol</name>
                                <value>
                                  <string>udp(4)</string>
                                </value>
                              </member>
                              <member>
                                <name>016:1:container:Container Format</name>
                                <value>
                                  <string>mpeg2_ts(3)</string>
                                </value>
                              </member>
                              <member>
                               <name>017:1:operState:Operational State</name>
                                <value>
                                  <string>enabled(2)</string>
                                </value>
                              </member>
                              <member>
                               <name>018:3:Configuration:Configuration</name>
                                <value>
                                  <struct>
                                    <member>
                                      <name>001:3:program:Program</name>
                                      <value>
                                        <i4>1</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>002:3:videoPID:Video PID</name>
                                      <value>
                                        <i4>101</i4>
                                      </value>
                                    </member>
                                    <member>
                                      <name>003:3:audioPID:Audio PID</name>
                                      <value>
                                        <i4>102</i4>
                                      </value>
                                    </member>
                                    <member>
                                   <name>004:3:passData:Pass Data PIDs</name>
                                      <value>
                                        <string>false(0)</string>
```

```
                                    </value>
                                  </member>
                                  <member>
                                  <name>005:3:autoDetect:Auto Detect</name>
                                    <value>
                                      <string>false(0)</string>
                                    </value>
                                  </member>
                                </struct>
                              </value>
                            </member>
                          </struct>
                        </value>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:index:Index</name>
                              <value>
                                <i4>3</i4>
                              </value>
                            </member>
                            <member>
                             <name>002:1:pubVidBitRate:Publishing Video Bit
Rate</name>
                              <value>
                                <i4>0</i4>
                              </value>
                            </member>
                            <member>
                              <name>003:1:monitorOnly:Monitor Only</name>
                              <value>
                                <string>false(0)</string>
                              </value>
                            </member>
                            <member>
                              <name>005:1:inputID:Input ID</name>
                              <value>
                                <i4>4</i4>
                              </value>
                            </member>
                            <member>
                              <name>006:1:name:Name</name>
                              <value>
                                <string>512x288</string>
                              </value>
                            </member>
                            <member>
                              <name>007:1:host:Host</name>
                              <value>
                                <string>234.5.6.101</string>
```

```
                    </value>
                  </member>
                  <member>
                    <name>008:1:port:Port</name>
                    <value>
                      <i4>10004</i4>
                    </value>
                  </member>
                  <member>
                    <name>009:1:interface:Interface</name>
                    <value>
                      <string>any</string>
                    </value>
                  </member>
                  <member>
                    <name>010:1:castType:IP Cast Type</name>
                    <value>
                      <string>multicast</string>
                    </value>
                  </member>
                  <member>
                    <name>011:1:mcastSource1:IGMPv3 Source IP 1</
name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>012:1:mcastSource2:IGMPv3 Source IP 2</
name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>013:1:mcastSource3:IGMPv3 Source IP 3</
name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>014:1:mcastSource4:IGMPv3 Source IP 4</
name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>015:1:protocol:Protocol</name>
```

```
      <value>
        <string>udp(4)</string>
      </value>
    </member>
    <member>
      <name>016:1:container:Container Format</name>
      <value>
        <string>mpeg2_ts(3)</string>
      </value>
    </member>
    <member>
     <name>017:1:operState:Operational State</name>
      <value>
        <string>enabled(2)</string>
      </value>
    </member>
    <member>
     <name>018:3:Configuration:Configuration</name>
      <value>
        <struct>
          <member>
            <name>001:3:program:Program</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>002:3:videoPID:Video PID</name>
            <value>
              <i4>101</i4>
            </value>
          </member>
          <member>
            <name>003:3:audioPID:Audio PID</name>
            <value>
              <i4>102</i4>
            </value>
          </member>
          <member>
          <name>004:3:passData:Pass Data PIDs</name>
            <value>
              <string>false(0)</string>
            </value>
          </member>
          <member>
           <name>005:3:autoDetect:Auto Detect</name>
            <value>
              <string>false(0)</string>
            </value>
          </member>
```

```
                                    </struct>
                                  </value>
                                </member>
                              </struct>
                            </value>
                            <value>
                              <struct>
                                <member>
                                  <name>001:1:index:Index</name>
                                  <value>
                                    <i4>4</i4>
                                  </value>
                                </member>
                                <member>
                                 <name>002:1:pubVidBitRate:Publishing Video Bit
Rate</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>003:1:monitorOnly:Monitor Only</name>
                                  <value>
                                    <string>false(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>005:1:inputID:Input ID</name>
                                  <value>
                                    <i4>5</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>006:1:name:Name</name>
                                  <value>
                                    <string>1280x720_HD</string>
                                  </value>
                                </member>
                                <member>
                                  <name>007:1:host:Host</name>
                                  <value>
                                    <string>234.5.6.101</string>
                                  </value>
                                </member>
                                <member>
                                  <name>008:1:port:Port</name>
                                  <value>
                                    <i4>10005</i4>
                                  </value>
                                </member>
```

```
                                <member>
                                  <name>009:1:interface:Interface</name>
                                  <value>
                                    <string>any</string>
                                  </value>
                                </member>
                                <member>
                                  <name>010:1:castType:IP Cast Type</name>
                                  <value>
                                    <string>multicast</string>
                                  </value>
                                </member>
                                <member>
                                  <name>011:1:mcastSource1:IGMPv3 Source IP 1</
name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                  <name>012:1:mcastSource2:IGMPv3 Source IP 2</
name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                  <name>013:1:mcastSource3:IGMPv3 Source IP 3</
name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                  <name>014:1:mcastSource4:IGMPv3 Source IP 4</
name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                  <name>015:1:protocol:Protocol</name>
                                  <value>
                                    <string>udp(4)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>016:1:container:Container Format</name>
                                  <value>
                                    <string>mpeg2_ts(3)</string>
```

```
          </value>
        </member>
        <member>
         <name>017:1:operState:Operational State</name>
          <value>
            <string>enabled(2)</string>
          </value>
        </member>
        <member>
         <name>018:3:Configuration:Configuration</name>
          <value>
            <struct>
              <member>
                <name>001:3:program:Program</name>
                <value>
                  <i4>1</i4>
                </value>
              </member>
              <member>
                <name>002:3:videoPID:Video PID</name>
                <value>
                  <i4>101</i4>
                </value>
              </member>
              <member>
                <name>003:3:audioPID:Audio PID</name>
                <value>
                  <i4>102</i4>
                </value>
              </member>
              <member>
               <name>004:3:passData:Pass Data PIDs</name>
                <value>
                  <string>false(0)</string>
                </value>
              </member>
              <member>
               <name>005:3:autoDetect:Auto Detect</name>
                <value>
                  <string>false(0)</string>
                </value>
              </member>
            </struct>
          </value>
        </member>
      </struct>
    </value>
  </data>
 </array>
</value>
```

```
                </member>
                <member>
                  <name>004:1:captureSettings:Capture Settings</name>
                  <value>
                    <struct>
                      <member>
                        <name>001:1:outputDir:Output Directory</name>
                        <value>
                          <i4>0</i4>
                        </value>
                      </member>
                      <member>
                        <name>002:1:Underrun:Underrun</name>
                        <value>
                          <string>false(0)</string>
                        </value>
                      </member>
                      <member>
                        <name>003:1:Out-Of-Sync:Out-Of-Sync</name>
                        <value>
                          <string>false(0)</string>
                        </value>
                      </member>
                    </struct>
                  </value>
                </member>
              </struct>
            </value>
          </data>
        </array>
      </value>
    </param>
  </params>
</methodResponse>
```

Sample Response - all streams selected

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:inputGID:Input Stream Group</name>
                  <value>
                    <i4>7</i4>
```

```
                </value>
              </member>
              <member>
                <name>002:1:name:Name</name>
                <value>
                  <string>VMG6-1_KEYE_CBS</string>
                </value>
              </member>
              <member>
                <name>003:1:inputStream:Input Stream</name>
                <value>
                  <i4>4</i4>
                </value>
              </member>
              <member>
                <name>004:1:enabledCnt:Enabled</name>
                <value>
                  <i4>4</i4>
                </value>
              </member>
            </struct>
          </value>
        </data>
      </array>
    </value>
  </param>
 </params>
</methodResponse>
```

8. configuration.input.group.stream.add

This method allows you to add live streams for packaging input. Note that live input streams must be present and fully functional.

Method Help Text

```
Help:
This method adds a new input stream.
NOTE: Ensure the route table has proper static routes defined for multicast
streams to be properly received.
NOTE: If package-level redundancy is in use, input stream characteristics
must match on both Packagers in the same N+1 redundancy group.
```

```
Help:
NOTE: Ensure the route table has proper static routes defined for multicast
streams to be properly received.
```

Return Value

Return:
struct:Added record.

Parameter Descriptors (20)

Refer to Table 7 for a complete list of parameter descriptors.

Table 7. configuration.input.group.stream.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
inputGID	integer	Refer to "configuration.input.group.add" on page 35 for Group ID #.	Enter the group ID where the input stream will be added.
pubVidBitRate	integer	0 = As detected	Enter the video bit rate at which the stream will be published. Enter 0 (zero) to have *Packager* use the bit rate it detects from the input stream.
monitorOnly	integer	0 = false 1 = true	Enter the *Numeric Selector* representing **true** if the stream is only for monitoring and capturing, and *Packager* will not package the stream. Otherwise, enter the *Numeric Selector* representing **false**.
name	string	*Example:* InputStream_201	Enter an identifier for the inbound stream, up to 23 characters. Must contain only alphanumeric characters, periods, underscores and hyphens.
protocol	integer	4 = udp/rtp	Enter the *Numeric Selector* representing the IP protocol of the stream. For this release, only udp/rtp (User Datagram Protocol over Real-Time Transport Protocol) is supported for inbound streams.
castType	integer	0 = unicast 1 = multicast	Enter the *Numeric Selector* representing whether the stream is unicast (serves content to a single user at a time) or multicast (serves content simultaneously to multiple destinations).
host	string	*Example:* 232.24.24.200	*Applicable and required for multicast streams only.* [a] [b] Enter the destination multicast IP address where the stream will be published. Valid entries are: 224.0.0.1 – 239.255.255.254. Refer to iana.org for details. *Note:* If using Source Specific Multicasting (SSM), you *must* use only this range: 232.0.0.1 – 232.255.255.254.

Table 7. configuration.input.group.stream.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`port`	integer	*Example:* `5000`	For multicast, enter the UDP port (User Datagram Protocol) of the multicast source in a range of 1 – 65535. For unicast, enter the UDP port opened on the *Packager* to receive the input stream in a range of 10000–65535.
`mcastSource1`	string	n/a	For SSM only. Max length of 72 characters. Provide the *unicast* IP address of the source that is publishing the stream to the destination multicast IP (configured in the **Host** field). • Leave empty if you do not want to perform source filtering. • If using *source-level redundancy*, this unicast IP address must be unique from *IGMPv3 Source IP* 2, 3, and 4. *Note*: If using redundant IGMPv3 Source IPs 2, 3, or 4, the input sources must be identical (PIDs, program numbers, number of elementary streams, etc).
`mcastSource2`	string	n/a	For SSM source-level redundancy only. Max length of 72 characters. Provide the alternate unicast IP address of the source that is publishing the stream to the destination multicast IP (configured in the Host field). Leave empty if you do not want to perform source filtering. This unicast IP address must be unique from IGMPv3 Source IP 1, 3, and 4 Note: If using redundant IGMPv3 Source IPs 1, 3, or 4, the input sources must be identical (PIDs, program numbers, number of elementary streams, etc).
`mcastSource3`	string	n/a	For SSM *source-level redundancy* only. Max length of 72 characters. Provide the 2nd alternate *unicast* IP address of the source that is publishing the stream to the destination multicast IP (configured in the **Host** field). • Leave empty if you do not want to perform source filtering. • This unicast IP address must be unique from *IGMPv3 Source IP* 1, 2, and 4 *Note*: If using redundant IGMPv3 Source IPs 1, 2, or 4, the input sources must be identical (PIDs, program numbers, number of elementary streams, etc).

Table 7. configuration.input.group.stream.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`mcastSource4`	string	n/a	For SSM *source-level redundancy* only. Max length of 72 characters. Provide the 3rd alternate *unicast* IP address of the source that is publishing the stream to the destination multicast IP (configured in the **Host** field). • Leave empty if you do not want to perform source filtering. • This unicast IP address must be unique from *IGMPv3 Source IP* 1, 2, and 3 *Note*: If using redundant IGMPv3 Source IPs 1, 2, or 3, the input sources must be identical (PIDs, program numbers, number of elementary streams, etc).
`scte35StreamID`	integer	1 to 9223372036854775806 blank = no ID specified 0 = same as blank	Enter the SCTE35 stream ID of the input program. The value is a 64-bit decimal string. Valid entries: blank = no SCTE35 stream ID specified Minimum: 1 Maximum: 9223372036854775806
`interface`	integer	255 = any interface 0 = eth0 interface 1 = eth1 interface 2 = eth2 interface etc...	Enter the network interface the Packager should use to receive the stream; choices include any or one of the currently available valid interfaces (dynamically populated). If **any** (**255**) is selected, Packager listens on all available interfaces and will configure the first available. If a specific interface is selected, Packager only listens on that interface.
`format`	integer	3 = mpeg2_ts	Enter the *Numeric Selector* representing the container format that will be received from the inbound stream. For this release, only MPEG2TS format can be received by *Packager*.
`program`	integer	0 to 65535	The number of the program channel within the multi-program stream that you want to target. • For SPTS, enter 0 (zero) to automatically determine the program numbers and track PIDs. • For MPTS, enter 0 (zero) to detect the stream. ***Note:*** *In order to modify Program and PID values for an input stream, the stream must be active and detected by Packager.*

Table 7. configuration.input.group.stream.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`videoPID`	integer	-1 = all 0 = none	Enter the number of the video track in the program channel that you want to target. • Entering "**-1**" will select all tracks of the selected program. • Entering "**0**" means no video is desired. If `program` is set to 0 and SPTS is detected, the system will automatically select the first PID of the video track detected.
`audioPID`	integer	-1 = all 0 = none	Enter the number of the audio track in the program channel that you want to target. • Entering "**-1**" will select all tracks of the selected program. • Entering "**0**" means no audio is desired. If `program` is set to 0 and SPTS is detected, the system will automatically select PIDs of all audio tracks detected.
`dataPID`	string	-1 = all PIDs 1, 2, 3, 4, n = multiple PID numbers separated by commas	Enter the Packet ID of the data track in the input. The system will *drop* any data track that is not selected (unless **-1** is entered). • To enter multiple tracks, separate each number with a comma (e.g., 4, 20, 30, 55, 244). • To pass all data tracks for the program, enter **-1** • To discard these tracks during packaging, leave the field empty. (This field is ignored if *program* is "0".) ***Note:*** *If performing ad insertion and POIS has been enabled on the system, this field must be set to -1 or the specific value of the desired Data PID in order to process MPEG sections that contain SCTE-35 signals.*

a. For *Host*: When configuring an input stream to use a multicast source that does not use the default gateway, a static route must be added to the multicast address. A static route can only exist for one interface (e.g., eth0 or eth1), to an IP address regardless of ports, and can have a mask that enables receiving a range of multicast addresses with a single route entry (e.g., 225.1.2.0/24 would apply to all multicast addresses from 225.1.2.1 to 225.1.2.255).

b. For *Host*: The *Packager* has an internal implementation restriction that limits the number of static route entries to 9 per interface. Configure *Packager* to optimize the maximum number of input streams into minimal route entries.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.stream.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
```

```
    </value>
  </param>
  <param>
    <value>
      <string>ripcode!</string>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <string>GroupB</string>
    </value>
  </param>
  <param>
    <value>
      <int>4</int>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <string>225.0.0.55</string>
    </value>
  </param>
  <param>
    <value>
      <int>4500</int>
    </value>
  </param>
  <param>
    <value>
      <string>224.0.0.25</string>
```

```
    </value>
  </param>
  <param>
    <value>
      <string>225.0.0.68</string>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string>546</string>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>3</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>-1</int>
    </value>
  </param>
  <param>
    <value>
      <int>-1</int>
    </value>
  </param>
  <param>
    <value>
      <string>-1</string>
```

```
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <struct>
          <member>
            <name>001:1:inputGID:Input Stream Group</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>002:1:name:Name</name>
            <value>
              <string>vmg3</string>
            </value>
          </member>
          <member>
            <name>003:1:inputID1:Input Stream ID</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>004:1:inputID2:Input Stream ID</name>
            <value>
              <i4>2</i4>
            </value>
          </member>
          <member>
            <name>005:1:inputID3:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
            <name>006:1:inputID4:Input Stream ID</name>
            <value>
              <i4>0</i4>
            </value>
          </member>
          <member>
```

```
  <name>007:1:inputID5:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>008:1:inputID6:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>009:1:inputID7:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>010:1:inputID8:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>011:1:inputID9:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>012:1:inputID10:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>013:1:inputID11:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>014:1:inputID12:Input Stream ID</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>015:1:inputID13:Input Stream ID</name>
  <value>
```

```
            <i4>0</i4>
          </value>
        </member>
        <member>
          <name>016:1:inputID14:Input Stream ID</name>
          <value>
            <i4>0</i4>
          </value>
        </member>
        <member>
          <name>017:1:inputID15:Input Stream ID</name>
          <value>
            <i4>0</i4>
          </value>
        </member>
        <member>
          <name>018:1:inputID16:Input Stream ID</name>
          <value>
            <i4>0</i4>
          </value>
        </member>
      </struct>
    </value>
  </param>
 </params>
</methodResponse>
```

9. configuration.input.group.stream.redetect

This method forces the redetection of all incoming streams for the specified input.

Method Help Text

```
Help:
This method forces the redetection of an incoming input stream.<br>Note:
This operation effects all streams listening on the same stream input!

PROMPT_YESNO:WARNING: This operation effects all streams already detected
that share the same input! Continue?
```

Return Value

```
Return:
int:DB return code.
```

Parameter Descriptors (5)

Refer to Table 8 for a complete list of parameter descriptors.

Table 8. configuration.input.group.stream.redetect API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
inputGID	integer	Refer to "configuration.input.group.add" on page 35 for Group ID #.	Enter the group ID where the input stream will be added.
streamID	integer	0 = all streams Refer to "configuration.input.group.stream.show" on page 66 to show stream IDs.	Enter the ID assigned to the stream by *Packager*.
detectDelay	integer	0 to 2147483647	The amount of time (in seconds) to delay connection with the stream before resuming attempts to reconnect (in 9 second increments). For example, if you're aware that an input stream or group will be going out of service for a period of time, use this field to disable the stream input until it will be available once more.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.stream.redetect</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>2</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
```

```
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

10. configuration.input.group.stream.show

This method shows all configured live streams for packaging input.

Method Help Text

```
Help:
This method retrieves info for a given stream.
```

Return Value

```
Return:
struct:The requested stream info
```

Parameter Descriptors (5)

Refer to Table 9 for a complete list of parameter descriptors.

Table 9. configuration.input.group.stream.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password

Table 9. configuration.input.group.stream.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`inputGID`	integer	Refer to "configuration.input.group.add" on page 35 for Group ID #.	Enter the group ID of the input stream to view.
`streamID`	integer	0 = all streams Refer to "configuration.input.group.stream.show" on page 66 to show stream IDs.	Enter the ID assigned to the stream by *Packager*.
`Display`	integer	0 = configuration 1 = statistics 2 = content	Enter the *Numeric Selector* representing the type of information you want to view. You can view stream configuration on the *Packager* (select **configuration**), statistics for a particular stream (select **statistics**), or stream properties including the program channels and audio/video in a stream (select **content**).

Sample Request - for configuration option (default)

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.input.group.stream.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>7</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
```

```
    </param>
  </params>
</methodCall>
```

Sample Response - displaying configuration option (default)

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:inputID:Input ID</name>
                  <value>
                    <i4>9</i4>
                  </value>
                </member>
                <member>
                  <name>002:1:name:Name</name>
                  <value>
                    <string>10001</string>
                  </value>
                </member>
                <member>
                  <name>003:1:host:Host</name>
                  <value>
                    <string>234.5.6.104</string>
                  </value>
                </member>
                <member>
                  <name>004:1:port:Port</name>
                  <value>
                    <i4>10001</i4>
                  </value>
                </member>
                <member>
                  <name>005:1:interface:Interface</name>
                  <value>
                    <string>em1</string>
                  </value>
                </member>
                <member>
                  <name>006:1:castType:IP Cast Type</name>
                  <value>
                    <string>multicast</string>
                  </value>
```

```
</member>
<member>
  <name>007:1:mcastSource1:IGMPv3 Source IP 1</name>
  <value>
    <string/>
  </value>
</member>
<member>
  <name>008:1:mcastSource2:IGMPv3 Source IP 2</name>
  <value>
    <string/>
  </value>
</member>
<member>
  <name>009:1:mcastSource3:IGMPv3 Source IP 3</name>
  <value>
    <string/>
  </value>
</member>
<member>
  <name>010:1:mcastSource4:IGMPv3 Source IP 4</name>
  <value>
    <string/>
  </value>
</member>
<member>
  <name>011:1:protocol:Protocol</name>
  <value>
    <string>udp(4)</string>
  </value>
</member>
<member>
  <name>012:1:container:Container Format</name>
  <value>
    <string>mpeg2_ts(3)</string>
  </value>
</member>
<member>
  <name>013:1:operState:Operational State</name>
  <value>
    <string>enabled(2)</string>
  </value>
</member>
<member>
  <name>014:3:Configuration:Configuration</name>
  <value>
    <struct>
      <member>
        <name>001:3:program:Program</name>
        <value>
```

```
                    <i4>1</i4>
                  </value>
                </member>
                <member>
                  <name>002:3:videoPID:Video PID</name>
                  <value>
                    <i4>101</i4>
                  </value>
                </member>
                <member>
                  <name>003:3:audioPID:Audio PID</name>
                  <value>
                    <i4>-1</i4>
                  </value>
                </member>
                <member>
                  <name>004:3:passData:Pass Data PIDs</name>
                  <value>
                    <string>false(0)</string>
                  </value>
                </member>
                <member>
                  <name>005:3:autoDetect:Auto Detect</name>
                  <value>
                    <string>false(0)</string>
                  </value>
                </member>
              </struct>
            </value>
          </member>
          <member>
            <name>015:3:streamStatus:Detection Status</name>
            <value>
              <string>Stream detected</string>
            </value>
          </member>
        </struct>
      </value>
      <value>
        <struct>
          <member>
            <name>001:1:inputID:Input ID</name>
            <value>
              <i4>10</i4>
            </value>
          </member>
          <member>
            <name>002:1:name:Name</name>
            <value>
              <string>10002</string>
```

```
                    </value>
                  </member>
                  <member>
                    <name>015:3:streamStatus:Detection Status</name>
                    <value>
                      <string>Stream detected</string>
                    </value>
                  </member>
                </struct>
              </value>
            </data>
          </array>
        </value>
      </param>
    </params>
</methodResponse>
```

11. configuration.jitp.profile.add

This method adds a just-in-time packaging (JITP) profile table to *Packager*. JITP profile tables are used to determine whether an output format is allowed for packaging and how that format is handled.

Method Help Text

```
Help:
This method creates a JITP profile record.
```

Return Value

```
Return:
string:Status String.
```

Parameter Descriptors (3)

Refer to Table 10 for a complete list of parameter descriptors.

Table 10. configuration.jitp.profile.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
profileName	string	n/a	Enter a name up to 255 characters to identify the profile.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.jitp.profile.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>all_2second_segments_unencrypt</string>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

12. configuration.jitp.profile.modify

This method allows you to modify either the default JITP profile table or any operator-configured profile tables.

Method Help Text

Help:
This method sets values for JITP profile Tables. Local asset cache will be flushed which may interrupt JITP sessions. Changes should be executed during a maintenance window.

PROMPT_YESNO:WARNING: Changing this table will cause the local asset cache to be flushed and may interrupt JITP sessions. Changes should be executed during a maintenance window! Continue?

Return Value

Return:
int:The DB return code

Parameter Descriptors (13)

Refer to Table 11 for a complete list of parameter descriptors.

Table 11. configuration.jitp.profile.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
profileName	string	n/a	Enter the name of the profile for which to make changes.

Table 11. configuration.jitp.profile.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`packageType`	integer	1 = Apple HTTP Live Streaming 3 = MPEG Dash ISO 5 = Adobe HTTP Dynamic Streaming 7 = Microsoft Smooth Streaming	Enter a *Numerical Selector* representing a package format to configure its JITP settings. Choices for this release include **Apple HTTP Live Streaming**, **MPEG DASH ISO**, **Adobe HTTP Dynamic Streaming,** and **Microsoft Smooth Streaming**.
`allowed`	integer	0 = false 1 = true	Enter a *Numerical Selector* representing whether the package format is available for JITP packaging.
`segmentDuration`	integer		The time frame (in seconds) for each segment. N/A for MPEG Dash ISO.
`audioMap`	string		Enter the name of the audio map rule to be used for the profile.
`keyServerVendor`	integer	0 = None 1 = VerimatrixHLS 2 = BuyDRM 3 = CKM 4 = Nagra 5 = InternalHLS 6 = VerimatrixPlayready 7 = InternalFlashAccess 8 = Latens 9 = SecureMedia 10 = Conax 11 = Irdeto 12 = InternalPlayready 13 = NdsCisco 14 = RgbAPI 15 = Mezzanine 16 = KPN	Optional. Enter the *Numeric Selector* representing the Key Server to use to manage the encryption key with client players. Choices for JITP in this release include: For **Apple HLS** — VerimatrixHLS, CKM, Nagra, InternalHLS[a], InternalFlashAccess, SecureMedia, Conax, NdsCisco, and Mezzanine. For **Adobe HDS** — CKM, InternalFlashAccess. For **Microsoft SS** — BuyDRM, CKM, VerimatrixPlayready, Latens, Conax, InternalPlayready, and RgbAPI. *Note:* the MPEG Dash ISO field does not have key server options.
`KeyServerUrl`	string	n/a	Enter the exact URL of the keyserver.
`contentIdType`	integer	0 = None 1 = ROVI 2 = MERLIN 3 = PUB 4 = UUID 5 = mediaContentId 6 = recordingId	
`policyId`	string	n/a	For CKM, enter the name of the keyserver policy ID.

Table 11. configuration.jitp.profile.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
keyResourceId	integer		Does not apply for JITP
keyRotation	integer	0 = no rotation	The duration of time (in minutes) that a particular encryption key will be used. After the time period expires, a new encryption key will be used to encrypt content. Enter 0 for no rotation.

a. InternalHLS has been optimized for small-scale deployments such as lab environments, demo systems, etc.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.jitp.profile.modify</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>DEFAULT</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>10</int>
      </value>
    </param>
    <param>
```

```
        <value>
          <string>aac_eng_Prm_all_Alt</string>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <string>http://verimatrixkey/test/now</string>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>30</int>
        </value>
      </param>
    </params>
  </methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

13. configuration.jitp.profile.show

This method displays both the default and operator-configured JITP profile tables.

Method Help Text

```
Help:
This method displays a JITP profile record.
```

Return Value

```
Return:
string:Status String.
```

Parameter Descriptors (3)

Refer to Table 12 for a complete list of parameter descriptors.

Table 12. configuration.jitp.profile.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
profileName	string	n/a	Enter the name of the profile to view.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.jitp.profile.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string/>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:profileName:Profile</name>
                  <value>
                    <string>DEFAULT</string>
                  </value>
                </member>
                <member>
                 <name>002:1:Profile Information:Profile Information</name>
                  <value>
                    <array>
                      <data>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:packageType:Package Type</name>
                              <value>
                               <string>Apple HTTP Live Streaming(1)</string>
                              </value>
                            </member>
                            <member>
                              <name>002:1:allowed:Allowed</name>
                              <value>
                                <string>true(1)</string>
                              </value>
                            </member>
                            <member>
                             <name>003:1:segmentDuration:Segment Duration</
name>
                              <value>
                                <i4>2</i4>
                              </value>
                            </member>
                            <member>
                              <name>004:1:AudioMap:AudioMap</name>
                              <value>
                                <string>all</string>
                              </value>
                            </member>
                            <member>
```

```
                                <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                                <value>
                                  <string>None(0)</string>
                                </value>
                              </member>
                              <member>
                                <name>006:1:keyServerURL:keyServerURL</name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                              <name>007:1:keyResourceId:Key Resource ID</name>
                                <value>
                                  <i4>0</i4>
                                </value>
                              </member>
                              <member>
                              <name>008:1:contentIdType:Content ID Type</name>
                                <value>
                                  <string>None(0)</string>
                                </value>
                              </member>
                              <member>
                                <name>009:1:policyId:Policy ID</name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                            </struct>
                          </value>
                          <value>
                            <struct>
                              <member>
                                <name>001:1:packageType:Package Type</name>
                                <value>
                                <string>Microsoft Smooth Streaming(7)</string>
                                </value>
                              </member>
                              <member>
                                <name>002:1:allowed:Allowed</name>
                                <value>
                                  <string>true(1)</string>
                                </value>
                              </member>
                              <member>
                                <name>003:1:segmentDuration:Segment Duration</
name>
                                <value>
```

```
                                <i4>2</i4>
                              </value>
                            </member>
                            <member>
                              <name>004:1:AudioMap:AudioMap</name>
                              <value>
                                <string>all</string>
                              </value>
                            </member>
                            <member>
                             <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                              <value>
                                <string>None(0)</string>
                              </value>
                            </member>
                            <member>
                              <name>006:1:keyServerURL:keyServerURL</name>
                              <value>
                                <string/>
                              </value>
                            </member>
                            <member>
                            <name>007:1:keyResourceId:Key Resource ID</name>
                              <value>
                                <i4>0</i4>
                              </value>
                            </member>
                            <member>
                            <name>008:1:contentIdType:Content ID Type</name>
                              <value>
                                <string>None(0)</string>
                              </value>
                            </member>
                            <member>
                              <name>009:1:policyId:Policy ID</name>
                              <value>
                                <string/>
                              </value>
                            </member>
                          </struct>
                        </value>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:packageType:Package Type</name>
                              <value>
                                <string>Adobe HTTP Dynamic Streaming(5)</
string>
                              </value>
```

```
                                </member>
                                <member>
                                  <name>002:1:allowed:Allowed</name>
                                  <value>
                                    <string>true(1)</string>
                                  </value>
                                </member>
                                <member>
                                 <name>003:1:segmentDuration:Segment Duration</
name>
                                  <value>
                                    <i4>2</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>004:1:AudioMap:AudioMap</name>
                                  <value>
                                    <string>all</string>
                                  </value>
                                </member>
                                <member>
                                 <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>006:1:keyServerURL:keyServerURL</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                               <name>007:1:keyResourceId:Key Resource ID</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                               <name>008:1:contentIdType:Content ID Type</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>009:1:policyId:Policy ID</name>
                                  <value>
                                    <string/>
                                  </value>
```

```
                                </member>
                              </struct>
                            </value>
                            <value>
                              <struct>
                                <member>
                                  <name>001:1:packageType:Package Type</name>
                                  <value>
                                    <string>MPEG Dash(3)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>002:1:allowed:Allowed</name>
                                  <value>
                                    <string>true(1)</string>
                                  </value>
                                </member>
                                <member>
                                 <name>003:1:segmentDuration:Segment Duration</
name>
                                  <value>
                                    <i4>2</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>004:1:AudioMap:AudioMap</name>
                                  <value>
                                    <string>all</string>
                                  </value>
                                </member>
                                <member>
                                 <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>006:1:keyServerURL:keyServerURL</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                               <name>007:1:keyResourceId:Key Resource ID</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
```

```
                                <name>008:1:contentIdType:Content ID Type</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>009:1:policyId:Policy ID</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                              </struct>
                            </value>
                          </data>
                        </array>
                      </value>
                    </member>
                  </struct>
                </value>
                <value>
                  <struct>
                    <member>
                      <name>001:1:profileName:Profile</name>
                      <value>
                        <string>all_2second_segments_unencrypt</string>
                      </value>
                    </member>
                    <member>
                     <name>002:1:Profile Information:Profile Information</name>
                      <value>
                        <array>
                          <data>
                            <value>
                              <struct>
                                <member>
                                  <name>001:1:packageType:Package Type</name>
                                  <value>
                                   <string>Apple HTTP Live Streaming(1)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>002:1:allowed:Allowed</name>
                                  <value>
                                    <string>true(1)</string>
                                  </value>
                                </member>
                                <member>
                                 <name>003:1:segmentDuration:Segment Duration</
name>
                                  <value>
```

```
                                <i4>2</i4>
                              </value>
                            </member>
                            <member>
                              <name>004:1:AudioMap:AudioMap</name>
                              <value>
                                <string>all</string>
                              </value>
                            </member>
                            <member>
                             <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                              <value>
                                <string>None(0)</string>
                              </value>
                            </member>
                            <member>
                              <name>006:1:keyServerURL:keyServerURL</name>
                              <value>
                                <string/>
                              </value>
                            </member>
                            <member>
                            <name>007:1:keyResourceId:Key Resource ID</name>
                              <value>
                                <i4>0</i4>
                              </value>
                            </member>
                            <member>
                            <name>008:1:contentIdType:Content ID Type</name>
                              <value>
                                <string>None(0)</string>
                              </value>
                            </member>
                            <member>
                              <name>009:1:policyId:Policy ID</name>
                              <value>
                                <string/>
                              </value>
                            </member>
                          </struct>
                        </value>
                        <value>
                          <struct>
                            <member>
                              <name>001:1:packageType:Package Type</name>
                              <value>
                               <string>Microsoft Smooth Streaming(7)</string>
                              </value>
                            </member>
```

```
                                <member>
                                  <name>002:1:allowed:Allowed</name>
                                  <value>
                                    <string>false(0)</string>
                                  </value>
                                </member>
                                <member>
                                 <name>003:1:segmentDuration:Segment Duration</
name>
                                  <value>
                                    <i4>2</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>004:1:AudioMap:AudioMap</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                 <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>006:1:keyServerURL:keyServerURL</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                                <member>
                               <name>007:1:keyResourceId:Key Resource ID</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                               <name>008:1:contentIdType:Content ID Type</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>009:1:policyId:Policy ID</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
```

```
                            </struct>
                          </value>
                          <value>
                            <struct>
                              <member>
                                <name>001:1:packageType:Package Type</name>
                                <value>
                                  <string>Adobe HTTP Dynamic Streaming(5)</
string>
                                </value>
                              </member>
                              <member>
                                <name>002:1:allowed:Allowed</name>
                                <value>
                                  <string>false(0)</string>
                                </value>
                              </member>
                              <member>
                               <name>003:1:segmentDuration:Segment Duration</
name>
                                <value>
                                  <i4>4</i4>
                                </value>
                              </member>
                              <member>
                                <name>004:1:AudioMap:AudioMap</name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                               <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                                <value>
                                  <string>None(0)</string>
                                </value>
                              </member>
                              <member>
                                <name>006:1:keyServerURL:keyServerURL</name>
                                <value>
                                  <string/>
                                </value>
                              </member>
                              <member>
                             <name>007:1:keyResourceId:Key Resource ID</name>
                                <value>
                                  <i4>0</i4>
                                </value>
                              </member>
                              <member>
```

```
                        <name>008:1:contentIdType:Content ID Type</name>
                          <value>
                            <string>None(0)</string>
                          </value>
                        </member>
                        <member>
                          <name>009:1:policyId:Policy ID</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                      </struct>
                    </value>
                    <value>
                      <struct>
                        <member>
                          <name>001:1:packageType:Package Type</name>
                          <value>
                            <string>MPEG Dash(3)</string>
                          </value>
                        </member>
                        <member>
                          <name>002:1:allowed:Allowed</name>
                          <value>
                            <string>false(0)</string>
                          </value>
                        </member>
                        <member>
                         <name>003:1:segmentDuration:Segment Duration</
name>
                          <value>
                            <i4>10</i4>
                          </value>
                        </member>
                        <member>
                          <name>004:1:AudioMap:AudioMap</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                         <name>005:1:keyServerVendor:Key Server Vendor
Name</name>
                          <value>
                            <string>None(0)</string>
                          </value>
                        </member>
                        <member>
                          <name>006:1:keyServerURL:keyServerURL</name>
                          <value>
```

```
                                    <string/>
                                  </value>
                                </member>
                                <member>
                                <name>007:1:keyResourceId:Key Resource ID</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                <name>008:1:contentIdType:Content ID Type</name>
                                  <value>
                                    <string>None(0)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>009:1:policyId:Policy ID</name>
                                  <value>
                                    <string/>
                                  </value>
                                </member>
                              </struct>
                            </value>
                          </data>
                        </array>
                      </value>
                    </member>
                  </struct>
                </value>
              </data>
            </array>
          </value>
        </param>
      </params>
    </methodResponse>
```

14. configuration.jitp.source.server.add

This method defines the JITP source server where inbound content is stored.

Method Help Text

```
Help:
This method adds an source server where input content is stored.

PROMPT_YESNO:WARNING: Adding a source server requires a web server reload,
potentially interrupting HTTP requests for up to 1 second. Continue?
```

Return Value

`Return:`
`string:Status String.`

Parameter Descriptors (3)

Refer to Table 13 for a complete list of parameter descriptors.

Table 13. configuration.jitp.source.server.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`username`	string	n/a	Enter user name
`password`	string	n/a	Enter user password
`sourcePattern`	string	n/a	Enter an identifier for the source server that contains the inbound content for Just-in-Time packaging. It is used to map to a valid hostname, or a directory ID for a file system mount. • Can be up to 255 characters (`a-z`, `0-9`, `-` [dash] and `.` [dot]) • Pattern cannot *begin* or *end* with a dash Cannot be the management IP address or host name.
`accessType`	integer	0 = File system 1 = HTTP 2 = C2 HTTP 3 = DASH HTTP 4 = HLS HTTP	Enter the numeric selector to indicate how files are retrieved from the source server. **File System**—If this is selected, the `sourcePattern` must correspond to a provisioned directory mount ID. **HTTP / C2 HTTP**, **DASH HTTP**, or **HLS HTTP**—If any of these options are selected, the `sourcePattern` must correspond to a valid HTTP web server hostname.
`hostname`	string	n/a	Configure this when **HTTP / C2 HTTP**, **DASH HTTP**, or **HLS HTTP** is selected from `accessType`. Enter a URL hostname (domain name or IP address) for an HTTP source server.

Table 13. configuration.jitp.source.server.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
althostname	string	n/a	Configure this when **HTTP / C2 HTTP**, **DASH HTTP**, or **HLS HTTP** is selected from accessType. Only used with HLS-HTTP when Stitcher is used (therefore, only used with TransAct *Recording Manager)*. Enter an alternate URL hostname (domain name or IP address) for an HTTP source server (if different from hostname).
mountID	integer		Applies when **File System** is chosen from accessType Enter a valid mount ID for a valid inbound directory as configured via configuration.input.directory.add
concurrencyLevel	integer	Not available	deprecated
allowOSCaching	integer	0 = Disable 1 = Enable	Enables memory caching for faster responses to JITP requests. Enabling increases memory consumption with performance; disabling decreases memory consumption at the expense of performance. *For NFS only.* CIFS, HTTP and C2 HTTP will ignore this setting.
profileName	string		Enter a JITP profile for which to apply the source server configuration. If no other profiles were created besides DEFAULT, enter "DEFAULT."

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.jitp.source.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
```

```
      <param>
        <value>
          <string>source-1-east</string>
        </value>
      </param>
      <param>
        <value>
          <int>4</int>
        </value>
      </param>
      <param>
        <value>
          <string>http://10.10.30.187</string>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>125</int>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <string>DEFAULT</string>
        </value>
      </param>
    </params>
  </methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
```

```
            <struct>
              <member>
                <name>001:1:sourcePattern:Source Server Pattern</name>
                <value>
                  <string>source-1-east</string>
                </value>
              </member>
              <member>
                <name>002:1:accessType:Access Type</name>
                <value>
                  <string>HLS HTTP(4)</string>
                </value>
              </member>
              <member>
                <name>003:1:hostname:Host Name</name>
                <value>
                  <string>http://10.10.30.187</string>
                </value>
              </member>
              <member>
                <name>004:1:althostname:Alternate Host Name</name>
                <value>
                  <string/>
                </value>
              </member>
              <member>
                <name>005:1:mountID:Directory Mount ID</name>
                <value>
                  <i4>0</i4>
                </value>
              </member>
              <member>
                <name>006:1:cacheRequestsInMemory:Cache Requests In Memory</
name>
                <value>
                  <string>Enabled</string>
                </value>
              </member>
              <member>
                <name>007:1:profileName:Profile</name>
                <value>
                  <string>DEFAULT</string>
                </value>
              </member>
            </struct>
          </value>
        </param>
      </params>
    </methodResponse>
```

15. configuration.output.directory.add

This method adds an output directory location for players that require directory publishing for outputs.

Method Help Text

```
Help:
This method adds an output directory.
```

Return Value

```
Return:
struct:Directory object added.
```

Parameter Descriptors (15)

Refer to Table 14 for a complete list of parameter descriptors.

Table 14. configuration.output.directory.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
dirname	string	n/a	Enter an identifier for the directory, up to 24 characters. Only use alphanumeric characters, periods, underscores, or hyphens.
fsType	integer	0 = cifs 1 = nfs 4 = nfs4 2 = local 3 = davfs 5 = GPFS	Enter the *Numeric Selector* representing the method to be used to access files in the directory: CIFS[a], NFS, local, davfs (Webdav), or GPFS.
host	string	n/a	Enter the hostname or IP address of the file system server, up to 254 alphanumeric characters. **Note:** To use a hostname, you must use a hostname that is not a fully qualified domain name and supply the remaining domain name in a search field for the DNS configuration. For example, if you enter *xcoder01* in the **Host** field and want it to resolve to *xcoder01.rgbnetworks.com*, then the **DNS search** field must be configured with *rgbnetworks.com*. **For Local:** Does not apply. **For Webdav:** The IP address or fully qualified domain name (FQDN) of the Webdav server.

Table 14. configuration.output.directory.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`remoteDir`	string	n/a	**For CIFS:** Enter the name of the shared directory to mount. This is the share name assigned to the directory when it is configured for sharing on the network. **For NFS:** Enter the path to the remote directory to mount. *Packager* supports the ability to add the same output mount point multiple times. This means the Remote Share Name field may be configured with the same directory. A unique path will be automatically configured on the NFS server for each package without having to explicitly specify each path here. **For Local:** Does not apply. **For Webdav:** Enter the directory on the Webdav server that is to be mounted.
`mountOpts`	string	n/a	**For CIFS, NFS, NFS4:** Mount options for the remote shared directory to mount, up to 127 characters, fields separated by commas. For example: **`soft,vers=3,acdirmin=0.5,acdirmax=1,acregmin=3,acregmax=60, atime,timeo=1,retrans=3,tcp`** *Note*: For NFS and NFS4, you may configure either **`hard`** or **`soft`** mounts. The example above shows a **`soft`** mount configuration.
`usage`	integer	0 = auto 1 = on-demand	This API has been deprecated.
`sourceDelete`	integer	0 = none 1 = success 2 = always	This API, while present in output.directory.add, does not apply to output directories; only to input directories.
`priority`	integer	1 = lowest priority ... 10 = highest priority	This API, while present in output.directory.add, does not apply to output directories; only to input directories.
`remoteDomain`	string	n/a	**For CIFS:** Enter the domain or workgroup that has permission to access the shared directory on the remote file server. This optional command line parameter must be preceded by its keyword.
`remoteUsername`	string	n/a	**For CIFS:** A username that has permission to access the shared directory on the remote file server. **For Webdav:** The username to use to connect to the Webdav server.
`remotePassword`	string	n/a	**For CIFS or Webdav:** The password associated with the username.

Table 14. configuration.output.directory.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
localDirSize	integer	0 = partition 10 to 2147483647	Enter the mount size (in MB) for a virtual file system, or enter 0 for a partition. This field is used for loop devices and ignored for partitions or if a loop device mount has already been created. Ensure local filesystem has sufficient free space to create the mount. Mount file is created when first Local Mount is added and shared with all subsequent Local Mounts.
loopDevice	integer	300 = localmnt 301 = localmnt2	Enter the *Numeric Selector* representing the appropriate loop device when using a virtual file system, or a mount partition when using a partition on disk. By default if a partition is present, this field is restricted to only the available partition options. Note: For the AMS r620 platform, localmnt2 is used. For the AMS r610 platform, localmnt is used. For a virtual machine, either localmnt or localmnt2 is used.

a. For deployment scenarios, RGB recommends the Network File System (NFS) protocol for all external storage mounts. Common Internet File Services (CIFS) can be used but is not recommended due to decreased performance (refer to the Release Notes for this version of software for test data). If used, CIFS should be limited to non-deployment situations.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.output.directory.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>nfs10</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
```

```
      </param>
      <param>
        <value>
          <string>10.10.88.165</string>
        </value>
      </param>
      <param>
        <value>
          <string>/data/nfs10</string>
        </value>
      </param>
      <param>
        <value>
          <string>soft,vers=3,acdirmin=1,acdirmax=1,acregmin=3,acreg-
max=60,atime,timeo=5,retrans=3,tcp</string>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <int>10</int>
```

```
        </value>
      </param>
      <param>
        <value>
          <int>300</int>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <struct>
          <member>
            <name>001:1:dirType:Directory Type</name>
            <value>
              <string>outbound(1)</string>
            </value>
          </member>
          <member>
            <name>002:1:dirID:Directory ID</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>003:1:dirname:Directory Name</name>
            <value>
              <string>nfs10</string>
            </value>
          </member>
          <member>
            <name>004:1:fsType:File System Type</name>
            <value>
              <string>nfs(1)</string>
            </value>
          </member>
          <member>
            <name>005:1:usage:Usage</name>
            <value>
              <string>auto(0)</string>
            </value>
          </member>
          <member>
            <name>006:1:sourceDelete:Source File Deletion</name>
```

```
      <value>
        <string>none(0)</string>
      </value>
    </member>
    <member>
      <name>007:1:priority:Priority</name>
      <value>
        <i4>1</i4>
      </value>
    </member>
    <member>
      <name>008:1:adminState:Administrative State</name>
      <value>
        <string>unlocked(1)</string>
      </value>
    </member>
    <member>
      <name>009:1:operState:Operational State</name>
      <value>
        <string>unknown(0)</string>
      </value>
    </member>
    <member>
      <name>010:1:host:Host</name>
      <value>
        <string>10.10.88.165</string>
      </value>
    </member>
    <member>
      <name>011:1:sharename:Share Name</name>
      <value>
        <string>/data/nfs10</string>
      </value>
    </member>
    <member>
      <name>012:2:remoteDomain:Remote Domain</name>
      <value>
        <string/>
      </value>
    </member>
    <member>
      <name>013:2:remoteUsername:Remote Username</name>
      <value>
        <string/>
      </value>
    </member>
    <member>
      <name>014:2:remotePassword:Remote Password</name>
      <value>
        <string>****</string>
```

```
            </value>
          </member>
          <member>
            <name>015:2:mountOpts:Remote Mount Options</name>
            <value>
              <string>soft,vers=3,acdirmin=1,acdirmax=1,acregmin=3,acreg-
max=60,atime,timeo=5,retrans=3,tcp</string>
            </value>
          </member>
        </struct>
      </value>
    </param>
  </params>
</methodResponse>
```

16. configuration.output.directory.remove

This method removes a currently configured output directory from *Packager*.

Method Help Text

```
Help:
This method removes an output directory.
```

Return Value

```
Return:
int:DB return code.
```

Parameter Descriptors (3)

Refer to Table 15 for a complete list of parameter descriptors.

Table 15. configuration.output.directory.remove API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
dirID	integer		Enter the directory ID you wish to remove.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.output.directory.remove</methodName>
  <params>
    <param>
```

```
        <value>
          <string>admin</string>
        </value>
      </param>
      <param>
        <value>
          <string>ripcode!</string>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

17. configuration.output.directory.show

This method displays all configured output directories.

Method Help Text

```
Help:
This method retrieves info for an output directory.
```

Return Value

```
Return:
struct:Directory info.
```

Parameter Descriptors (3)

Refer to Table 16 for a complete list of parameter descriptors.

Table 16. configuration.output.directory.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
dirID	integer	0 = all	Enter the directory ID you wish to view, or enter 0 to retrieve all directories.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.output.directory.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:dirType:Directory Type</name>
```

```
      <value>
        <string>outbound(1)</string>
      </value>
    </member>
    <member>
      <name>002:1:dirID:Directory ID</name>
      <value>
        <i4>1</i4>
      </value>
    </member>
    <member>
      <name>003:1:dirname:Directory Name</name>
      <value>
        <string>nfs10</string>
      </value>
    </member>
    <member>
      <name>004:1:fsType:File System Type</name>
      <value>
        <string>nfs(1)</string>
      </value>
    </member>
    <member>
      <name>005:1:usage:Usage</name>
      <value>
        <string>auto(0)</string>
      </value>
    </member>
    <member>
      <name>006:1:sourceDelete:Source File Deletion</name>
      <value>
        <string>none(0)</string>
      </value>
    </member>
    <member>
      <name>007:1:priority:Priority</name>
      <value>
        <i4>1</i4>
      </value>
    </member>
    <member>
      <name>008:1:adminState:Administrative State</name>
      <value>
        <string>unlocked(1)</string>
      </value>
    </member>
    <member>
      <name>009:1:operState:Operational State</name>
      <value>
        <string>enabled(2)</string>
```

```
                    </value>
                  </member>
                  <member>
                    <name>010:1:host:Host</name>
                    <value>
                      <string>10.10.88.165</string>
                    </value>
                  </member>
                  <member>
                    <name>011:1:sharename:Share Name</name>
                    <value>
                      <string>/data/nfs10</string>
                    </value>
                  </member>
                  <member>
                    <name>012:2:remoteDomain:Remote Domain</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>013:2:remoteUsername:Remote Username</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>014:2:remotePassword:Remote Password</name>
                    <value>
                      <string>****</string>
                    </value>
                  </member>
                  <member>
                    <name>015:2:mountOpts:Remote Mount Options</name>
                    <value>
                      <string>soft,vers=3,acdirmin=1,acdirmax=1,acreg-
min=3,acregmax=60,atime,timeo=5,retrans=3,tcp</string>
                    </value>
                  </member>
                </struct>
              </value>
            </data>
          </array>
        </value>
      </param>
    </params>
</methodResponse>
```

18. configuration.output.format.dash.modify

This method allows you to set global configuration parameters that defines how linear MPEG-Dash content is generated for the manifest files.

Method Help Text

```
Help:
This method modifies the linear MPEG-Dash (HTTP-File-Format) configuration.
--Changing this table will cause all MPEG-Dash (HTTP-File-Format) outputs
generated from input streams to restart!--
NOTE: If package-level redundancy is in use, all configuration parameters in
this menu must match on both Packagers in the same N+1 redundancy group.

PROMPT_YESNO:WARNING: Changing this table may cause all HLS outputs to
restart! Continue?
```

Return Value

```
Return:
nil:
```

Parameter Descriptors (6)

Refer to Table 17 for a complete list of parameter descriptors.

Table 17. configuration.output.format.dash.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
segmentTimeline	integer	1 = muxed 2 = unmuxed 3 = both muxed and unmuxed	Describes, in the manifest file, whether the type of content being generated is based on the main segment timeline (EBP segment, IDR, or RAI) for a particular package. Choices are: **muxed(1)**—Audio and video content is being delivered together **unmuxed(2)**—Audio and video content is being delivered separately **both(3)**—A mix of muxed and unmuxed audio and video content is being delivered.

Table 17. configuration.output.format.dash.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`trickPlay`		0 = none 1 = segment 3 = idr	Describes, in the manifest file, whether the video content will contain IDR frames for the purpose of trick play (fast-forward, rewind, etc.) and which method is being used for I-Frame to IDR-Frame adaptation. Choices are: **none(0)**—No trick play adaptation will be used **segment(1)**—Trick play adaptation will contain the starting IDR of each segment **fragment(2)**—*not a valid option* **idr(3)**—Trick play adaptation will contain every IDR frame
`adSignaling`	integer	0 = false 1 = true	Specifies whether to include ad signaling markers in the manifest file in order to support SCTE-35 ESAM cues. Select **true**[a] to include ad signaling markers. Select **false** to exclude ad signaling markers. Default is *false*.
`expiredRetention`	integer	0 = delete content immediately 0 to 300	Specifies how long to keep content on the output storage device after it has aged out of the manifest. • Value is in seconds, with a range of 0 to 300. • Default is 12. • Enter **0** to delete content immediately upon aging out.

a. In order for Packager to perform ad insertion signaling, the relevant input group stream must be enabled to pass data PIDs (configuration.input.group.stream.add or .modify) and the POIS must be enabled on the system (sysconfig.pois.modify). Additionally, the input stream (from the transcoder) must be conditioned with its own interaction to POIS for SCTE-35 and Packager must interact with the same POIS for SCTE-35 manifest markup.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.output.format.dash.modify</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
```

```
        <value>
          <int>3</int>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>12</int>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

19. configuration.output.format.hls.modify

This method allows you to set global configuration parameters that defines how HLS segment file outputs are generated, which versions of HLS are used, and whether to enable trick play when generating HLS.

Method Help Text

```
Help:
This method modifies the HLS format configuration.  --Changing this table
may cause all HLS outputs to restart!--
NOTE: If package-level redundancy is in use, all configuration parameters in
this menu must match on both Packagers in the same N+1 redundancy group.
```

```
PROMPT_YESNO:WARNING: Changing this table may cause all HLS outputs to
restart! Continue?
```

Return Value

Return:
nil:

Parameter Descriptors (15)

Refer to Table 18 for a complete list of parameter descriptors.

Table 18. configuration.output.format.hls.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
version	integer	2 = HLS v2 4 = HLS v4	Select which protocol version of HLS to generate. Default is *2*. When Version **4** is selected, trickPlay can be set.
trickPlay	integer	0 = false 1 = true	Specify whether to generate an I-frame-only manifest file. This feature allows players to fast-forward and rewind. Select **true** to enable generation of I-frame only manifests. Select **false** to disable generation of I-frame only manifests. Default is false. This field only appears when the *Version* field is set to 4.
ignoreOutOfSync	integer	0 = false 1 = true	Specify whether the player will keep publishing content even when the content is not IDR-aligned. When this field is **false**, out-of-sync content will not be published. When this field is **true**, out-of-sync content will be published. Applies to HLS v2 only.
variantName	string	n/a	Enter the name to assign to the top variant playlist. Leave this field blank to use package names. *Note*: This feature applies to linear packaging only.

Table 18. configuration.output.format.hls.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`template`	string	n/a	Specifies the creation of a template to define how segment file names are constructed. The following keywords are allowed: **%ptim%** = Segment program time (ISO 8601:2004)[a] **%stim%** = Package start time (ISO 8601:2004)[b] **%strn%** = Stream number (2 digits) **%seqn%** = Segment sequence number **%name%** = Package name **%mode%** = Package mode ("live" or "vod") In addition to the above keywords, any alphanumeric or special character may be added to the syntax, with the exception of the "%" character. Default is set to: `%stim%-%strn%-%seqn%%mode%.ts` Example of a default filename: `20121101T103824-01-1vod.ts` *Note*: This feature applies to linear packaging only.
`timePerChunk`	integer	0 = false 1 = true	**True** or **False**. When set to **true**, each segment in the playlist will have a preceding program time tag which displays the approximate wall clock time of the segment's original broadcast. Example: (...) EXT-X-PROGRAM-DATE-TIME:2010-02-19T14:54:23+08:00 EXTINF:6,1 20120309T100226-01-1vod.ts EXT-X-PROGRAM-DATE-TIME:2010-02-19T14:54:29+08:00 EXTINF:6,2 20120309T100226-01-2vod.ts *Note*: This feature applies to linear packaging only.
`keepLiveSegments`	integer	0 = false 1 = true	**True** or **False**. Specifies whether to delete expired live segments. If set to **true**, live segments will be kept always. If set to **false**, live segments will be deleted after an elapsed time period that is equal to twice the playlist duration. *Note*: This feature applies to linear packaging only.
`liveImmediateStop`	integer	0 = false 1 = true	When set to **true**, live content is immediately removed on stop instead of gracefully phasing it out (**false**).

Table 18. configuration.output.format.hls.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`useSubDir`	integer	0 = false 1 = true	Specify whether to store segments for each bitrate in a separate subdirectory. Select **true** to store segments in separate subdirectories based on bitrate. *Note*: This feature applies to linear packaging only and will cause the system to restart when changed.
`maxChunkPerDir`	integer	0 = no limit 1 to 2147483647	Enter the maximum number of segments that will be created per sub-directory so as to avoid having too many entries in a single directory. This field is used in conjunction with the Bit rate sub-dir or the Keep live segments parameter. • This field only appears when `useSubDir` is set to true. When segments are preserved either by generating VOD content or by enabling the `keepLiveSegments` field, the configuration for `maxChunkPerDir` will take effect. • A setting of 0 disables this feature. *Note*: This feature applies to linear packaging only and will cause the system to restart when changed.
`adSignaling`	integer	0 = false 1 = true	Specifies whether to include ad signaling markers in the manifest file in order to support SCTE-35 ESAM cues. Select **true**[C] to include ad signaling markers. Select **false** to exclude ad signaling markers. Default is *false*.

Table 18. configuration.output.format.hls.modify API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`muxV4Audio`	integer	0 = false 1 = true	When *true*, all HLS V4 video output will be published with the audio track that matches the highest priority audiomap rule with an *Output Publishing Type* set to Primary (as long as the video feed contains the specified audio track). When *false*, HLS V4 video is published as video-only. For example: Assume an audiomap priority 1 rule in which the input audio codec of AAC-LC on any channel, in any language, and in the range of 12000 to 628000 bps is published as the Primary audio output. When the Mux Primary Audio V4 value is set to true, and the input video feed contains the audio track specified above, this track will then be packaged with each HLS V4 video output. This field only appears when the **Version** field is set to **4**.
`expiredRetention`	integer	0 = delete content immediately 0 to 300	Specifies how long to keep content on the output storage device after it has aged out of the manifest. • Value is in seconds, with a range of 0 to 300. • Default is 22. • Enter **0** to delete content immediately upon aging out.

a. Since %ptim% represents the program time of each segment, this number will change per segment.
b. Since %stim% represents the package start time, this number *will not* change per segment.
c. In order for Packager to perform ad insertion signaling, the relevant input group stream must be enabled to pass data PIDs (configuration.input.group.stream.add or .modify) and the POIS must be enabled on the system (system-fig.pois.modify). Additionally, the input stream (from the transcoder) must be conditioned with its own interaction to POIS for SCTE-35 and Packager must interact with the same POIS for SCTE-35 manifest markup.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.output.format.hls.modify</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
```

```
</param>
<param>
  <value>
    <int>4</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <string/>
  </value>
</param>
<param>
  <value>
    <string>%stim%-%strn%-%seqn%%mode%.ts</string>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
</param>
<param>
  <value>
    <int>0</int>
  </value>
```

```
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <int>22</int>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

20. configuration.package.add

This method allows you to create individual packages with specific output sources, audio map names, and other package configuration parameters.

Method Help Text

```
Help:
This method creates a package.
NOTE: If package-level redundancy is in use, packaging configuration,
including the Name, must match on both Packagers in the same N+1 redundancy
group.
```

Return Value

```
Return:
```

```
int:The DB return code
```

Parameter Descriptors (39)

Refer to Table 19 for a complete list of parameter descriptors.

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`username`	string	n/a	Enter user name
`password`	string	n/a	Enter user password
`name`	string	n/a	Enter unique identifier for the package. Must contain only alphanumeric characters; periods, underscores and hyphens are allowed. Up to 90 characters is allowed.
`packageType`	integer	1 = Apple HLS 2 = MSS - remote 3 = MPEG Dash (ISO) 4 = RGB pkgr asset 5 = Adobe HDS 6 = Adobe RTMP 7 = MSS 8 = Adobe HLS-HTTP 9 = MPEG Dash-HTTP	Enter the *Numeric Selector* representing the type of distribution to use for the package. Choices for this release include **Apple HTTP Live Streaming**, **Microsoft Smooth Streaming - remote**, **MPEG Dash**, **Adobe HTTP Dynamic Streaming**, **Adobe RTMP**, **RGB packager asset, Microsoft Smooth Streaming,** and **Adobe HTTP Dynamic Streaming - HTTP File Format**. ***Note:*** When *MPEG Dash TS - HTTP File Format* is used for the *Package Type* in conjunction with MPEG Dash JITP ingest and playback, the *Segment Duration* number in this field must be set to match the playback type. If HLS, HDS, or MSS is the intended playback, the Segment Duration (2 or 4 seconds) should be set to match the transcoder feeding *Packager*.
`packageMode`	integer	1 = live 2 = vod 4 = continuous-record	Enter the *Numeric Selector* representing the mode of distribution to use for the package: either (1) **live** or (2) **vod**. Choices depend upon `packageType`[a] entry. • Choose either **live** or **vod**: For *Apple HTTP Live Streaming, Microsoft Smooth Streaming***,** *Adobe HTTP Dynamic Streaming, and MPEG Dash TS - HTTP File Format***.** For these modes above, the **Segment Life Span** field appears for **live**. • Only choice is **live**: For *Microsoft Smooth Streaming - remote, MPEG Dash ISO, Adobe RTMP,* and *Adobe HTTP Dynamic Streaming - HTTP File Format.* • Only choice is **vod**: For *RGB packager asset*

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`duration`	integer	0 = never stop 1 to 65535	Period in seconds after which the package will stop after being started.
`segmentMode`	integer	0 = none 1 = IDR 2 = IDR periodic 3 = RAI 4 = RAI periodic 5 = EBP Frag 6 = EBP Frag periodic 7 = EBP Seg 8 = EBP Seg periodic	Enter the *Numeric Selector* representing the type of segmentation to use for the package. Choices include: • **IDR**—A segment file is built on each IDR frame. • **IDR periodic**—A segment file is built on the first IDR frame after the time frame specified in the **Segment Duration** field. • **RAI**—A segment file is built on each RAI flag (Random Access Indicator). • **RAI periodic**—A segment file is built on the first RAI flag after the time frame specified in the **Segment Duration** field. • **EBP Frag**—A segment file is built on each EBP (Encoder Boundary Point) fragment.[b] • **EBP Frag periodic**[c]—A segment file is built on the first EBP fragment after the time frame specified in the **Segment Duration** field. • **EBP Seg**—A segment file is built on each EBP segment. **EBP Seg periodic**—A segment file is built on the first EBP segment after the time frame specified in the **Segment Duration** field.
`segmentDuration`	integer	0 to 10	Enter the time frame (in seconds) for each segment. • The first frame for each segment is an IDR frame. • The segment duration specified with periodic modes is not an absolute, but a minimum target. • The final duration will be based on how far the IDR frame, RAI flag, or EBP marker is from the segment duration. For example: an IDR periodic segment duration of 3 seconds with incoming IDRs at 2-second intervals will produce 4-second segments.
`segmentLifeSpan`	integer	0 to 18000	**Only for Live mode.** The time a live segment will appear in the playlist manifest. This option only appears when **live** is selected from the **Package Mode** field (except for **Microsoft Smooth Streaming - remote,** for which *Segment Life Span* is controlled by the remote server.).

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`redundancyMode`	integer	0 = none 1 = single output 2 = duplicate output	When using package-level redundancy, select how the Packagers in the same N+1 redundancy group will handle their output. Choices are: **none** — the package will not use redundancy. **duplicate output** — both *Packager*s will publish their own output synchronized together to separate locations. Option available for *live* mode. **single output**[d] — in single output mode, only one *Packager* will output each feed to a single location while the other *Packager*'s corresponding feed will be muted. Option available for *VOD* and *continuous record* modes.
`redundancyPeer`	string	n/a	When using package-level redundancy, enter the IP address or hostname of the redundant *Packager*'s management interface hosting the redundant (and identically configured) package. Up to 72 characters max.
`inputType`	integer	1 = stream 0 = file	Indicate whether the input media is file- or stream-based.
`inputID`	integer		The input directory or input group (stream) from which to receive content.

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description

infileName	string	n/a	You can only configure this when inputType is set to file. Enter the name of the input group file specified with a file path that is relative to the location of the PCK file. The relative file path allows you to move the entire sub-directory without having to change the PCK file. The input group file is a simple text file pointing at the location of each input file part of the group with a few fields.
			Following is an example of a system auto-generated input group file.
			`# Manifest for Package: NewPCK`
			`# Recording Started: Tue May 1 16:38:21 2012`
			`Version:1`
			`SegmentMode:IDR`
			`GroupName:NewPCK`
			`# (Format: Path from the pck file for each video, Published video bit rate, Published audio bit rate)`
			`01/1.ts 3888951 125680`
			`02/1.ts 1711974 125718`
			The Version is 1 and the SegmentMode can be either IDR or RAI, depending upon how the material is expected to align.
			This file can be manually created for externally generated input files, or automatically generated along with an MPEG2TS straight file output session which will create a directory structure as follows in the output directory:
			`<package_name>/<group name>_S1/`
			`/<group name>_S2/`
			`/<group name>_S3/`
			`/<group name>.pck`
			<group name>.pck is the auto-generated text file to resubmit later for file ingest packaging.
			If the whole directory structure shown above was copied to an input mount, or if a mount point exists both as an input and an output, specify `<package_name>/<group name>.pck` as the input file group name.

audioMap	string	n/a	Enter the audio map profile table (set of rules) to apply to the package.

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`subDirectory`	string	n/a	For **Apple HLS, MPEG Dash ISO, RGB packager asset, Adobe HDS, Microsoft Smooth Streaming, Adobe HDS - HTTP File Format**, and **MPEG Dash TS - HTTP File Format.** Enter the name of the output sub-directory (up to 93 alphanumeric characters) after the mount point and preceding the package name. For example: `/mount/`**`sub-dir1`**`/package-name/video.ts`
`outContent1`	integer	1 = all	Enter the type of content to be output to the primary publishing point. Only option is **all**.
`outputType1`	integer	1 = stream 0 = file	Specify whether the output media is file- or stream-based. The value in this field is dependent upon the selection in the **Package Type** field. For **Microsoft Smooth Streaming - remote** and **Adobe RTMP** the output type is automatically **stream**. For all other package types, the output type is automatically **file**.
`outputID1`	integer	1 = 1st stream or dir. 2 = 2nd stream or dir. etc...	Enter the output directory or stream to which to publish content. Only the integer value of the ID number is required for this method call.
`outContent2`	integer	0 = none 1 = all 2 = media only[e] 3 = manifests only[f]	Enter the *Numeric Selector* representing the type of content to be output to a secondary publishing point: **none**, **all**, **manifests only**, or **media only**.
`outputType2`	integer	1 = stream 0 = file	Specify whether the output media for the secondary (1st alternate) publishing point is file- or stream-based.
`outputID2`	integer		Enter the output directory or stream to which to publish content for the secondary (1st alternate) publishing point.
`outContent3`	integer	0 = none 1 = all 2 = media only 3 = manifests only	Enter the *Numeric Selector* representing the type of content to be output to a tertiary (2nd alternate) publishing point: **none**, **all**, **manifests only**, or **media only**.
`outputType3`	integer	1 = stream 0 = file	Specify whether the output media for the tertiary (2nd alternate) publishing point is file- or stream-based.
`outputID3`	integer		Enter the output directory or stream to which to publish content for the tertiary (2nd alternate) publishing point.

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`syncErrorRestart`	integer	0 = false 1 = true	Selecting **true** will re-synchronize stream-based content if the streams are not synchronized. Synchronization of streams is determined using IDR frames. For example, if there are 3 streams and streams #1 and #2 have IDR frames at 0, 2, 4, 6... seconds but stream #3 has IDR frames at 0,2,4,5... seconds, then an out-of-sync stream condition has occurred. Essentially, if a player switches between streams that are not synchronized, then the video will jump because the frames will not be continuous.
`thumbnail`	integer	0 = false 1 = true	Choose whether to generate thumbnails for this package. **(1) true** = generate thumbnails for this package; **(2) false** = do not generate thumbnails If set to *true*, you must configure global output thumbnail parameters using the `configuration.output.format.thumbnail` method. Refer to the *TransAct Packager User Guide, Release 5.4* for detailed thumbnail descriptions and configuration guidelines.
`enableLinearTTML`	integer	0 = false 1 = true	For Microsoft Smooth Streaming - remote and Microsoft Smooth Streaming only. Select whether to enable subtitles on *linear* packaging output[9].

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`keyServerVendor`	integer	0 = None 1 = VerimatrixHLS 2 = BuyDRM 3 = CKM 4 = Nagra 5 = InternalHLS 6 = VerimatrixPlayready 7 = InternalFlashAccess 8 = Latens 9 = SecureMedia 10 = Conax 11 = Irdeto 12 = InternalPlayready 13 = NdsCisco 14 = RgbAPI 15 = Mezzanine 16 = KPN	Enter the *Numeric Selector* representing the Key Server to use to manage the encryption key with client players or enter 0 if the package will not use a key server. The following options are available based on Package Type selection: Apple HLS — VerimatrixHLS, CKM, Nagra, Internal HLS, Internal Flash Access, Secure Media, Conax, NdsCisco, rgbAPI, Mezzanine, and KPN. Microsoft SS - remote — Buy DRM, CKM, Verimatrix Playready, Latens, Conax, Irdeto, InternatlPlayready, rgbAPI, and KPN. Microsoft SS — BuyDRM, CKM, Verimatrix Playready, Latens, Conax, Irdeto, InternalPlayready, rgbAPI and KPN. Adobe HDS — CKM, Internal Flash Access Adobe HDS - HTTP File — CKM, Internal Flash Access The following Package Types do not have Key Server options: MPEG Dash ISO, MPEG Dash TS - HTTP File Format, RGB packager asset, Adobe HTTP Dynamic Streaming, and Adobe RTMP.
`contentId`	string	n/a	Used by some key management servers to identify the content. Example: `demo:RC001`.
`contentIdType`	integer	0 = None 1 = ROVI 2 = MERLIN 3 = PUB 4 = UUID 5 = mediaContentId 6 = recordingId	Enter the *Numeric Selector* representing the type of content. This is used by some key management servers to identify the content.
`policyId`	string	n/a	Enter a string that identifies the policies to be applied to the content. Example: `demo:P001:FIXED:EFF:NA:EXP:NA`
`keyRotation`	integer	0 = no rotation	The duration of time (in minutes) that a particular encryption key will be used. After the time period expires, a new encryption key will be used to encrypt content. Enter 0 for no rotation.
`keyResourceId`	integer		This option, while present in the API, is no longer applicable.

Table 19. configuration.package.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`keyDeletePolicy`	integer	0 = Don't delete 1 = Delete on stop	Enter the *Numeric Selector* representing whether the package will be deleted at the conclusion of packaging, or not deleted. Used by some key management servers.
`contentName`	string	n/a	Used by some key management servers (Irdeto) to identify the name of content.
`contentDescription`	string	n/a	Used by some key management servers (Irdeto) to describe content.
`subContentType`	string	n/a	Used by some key management servers (Irdeto) to identify the content.
`policyGroupId`	integer		For Irdeto: enter a 32 bit integer that identifies the policy group ID to be applied to the content.

a. The option **continuous record** is available when the *Package Type* is set to *Apple HTTP Live Streaming*. This option will record continuous content based on user-defined start and end time. However, the continuous record choice only relates to RGB's nDVR solution, which is configured from the RGB Recording Manager. In other words, this setting should not be chosen from the TransAct *Packager<Default Font>* GUI.
b. *EBP Frag* mode aligns audio track based on video track timing.
c. *EBP Frag periodic* mode aligns audio track based on video track timing.
d. Single output mode is available for HLS VOD, HLS Continuous Record, and DASH-TS VOD only in this release.
e. Applies to HLS or DASH-TS only
f. Applies to HLS or DASH-TS only
g. To configure subtitles for MSS JITP packaging output, use the `configuration.output.format.subtitle.add` method call..

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.package.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>NewPackage</string>
      </value>
    </param>
    <param>
      <value>
```

```
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>2</int>
    </value>
  </param>
  <param>
    <value>
      <int>3600</int>
    </value>
  </param>
  <param>
    <value>
      <int>2</int>
    </value>
  </param>
  <param>
    <value>
      <int>5</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <string>10.32.128.109</string>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
```

```
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string>aac_eng_Prm_all_Alt</string>
    </value>
  </param>
  <param>
    <value>
      <string>sub-directory</string>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
```

```
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
      <int>16</int>
    </value>
  </param>
  <param>
    <value>
      <string>KPN-ContentID</string>
    </value>
  </param>
  <param>
    <value>
      <int>1</int>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <int>0</int>
    </value>
  </param>
  <param>
    <value>
```

```
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>1</int>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
    </params>
  </methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <struct>
          <member>
            <name>001:1:packageID:Package ID</name>
            <value>
              <i4>1</i4>
            </value>
          </member>
          <member>
            <name>002:1:name:Name</name>
            <value>
              <string>NewPackage</string>
            </value>
```

```
            </member>
            <member>
              <name>003:1:packageType:Package Type</name>
              <value>
                <string>Apple HTTP Live Streaming(1)</string>
              </value>
            </member>
            <member>
              <name>004:1:packageMode:Package Mode</name>
              <value>
                <string>vod(2)</string>
              </value>
            </member>
            <member>
              <name>005:1:adminState:Administrative State</name>
              <value>
                <string>stopped(0)</string>
              </value>
            </member>
            <member>
              <name>006:1:operState:Operational State</name>
              <value>
                <string>unknown(0)</string>
              </value>
            </member>
            <member>
              <name>007:1:outputStream:Output Stream</name>
              <value>
                <array>
                  <data>
</data>
                </array>
              </value>
            </member>
            <member>
              <name>008:1:Configuration:Configuration</name>
              <value>
                <struct>
                  <member>
                    <name>000:1:segmentMode:Segment Mode</name>
                    <value>
                      <string>IDR periodic(2)</string>
                    </value>
                  </member>
                  <member>
                    <name>001:1:segmentDuration:Segment Duration</name>
                    <value>
                      <i4>5</i4>
                    </value>
                  </member>
```

```
<member>
  <name>002:1:segmentLifeSpan:Segment Life Span</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>003:1:redundancyMode:Redundancy Mode</name>
  <value>
    <string>single output(1)</string>
  </value>
</member>
<member>
  <name>004:1:redundancyPeer:Redundancy Peer</name>
  <value>
    <string>10.32.128.109</string>
  </value>
</member>
<member>
  <name>005:1:duration:Duration</name>
  <value>
    <i4>3600</i4>
  </value>
</member>
<member>
  <name>006:1:inputType:Input Type</name>
  <value>
    <string>stream(1)</string>
  </value>
</member>
<member>
  <name>007:1:inputID:Input ID</name>
  <value>
    <i4>1</i4>
  </value>
</member>
<member>
  <name>008:1:infileName:Input File Name</name>
  <value>
    <string>N/A</string>
  </value>
</member>
<member>
  <name>009:1:audioMap:Audio Map</name>
  <value>
    <string>aac_eng_Prm_all_Alt</string>
  </value>
</member>
<member>
  <name>010:1:subDirectory:Subdirectory Path</name>
```

```
                    <value>
                      <string>sub-directory</string>
                    </value>
                  </member>
                  <member>
                    <name>011:1:outputs:Outputs</name>
                    <value>
                      <array>
                        <data>
                          <value>
                            <struct>
                              <member>
                                <name>001:1:outputID:Output ID</name>
                                <value>
                                  <i4>1</i4>
                                </value>
                              </member>
                              <member>
                                <name>002:1:outputType:Output Type</name>
                                <value>
                                  <string>file(0)</string>
                                </value>
                              </member>
                              <member>
                                <name>003:1:outContent:Content Type</name>
                                <value>
                                  <string>all(1)</string>
                                </value>
                              </member>
                            </struct>
                          </value>
                          <value>
                            <struct>
</struct>
                          </value>
                          <value>
                            <struct>
</struct>
                          </value>
                        </data>
                      </array>
                    </value>
                  </member>
                  <member>
                    <name>012:1:thumbnail:Thumbnail</name>
                    <value>
                      <string>false(0)</string>
                    </value>
                  </member>
                  <member>
```

```
      <name>013:1:enableLinearTTML:Enable TTML</name>
      <value>
        <string>false(0)</string>
      </value>
    </member>
    <member>
      <name>014:1:keyServerVendor:Key Server Vendor Name</name>
      <value>
        <string>KPN(16)</string>
      </value>
    </member>
    <member>
      <name>015:1:keyResourceId:Key Resource ID</name>
      <value>
        <i4>0</i4>
      </value>
    </member>
    <member>
      <name>016:1:contentId:Content ID</name>
      <value>
        <string>KPN-ContentID</string>
      </value>
    </member>
    <member>
      <name>017:1:contentIdType:Content ID Type</name>
      <value>
        <string>None(0)</string>
      </value>
    </member>
    <member>
      <name>018:1:policyId:Policy ID</name>
      <value>
        <string/>
      </value>
    </member>
    <member>
      <name>019:1:keyRotation:Key Rotation</name>
      <value>
        <i4>0</i4>
      </value>
    </member>
    <member>
      <name>020:1:keyDeletePolicy:Key Deletion Policy</name>
      <value>
        <string>NoDeletion(0)</string>
      </value>
    </member>
    <member>
      <name>021:1:contentName:Content Name</name>
      <value>
```

```
                    <string/>
                  </value>
                </member>
                <member>
                  <name>022:1:contentDescription:Content Description</name>
                  <value>
                    <string/>
                  </value>
                </member>
                <member>
                  <name>023:1:subContentType:Subcontent Type</name>
                  <value>
                    <string/>
                  </value>
                </member>
                <member>
                  <name>024:1:policyGroupId:Policy Group ID</name>
                  <value>
                    <i4>0</i4>
                  </value>
                </member>
              </struct>
            </value>
          </member>
        </struct>
      </value>
    </param>
  </params>
</methodResponse>
```

21. configuration.package.remove

This method allows you to delete a currently configured package.

Method Help Text

```
Help:
This method removes a package.
```

Return Value

```
Return:
int:DB return code.
```

Parameter Descriptors (3)

Refer to Table 20 for a complete list of parameter descriptors.

Table 20. configuration.package.remove API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
packageID	integer		Enter the package ID you wish to remove.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.package.remove</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

22. configuration.package.show

This methods displays currently configured parameters for the specified package(s).

Method Help Text

```
Help:
This method shows the configuration of a package.
```

Return Value

```
Return:
nil:
```

Parameter Descriptors (4)

Refer to Table 21 for a complete list of parameter descriptors.

Table 21. configuration.package.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
packageID	integer		Enter the package ID you wish to view. 0 to list all.
Display	integer	0 = configuration 2 = status 1 = summary	Enter the *Numeric Selector* representing the type of information you want to view. You can view package configurations on the *Packager* (select **configuration**), status for a particular package (select **status**), or summarized package information (select **summary**).

Sample Request - configuration

```
<?xml version="1.0"?>
<methodCall>
```

```
  <methodName>configuration.package.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>5</int>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response - configuration

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:packageID:Package ID</name>
                  <value>
                    <i4>1</i4>
                  </value>
                </member>
                <member>
                  <name>002:1:name:Name</name>
                  <value>
                    <string>NewPackage</string>
                  </value>
                </member>
                <member>
                  <name>003:1:packageType:Package Type</name>
```

```
                    <value>
                      <string>Apple HTTP Live Streaming(1)</string>
                    </value>
                  </member>
                  <member>
                    <name>004:1:packageMode:Package Mode</name>
                    <value>
                      <string>vod(2)</string>
                    </value>
                  </member>
                  <member>
                    <name>005:1:adminState:Administrative State</name>
                    <value>
                      <string>stopped(0)</string>
                    </value>
                  </member>
                  <member>
                    <name>006:1:operState:Operational State</name>
                    <value>
                      <string>unknown(0)</string>
                    </value>
                  </member>
                  <member>
                    <name>007:1:outputStream:Output Stream</name>
                    <value>
                      <array>
                        <data>
                          <value>
                            <string>http://10.10.70.243/hlsv/1/sub-directory/
NewPackage/index.m3u8</string>
                          </value>
                        </data>
                      </array>
                    </value>
                  </member>
                  <member>
                    <name>008:1:Configuration:Configuration</name>
                    <value>
                      <struct>
                        <member>
                          <name>000:1:segmentMode:Segment Mode</name>
                          <value>
                            <string>IDR periodic(2)</string>
                          </value>
                        </member>
                        <member>
                          <name>001:1:segmentDuration:Segment Duration</name>
                          <value>
                            <i4>5</i4>
```

```
  </value>
</member>
<member>
 <name>002:1:segmentLifeSpan:Segment Life Span</name>
  <value>
    <i4>0</i4>
  </value>
</member>
<member>
  <name>003:1:redundancyMode:Redundancy Mode</name>
  <value>
    <string>single output(1)</string>
  </value>
</member>
<member>
  <name>004:1:redundancyPeer:Redundancy Peer</name>
  <value>
    <string>10.32.128.109</string>
  </value>
</member>
<member>
  <name>005:1:duration:Duration</name>
  <value>
    <i4>3600</i4>
  </value>
</member>
<member>
  <name>006:1:inputType:Input Type</name>
  <value>
    <string>stream(1)</string>
  </value>
</member>
<member>
  <name>007:1:inputID:Input ID</name>
  <value>
    <i4>1</i4>
  </value>
</member>
<member>
  <name>008:1:infileName:Input File Name</name>
  <value>
    <string>N/A</string>
  </value>
</member>
<member>
  <name>009:1:audioMap:Audio Map</name>
  <value>
    <string>aac_eng_Prm_all_Alt</string>
  </value>
</member>
```

```
                        <member>
                          <name>010:1:subDirectory:Subdirectory Path</name>
                          <value>
                            <string>sub-directory</string>
                          </value>
                        </member>
                        <member>
                          <name>011:1:outputs:Outputs</name>
                          <value>
                            <array>
                              <data>
                                <value>
                                  <struct>
                                    <member>
                                      <name>001:1:outputID:Output ID</name>
                                      <value>
                                        <i4>1</i4>
                                      </value>
                                    </member>
                                    <member>
                                    <name>002:1:outputType:Output Type</name>
                                      <value>
                                        <string>file(0)</string>
                                      </value>
                                    </member>
                                    <member>
                                   <name>003:1:outContent:Content Type</name>
                                      <value>
                                        <string>all(1)</string>
                                      </value>
                                    </member>
                                  </struct>
                                </value>
                                <value>
                                  <struct>
</struct>
                                </value>
                                <value>
                                  <struct>
</struct>
                                </value>
                              </data>
                            </array>
                          </value>
                        </member>
                        <member>
                          <name>012:1:thumbnail:Thumbnail</name>
                          <value>
                            <string>false(0)</string>
                          </value>
```

```
                        </member>
                        <member>
                          <name>013:1:enableLinearTTML:Enable TTML</name>
                          <value>
                            <string>false(0)</string>
                          </value>
                        </member>
                        <member>
                         <name>014:1:keyServerVendor:Key Server Vendor Name</
name>
                          <value>
                            <string>KPN(16)</string>
                          </value>
                        </member>
                        <member>
                          <name>015:1:keyResourceId:Key Resource ID</name>
                          <value>
                            <i4>0</i4>
                          </value>
                        </member>
                        <member>
                          <name>016:1:contentId:Content ID</name>
                          <value>
                            <string>KPN-ContentID</string>
                          </value>
                        </member>
                        <member>
                          <name>017:1:contentIdType:Content ID Type</name>
                          <value>
                            <string>None(0)</string>
                          </value>
                        </member>
                        <member>
                          <name>018:1:policyId:Policy ID</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                          <name>019:1:keyRotation:Key Rotation</name>
                          <value>
                            <i4>0</i4>
                          </value>
                        </member>
                        <member>
                          <name>020:1:keyDeletePolicy:Key Deletion Policy</
name>
                          <value>
                            <string>NoDeletion(0)</string>
                          </value>
```

```
                        </member>
                        <member>
                          <name>021:1:contentName:Content Name</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                         <name>022:1:contentDescription:Content Description</
name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                          <name>023:1:subContentType:Subcontent Type</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                          <name>024:1:policyGroupId:Policy Group ID</name>
                          <value>
                            <i4>0</i4>
                          </value>
                        </member>
                      </struct>
                    </value>
                  </member>
                </struct>
              </value>
              <value>
                <struct>
                  <member>
                    <name>001:1:packageID:Package ID</name>
                    <value>
                      <i4>3</i4>
                    </value>
                  </member>
                  <member>
                    <name>002:1:name:Name</name>
                    <value>
                      <string>JaxTest</string>
                    </value>
                  </member>
                  <member>
                    <name>003:1:packageType:Package Type</name>
                    <value>
                      <string>Apple HTTP Live Streaming(1)</string>
                    </value>
```

```
                    </member>
                    <member>
                      <name>004:1:packageMode:Package Mode</name>
                      <value>
                        <string>continuous-record(4)</string>
                      </value>
                    </member>
                    <member>
                      <name>005:1:adminState:Administrative State</name>
                      <value>
                        <string>stopped(0)</string>
                      </value>
                    </member>
                    <member>
                      <name>006:1:operState:Operational State</name>
                      <value>
                        <string>unknown(0)</string>
                      </value>
                    </member>
                    <member>
                      <name>007:1:outputStream:Output Stream</name>
                      <value>
                        <array>
                          <data>
</data>
                        </array>
                      </value>
                    </member>
                    <member>
                      <name>008:1:Configuration:Configuration</name>
                      <value>
                        <struct>
                          <member>
                            <name>000:1:segmentMode:Segment Mode</name>
                            <value>
                              <string>IDR periodic(2)</string>
                            </value>
                          </member>
                          <member>
                            <name>001:1:segmentDuration:Segment Duration</name>
                            <value>
                              <i4>5</i4>
                            </value>
                          </member>
                          <member>
                           <name>002:1:segmentLifeSpan:Segment Life Span</name>
                            <value>
                              <i4>0</i4>
                            </value>
                          </member>
```

```
<member>
  <name>003:1:redundancyMode:Redundancy Mode</name>
  <value>
    <string>single output(1)</string>
  </value>
</member>
<member>
  <name>004:1:redundancyPeer:Redundancy Peer</name>
  <value>
    <string>10.32.128.109</string>
  </value>
</member>
<member>
  <name>005:1:duration:Duration</name>
  <value>
    <i4>1800</i4>
  </value>
</member>
<member>
  <name>006:1:inputType:Input Type</name>
  <value>
    <string>stream(1)</string>
  </value>
</member>
<member>
  <name>007:1:inputID:Input ID</name>
  <value>
    <i4>1</i4>
  </value>
</member>
<member>
  <name>008:1:infileName:Input File Name</name>
  <value>
    <string>N/A</string>
  </value>
</member>
<member>
  <name>009:1:audioMap:Audio Map</name>
  <value>
    <string>aac_eng_Prm_all_Alt</string>
  </value>
</member>
<member>
  <name>010:1:subDirectory:Subdirectory Path</name>
  <value>
    <string/>
  </value>
</member>
<member>
  <name>011:1:outputs:Outputs</name>
```

```
                        <value>
                          <array>
                            <data>
                              <value>
                                <struct>
                                  <member>
                                    <name>001:1:outputID:Output ID</name>
                                    <value>
                                      <i4>1</i4>
                                    </value>
                                  </member>
                                  <member>
                                  <name>002:1:outputType:Output Type</name>
                                    <value>
                                      <string>file(0)</string>
                                    </value>
                                  </member>
                                  <member>
                                   <name>003:1:outContent:Content Type</name>
                                    <value>
                                      <string>all(1)</string>
                                    </value>
                                  </member>
                                </struct>
                              </value>
                              <value>
                                <struct>
</struct>
                              </value>
                              <value>
                                <struct>
</struct>
                              </value>
                            </data>
                          </array>
                        </value>
                      </member>
                      <member>
                        <name>012:1:thumbnail:Thumbnail</name>
                        <value>
                          <string>false(0)</string>
                        </value>
                      </member>
                      <member>
                        <name>013:1:enableLinearTTML:Enable TTML</name>
                        <value>
                          <string>false(0)</string>
                        </value>
                      </member>
                      <member>
```

```
                          <name>014:1:keyServerVendor:Key Server Vendor Name</
name>
                            <value>
                              <string>None(0)</string>
                            </value>
                          </member>
                          <member>
                            <name>015:1:keyResourceId:Key Resource ID</name>
                            <value>
                              <i4>0</i4>
                            </value>
                          </member>
                          <member>
                            <name>016:1:contentId:Content ID</name>
                            <value>
                              <string/>
                            </value>
                          </member>
                          <member>
                            <name>017:1:contentIdType:Content ID Type</name>
                            <value>
                              <string>None(0)</string>
                            </value>
                          </member>
                          <member>
                            <name>018:1:policyId:Policy ID</name>
                            <value>
                              <string/>
                            </value>
                          </member>
                          <member>
                            <name>019:1:keyRotation:Key Rotation</name>
                            <value>
                              <i4>0</i4>
                            </value>
                          </member>
                          <member>
                            <name>020:1:keyDeletePolicy:Key Deletion Policy</
name>
                            <value>
                              <string>NoDeletion(0)</string>
                            </value>
                          </member>
                          <member>
                            <name>021:1:contentName:Content Name</name>
                            <value>
                              <string/>
                            </value>
                          </member>
                          <member>
```

```
                        <name>022:1:contentDescription:Content Description</
name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                          <name>023:1:subContentType:Subcontent Type</name>
                          <value>
                            <string/>
                          </value>
                        </member>
                        <member>
                          <name>024:1:policyGroupId:Policy Group ID</name>
                          <value>
                            <i4>0</i4>
                          </value>
                        </member>
                      </struct>
                    </value>
                  </member>
                </struct>
              </value>
            </data>
          </array>
        </value>
      </param>
    </params>
</methodResponse>
```

23. configuration.package.start

This method starts package processing for the specified package(s).

Method Help Text

Help:

```
This method starts a package.
```

Return Value

Return:

```
nil:
```

Parameter Descriptors (3)

Refer to Table 22 for a complete list of parameter descriptors.

Table 22. configuration.package.start API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
packageID	integer		Enter the package ID you wish to start.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.package.start</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

24. configuration.package.stop

This method stops processing for the specified package(s).

Method Help Text

```
Help:
This method stops a packaging session.
```

Return Value

```
Return:
nil:
```

Parameter Descriptors (3)

Refer to Table 23 for a complete list of parameter descriptors.

Table 23. configuration.package.stop API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
packageID	integer		Enter the package ID you wish to stop.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.package.stop</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <int>1</int>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

25. configuration.session.show

This method shows all current segments being generated for *Packager* and the state of each stream associated with the segment (package). You can optionally include to display JITP segments as well.

Method Help Text

```
Help:
This method returns one or more session information as requested.
Paging only applies when retrieving all sessions.
Dynamic and Paging values are ignored when retrieving a specific session ID.
```

Return Value

```
Return:
array:Requested session(s) info
```

Parameter Descriptors (7)

Refer to Table 24 for a complete list of parameter descriptors.

Table 24. configuration.session.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
sessionID	integer	0 = retrieve all sessions	Enter the ID assigned to the session by the *Packager*.
showJITP	integer	0 = false 1 = true	Enter whether to show Just-in-Time packaging sessions in the results: true or false.
pageSize	integer	0 = display on 1 page	Enter how many entries to retrieve and display on one results page. Enter 0 to display all results on one page.
pageSessionStart	integer	0 = retrieve 1st available	Enter the session ID from which to retrieve results. Enter 0 to retrieve results from the first available session ID.
workorderID	integer	0 = retrieve all	Enter the workorder ID from which to retrieve results. Enter 0 to retrieve results from all sessions.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>configuration.session.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
```

```
        </value>
      </param>
      <param>
        <value>
          <string>ripcode!</string>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:state:State</name>
                  <value>
                    <string>inProgress(3)</string>
```

```
                    </value>
                  </member>
                  <member>
                    <name>002:1:sessionID:Session ID</name>
                    <value>
                      <i4>1</i4>
                    </value>
                  </member>
                  <member>
                    <name>003:1:workorderID:Workorder ID</name>
                    <value>
                      <i4>7</i4>
                    </value>
                  </member>
                  <member>
                    <name>004:1:timeStarted:Time Started</name>
                    <value>
                      <string>Fri Jun 27 01:33:16 2014
</string>
                    </value>
                  </member>
                  <member>
                    <name>005:1:workflowName:Workflow Name</name>
                    <value>
                      <string>Package 1/Group 1</string>
                    </value>
                  </member>
                  <member>
                    <name>006:1:infileName:Input File Name</name>
                    <value>
                      <string>hds</string>
                    </value>
                  </member>
                  <member>
                    <name>007:1:Input:Input</name>
                    <value>
                      <i4>1</i4>
                    </value>
                  </member>
                  <member>
                    <name>008:1:redundancyMode:Redundancy Mode</name>
                    <value>
                      <string>Primary</string>
                    </value>
                  </member>
                  <member>
                    <name>009:1:redundancyPeer:Redundancy Peer</name>
                    <value>
                      <string>0.0.0.0</string>
                    </value>
```

```
                    </member>
                    <member>
                      <name>009:3:workorderStep:Workorder Step</name>
                      <value>
                        <array>
                          <data>
                            <value>
                              <struct>
                                <member>
                                  <name>001:3:stepState:Step State</name>
                                  <value>
                                    <string>inProgress(3)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>002:3:stepType:Step Type</name>
                                  <value>
                                    <string>encode(2)</string>
                                  </value>
                                </member>
                                <member>
                                  <name>003:3:transcoderID:Transcoder ID</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>004:3:totalFramesTranscoded:Total Frames
Transcoded</name>
                                  <value>
                                    <i4>39421</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>005:3:segmentCnt:Segment Generated</name>
                                  <value>
                                    <i4>245</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>006:3:totalFrames:Total Frames</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>007:3:maxQueueDepth:Maximum Queue Depth</
name>
                                  <value>
                                    <i4>0</i4>
```

```
                                  </value>
                                </member>
                                <member>
                               <name>008:3:currQueueDepth:Current Queue Depth</
name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>009:3:framesPerSec:Frames Per Second</
name>
                                  <value>
                                    <string>29.580 / 29.970</string>
                                  </value>
                                </member>
                                <member>
                                 <name>010:3:bitRateStats:Bit Rate Stats</name>
                                  <value>
                                    <string>2299215 / 2904000</string>
                                  </value>
                                </member>
                                <member>
                                  <name>011:3:transport:Transport/Usage</name>
                                  <value>
                                    <string>file(1)</string>
                                  </value>
                                </member>
                                <member>
                                <name>012:3:outfileName:Output File Name</name>
                                  <value>
                                    <string>/hds</string>
                                  </value>
                                </member>
                                <member>
                                  <name>013:1:output:Output</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>014:1:inSync:In Sync</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>015:1:retry:Retry Count</name>
                                  <value>
                                    <i4>0</i4>
```

```
                                </value>
                              </member>
                              <member>
                                <name>016:1:publishing:Publishing</name>
                                <value>
                                  <string>true(1)</string>
                                </value>
                              </member>
                            </struct>
                          </value>
                        </data>
                      </array>
                    </value>
                  </member>
                </struct>
              </value>
              <value>
                <struct>
                  <member>
                    <name>001:1:state:State</name>
                    <value>
                      <string>inProgress(3)</string>
                    </value>
                  </member>
                  <member>
                    <name>002:1:sessionID:Session ID</name>
                    <value>
                      <i4>2</i4>
                    </value>
                  </member>
                  <member>
                    <name>003:1:workorderID:Workorder ID</name>
                    <value>
                      <i4>8</i4>
                    </value>
                  </member>
                  <member>
                    <name>004:1:timeStarted:Time Started</name>
                    <value>
                      <string>Fri Jun 27 01:33:17 2014
</string>
                    </value>
                  </member>
                  <member>
                    <name>005:1:workflowName:Workflow Name</name>
                    <value>
                      <string>Package 2/Group 1</string>
                    </value>
                  </member>
                  <member>
```

```
    <name>006:1:infileName:Input File Name</name>
    <value>
      <string>HLS</string>
    </value>
  </member>
  <member>
    <name>007:1:Input:Input</name>
    <value>
      <i4>1</i4>
    </value>
  </member>
  <member>
    <name>008:1:redundancyMode:Redundancy Mode</name>
    <value>
      <string>Primary</string>
    </value>
  </member>
  <member>
    <name>009:1:redundancyPeer:Redundancy Peer</name>
    <value>
      <string>0.0.0.0</string>
    </value>
  </member>
  <member>
    <name>009:3:workorderStep:Workorder Step</name>
    <value>
      <array>
        <data>
          <value>
            <struct>
              <member>
                <name>001:3:stepState:Step State</name>
                <value>
                  <string>inProgress(3)</string>
                </value>
              </member>
              <member>
                <name>002:3:stepType:Step Type</name>
                <value>
                  <string>encode(2)</string>
                </value>
              </member>
              <member>
                <name>003:3:transcoderID:Transcoder ID</name>
                <value>
                  <i4>2</i4>
                </value>
              </member>
              <member>
```

```
                                <name>004:3:totalFramesTranscoded:Total Frames
Transcoded</name>
                                  <value>
                                    <i4>39199</i4>
                                  </value>
                                </member>
                                <member>
                                 <name>005:3:segmentCnt:Segment Generated</name>
                                  <value>
                                    <i4>245</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>006:3:totalFrames:Total Frames</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                 <name>007:3:maxQueueDepth:Maximum Queue Depth</
name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                               <name>008:3:currQueueDepth:Current Queue Depth</
name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>009:3:framesPerSec:Frames Per Second</
name>
                                  <value>
                                    <string>0.000 / 29.970</string>
                                  </value>
                                </member>
                                <member>
                                 <name>010:3:bitRateStats:Bit Rate Stats</name>
                                  <value>
                                    <string>0 / 2904000</string>
                                  </value>
                                </member>
                                <member>
                                  <name>011:3:transport:Transport/Usage</name>
                                  <value>
                                    <string>file(1)</string>
                                  </value>
```

```
                    </member>
                    <member>
                    <name>012:3:outfileName:Output File Name</name>
                      <value>
                        <string>/HLS</string>
                      </value>
                    </member>
                    <member>
                      <name>013:1:output:Output</name>
                      <value>
                        <i4>0</i4>
                      </value>
                    </member>
                    <member>
                      <name>014:1:inSync:In Sync</name>
                      <value>
                        <i4>1</i4>
                      </value>
                    </member>
                    <member>
                      <name>015:1:retry:Retry Count</name>
                      <value>
                        <i4>0</i4>
                      </value>
                    </member>
                    <member>
                      <name>016:1:publishing:Publishing</name>
                      <value>
                        <string>true(1)</string>
                      </value>
                    </member>
                  </struct>
                </value>
              </data>
            </array>
          </value>
        </member>
      </struct>
    </value>
    <value>
      <struct>
        <member>
          <name>001:1:state:State</name>
          <value>
            <string>inProgress(3)</string>
          </value>
        </member>
        <member>
          <name>002:1:sessionID:Session ID</name>
          <value>
```

```
                    <i4>3</i4>
                  </value>
                </member>
                <member>
                  <name>003:1:workorderID:Workorder ID</name>
                  <value>
                    <i4>9</i4>
                  </value>
                </member>
                <member>
                  <name>004:1:timeStarted:Time Started</name>
                  <value>
                    <string>Fri Jun 27 01:33:18 2014
</string>
                  </value>
                </member>
                <member>
                  <name>005:1:workflowName:Workflow Name</name>
                  <value>
                    <string>Package 3/Group 1</string>
                  </value>
                </member>
                <member>
                  <name>006:1:infileName:Input File Name</name>
                  <value>
                    <string>HLS-DO</string>
                  </value>
                </member>
                <member>
                  <name>007:1:Input:Input</name>
                  <value>
                    <i4>1</i4>
                  </value>
                </member>
                <member>
                  <name>008:1:redundancyMode:Redundancy Mode</name>
                  <value>
                    <string>Primary</string>
                  </value>
                </member>
                <member>
                  <name>009:1:redundancyPeer:Redundancy Peer</name>
                  <value>
                    <string>0.0.0.0</string>
                  </value>
                </member>
                <member>
                  <name>009:3:workorderStep:Workorder Step</name>
                  <value>
                    <array>
```

```
                        <data>
                          <value>
                            <struct>
                              <member>
                                <name>001:3:stepState:Step State</name>
                                <value>
                                  <string>inProgress(3)</string>
                                </value>
                              </member>
                              <member>
                                <name>002:3:stepType:Step Type</name>
                                <value>
                                  <string>encode(2)</string>
                                </value>
                              </member>
                              <member>
                                <name>003:3:transcoderID:Transcoder ID</name>
                                <value>
                                  <i4>3</i4>
                                </value>
                              </member>
                              <member>
                               <name>004:3:totalFramesTranscoded:Total Frames
Transcoded</name>
                                <value>
                                  <i4>39199</i4>
                                </value>
                              </member>
                              <member>
                               <name>005:3:segmentCnt:Segment Generated</name>
                                <value>
                                  <i4>245</i4>
                                </value>
                              </member>
                              <member>
                                <name>006:3:totalFrames:Total Frames</name>
                                <value>
                                  <i4>0</i4>
                                </value>
                              </member>
                              <member>
                               <name>007:3:maxQueueDepth:Maximum Queue Depth</
name>
                                <value>
                                  <i4>0</i4>
                                </value>
                              </member>
                              <member>
                              <name>008:3:currQueueDepth:Current Queue Depth</
name>
```

```
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>009:3:framesPerSec:Frames Per Second</
name>
                                  <value>
                                    <string>0.000 / 29.970</string>
                                  </value>
                                </member>
                                <member>
                                 <name>010:3:bitRateStats:Bit Rate Stats</name>
                                  <value>
                                    <string>0 / 2904000</string>
                                  </value>
                                </member>
                                <member>
                                  <name>011:3:transport:Transport/Usage</name>
                                  <value>
                                    <string>file(1)</string>
                                  </value>
                                </member>
                                <member>
                                <name>012:3:outfileName:Output File Name</name>
                                  <value>
                                    <string>/HLS-DO</string>
                                  </value>
                                </member>
                                <member>
                                  <name>013:1:output:Output</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>014:1:inSync:In Sync</name>
                                  <value>
                                    <i4>1</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>015:1:retry:Retry Count</name>
                                  <value>
                                    <i4>0</i4>
                                  </value>
                                </member>
                                <member>
                                  <name>016:1:publishing:Publishing</name>
                                  <value>
```

```
                                    <string>true(1)</string>
                                  </value>
                                </member>
                              </struct>
                            </value>
                          </data>
                        </array>
                      </value>
                    </member>
                  </struct>
                </value>
              </data>
            </array>
          </value>
        </param>
      </params>
    </methodResponse>
```

26. sysconfig.database.threshold.set

This method allows you to set high watermark threshold levels for system events, including percent of CPU utilization, percent of memory utilization, percent of disk utilization, percent of network utilization, and UDP error threshold limits.

Method Help Text

```
Help:
This method sets high watermark threshold levels for system events.
```

Return Value

```
Return:
int:Return code.
```

Parameter Descriptors (6)

Refer to Table 25 for a complete list of parameter descriptors.

Table 25. sysconfig.database.threshold.set API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
cpu	integer	1 to 100	Enter the high threshold for CPU utilization from 1-100 percent.
memory	integer	1 to 100	Enter the high threshold for memory utilization from 1-100 percent.
disk	integer	1 to 100	Enter the high threshold for system disk utilization from 1-100 percent.
network	integer	1 to 100	Enter the high threshold for network utilization from 1-100 percent.
udpErrors	integer	0 to 2147483647	Enter the high threshold for UDP error counts over an interval. The value is an integer designating the number of UDP error counts.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>sysconfig.database.threshold.set</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
```

```
        <value>
          <string>ripcode!</string>
        </value>
      </param>
      <param>
        <value>
          <int>90</int>
        </value>
      </param>
      <param>
        <value>
          <int>85</int>
        </value>
      </param>
      <param>
        <value>
          <int>92</int>
        </value>
      </param>
      <param>
        <value>
          <int>80</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
    </params>
  </methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

27. sysconfig.keyserver.add

This method allows you to configure key servers for *Packager* that manage encryption keys with client players.

Method Help Text

Help:
`This method adds a keyserver.`

Return Value

Return:
`int:DB return code.`

Parameter Descriptors (18)

Refer to Table 26 for a complete list of parameter descriptors.

Table 26. sysconfig.keyserver.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`username`	string	n/a	Enter user name
`password`	string	n/a	Enter user password
`KeyServerUrl`	string	n/a	**Only applies when BuyDRM, CKM, Verimatrix or Nagra are chosen.** The URL where the key server is running.
`tcpPort`	integer	0 to 65535	**Only appears when Verimatrix, CKM, Nagra, NdsCisco, RgbAPI, or KPN are chosen.** Enter the port number under which the key server is running on the URL provided.
`keyServerVendor`	integer	1 = VerimatrixHLS 2 = BuyDRM 3 = CKM 4 = Nagra 5 = InternalHLS 6 = VerimatrixPlayready 7 = InternalFlashAccess 8 = Latens 9 = SecureMedia 10 = Conax 11 = Irdeto 12 = InternalPlayready 13 = NdsCisco 14 = RgbAPI 15 = Mezzanine 16 = KPN	Enter the Numeric Selector representing the name of the vendor for the key server you are adding.

Table 26. sysconfig.keyserver.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`KeyServerUserKey`	string	n/a	**Only applies when BuyDRM is chosen.** Enter an authentication key sent during registration from the key server.
`ClientCertFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the key server certificate used for authenticating the client.
`ClientKeyFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the private key used for authenticating the client.
`ClientKeyPass`	string	n/a	**Only applies when CKM is chosen.** Enter the password for the private key that is used to authenticate the client.
`TrustBundleFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the Trust Bundle used with CKM authentication.
`accountId`	string	n/a	**Only applies when Irdeto is chosen.** Enter the account ID used in conjunction with the Irdeto key.
`UserName`	string	n/a	**Only applies when Conax, Irdeto, or KPN is chosen.** Enter the user name to use for logging in to the key server.
`UserPassword`	string	n/a	**Only applies when Conax, Irdeto, or KPN is chosen.** Enter the user password to use for logging in to the key server.

`BaseClientKeyURL`	string	n/a	**Only applies when InternalHLS[a], InternalFlashAccess, or InternalPlayready is chosen.** Enter the URL from which the client should request a key. Syntax as follows:
			`http://<hostname or IP address>/<subdirectory>`
			e.g.
			`http://10.10.5.6/HlsKeys`
			-or-
			`http://KeyHost/HlsKeys`

`outputType`	integer	0 = file 1 = stream	**Only applies when InternalHLS is chosen.** Select **file** if *Packager* is serving keys, or if key files are being stored on a remote nfs/cifs mount. Select **stream** if key files are to be sent to a remote HLS Key Server via Webdav or edgeware.
`outputID`	integer		**Only applies when InternalHLS is chosen.** Enter 0 if *Packager* is serving keys; otherwise pick the desired output directory. For example, *1 U OutDir*.

Table 26. sysconfig.keyserver.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
`KeyServerUserKey`	string	n/a	**Only applies when BuyDRM is chosen.** Enter an authentication key sent during registration from the key server.
`ClientCertFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the key server certificate used for authenticating the client.
`ClientKeyFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the private key used for authenticating the client.
`ClientKeyPass`	string	n/a	**Only applies when CKM is chosen.** Enter the password for the private key that is used to authenticate the client.
`TrustBundleFile`	string	n/a	**Only applies when CKM is chosen.** Enter the URL for downloading the Trust Bundle used with CKM authentication.
`accountId`	string	n/a	**Only applies when Irdeto is chosen.** Enter the account ID used in conjunction with the Irdeto key.
`UserName`	string	n/a	**Only applies when Conax, Irdeto, or KPN is chosen.** Enter the user name to use for logging in to the key server.
`UserPassword`	string	n/a	**Only applies when Conax, Irdeto, or KPN is chosen.** Enter the user password to use for logging in to the key server.

`BaseClientKeyURL`	string	n/a	**Only applies when InternalHLS[a], InternalFlashAccess, or InternalPlayready is chosen.** Enter the URL from which the client should request a key. Syntax as follows:
			`http://<hostname or IP address>/<subdirectory>`
			e.g.
			`http://10.10.5.6/HlsKeys`
			-or-
			`http://KeyHost/HlsKeys`

`outputType`	integer	0 = file 1 = stream	**Only applies when InternalHLS is chosen.** Select **file** if *Packager* is serving keys, or if key files are being stored on a remote nfs/cifs mount. Select **stream** if key files are to be sent to a remote HLS Key Server via Webdav or edgeware.
`outputID`	integer		**Only applies when InternalHLS is chosen.** Enter 0 if *Packager* is serving keys; otherwise pick the desired output directory. For example, *1 U OutDir*.

Table 26. sysconfig.keyserver.add API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description

`subDirectory`	string	n/a	**When Internal is chosen:** Enter the subdirectory on the output mount where where *Packager* will place the key files.
			When InternalHLS is chosen: Enter the subdirectory in the output mount. This entry should match the subdirectory configured in the *Client key request URL* field. Syntax as follows:
			`<subdirectory>`
			e.g.
			`<HlsKeys>`

`keySeed`	string	n/a	**Only applies when InternalPlayready is chosen.** Enter the Playready key seed.

a. InternalHLS has been optimized for small-scale deployments such as lab environments, demo systems, etc.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>sysconfig.keyserver.add</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>http://iisrgbistestesting.mytest.com/livedrmservice/
livedrmservice.asmx</string>
      </value>
    </param>
    <param>
      <value>
        <int>0</int>
      </value>
    </param>
    <param>
      <value>
        <int>11</int>
```

```
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
    <value>
      <string>RGBencrypt</string>
    </value>
  </param>
  <param>
    <value>
      <string>admin@Demo.com</string>
    </value>
  </param>
  <param>
    <value>
      <string>RGBdemo234</string>
    </value>
  </param>
  <param>
    <value>
      <string/>
    </value>
  </param>
  <param>
```

```
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <int>0</int>
        </value>
      </param>
      <param>
        <value>
          <string/>
        </value>
      </param>
    </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

28. sysconfig.keyserver.remove

This method removes an existing key server from *Packager*'s configuration.

Method Help Text

```
Help:
This method removes a key server.
```

Return Value

```
Return:
int:DB return code.
```

Parameter Descriptors (3)

Refer to Table 27 for a complete list of parameter descriptors.

Table 27. sysconfig.keyserver.remove API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
KeyServerUrl	string	n/a	Enter the URL of the key server you wish to remove.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>sysconfig.keyserver.remove</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>http://vcas3.rgbnetworks.com/CAB/keyfile</string>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

29. sysconfig.keyserver.show

This method displays all configured key server information for *Packager*.

Method Help Text

```
Help:
This method shows key server data.
```

Return Value

```
Return:
nil:
```

Parameter Descriptors (3)

Refer to Table 28 for a complete list of parameter descriptors.

Table 28. sysconfig.keyserver.show API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password
KeyServerUrl	string	n/a	Enter the URL of the key server whose information you wish to view.

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>sysconfig.keyserver.show</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string/>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <array>
          <data>
            <value>
              <struct>
                <member>
                  <name>001:1:KeyServerUrl:Key Server URL</name>
                  <value>
                    <string>http://74.62.179.10/CAB/keyfile</string>
                  </value>
                </member>
                <member>
                  <name>002:1:tcpPort:TCP port number</name>
                  <value>
                    <i4>12684</i4>
                  </value>
                </member>
                <member>
                  <name>003:1:keyServerVendor:Key Server Vendor Name</name>
                  <value>
                    <string>VerimatrixHLS</string>
                  </value>
                </member>
                <member>
                  <name>004:1:UserKey:UserKey</name>
                  <value>
                    <string/>
                  </value>
                </member>
                <member>
                  <name>005:1:ClientCertFile:Client Certificate</name>
                  <value>
                    <string/>
                  </value>
                </member>
                <member>
                  <name>006:1:ClientKeyFile:Client Key</name>
                  <value>
                    <string/>
                  </value>
                </member>
                <member>
                  <name>007:1:ClientKeyPass:Client Key Password</name>
                  <value>
```

```
      <string>****</string>
    </value>
  </member>
  <member>
    <name>008:1:TrustBundleFile:Trust Bundle</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
   <name>009:1:BaseClientKeyURL:Client key request URL</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>010:1:outputType:Output Type</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>011:1:outputID:Output ID</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>012:1:subDirectory:Subdirectory Path</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>013:1:accountId:Account ID</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>014:1:UserName:User Name</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>015:1:UserPassword:User Password</name>
    <value>
      <string>****</string>
    </value>
```

```
      </member>
      <member>
        <name>016:1:keySeed:Playready key seed</name>
        <value>
          <string/>
        </value>
      </member>
    </struct>
  </value>
  <value>
    <struct>
      <member>
        <name>001:1:KeyServerUrl:Key Server URL</name>
        <value>
        <string>http://vcas3.rgbnetworks.com/CAB/keyfile</string>
        </value>
      </member>
      <member>
        <name>002:1:tcpPort:TCP port number</name>
        <value>
          <i4>12684</i4>
        </value>
      </member>
      <member>
        <name>003:1:keyServerVendor:Key Server Vendor Name</name>
        <value>
          <string>VerimatrixHLS</string>
        </value>
      </member>
      <member>
        <name>004:1:UserKey:UserKey</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>005:1:ClientCertFile:Client Certificate</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>006:1:ClientKeyFile:Client Key</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>007:1:ClientKeyPass:Client Key Password</name>
        <value>
```

```
      <string>****</string>
    </value>
  </member>
  <member>
    <name>008:1:TrustBundleFile:Trust Bundle</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
   <name>009:1:BaseClientKeyURL:Client key request URL</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>010:1:outputType:Output Type</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>011:1:outputID:Output ID</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>012:1:subDirectory:Subdirectory Path</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>013:1:accountId:Account ID</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>014:1:UserName:User Name</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>015:1:UserPassword:User Password</name>
    <value>
      <string>****</string>
    </value>
```

```
      </member>
      <member>
        <name>016:1:keySeed:Playready key seed</name>
        <value>
          <string/>
        </value>
      </member>
    </struct>
  </value>
  <value>
    <struct>
      <member>
        <name>001:1:KeyServerUrl:Key Server URL</name>
        <value>
          <string>/opt/ripcode/www/pages/HlsKeys</string>
        </value>
      </member>
      <member>
        <name>002:1:tcpPort:TCP port number</name>
        <value>
          <i4>0</i4>
        </value>
      </member>
      <member>
        <name>003:1:keyServerVendor:Key Server Vendor Name</name>
        <value>
          <string>InternalHLS</string>
        </value>
      </member>
      <member>
        <name>004:1:UserKey:UserKey</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>005:1:ClientCertFile:Client Certificate</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>006:1:ClientKeyFile:Client Key</name>
        <value>
          <string/>
        </value>
      </member>
      <member>
        <name>007:1:ClientKeyPass:Client Key Password</name>
        <value>
```

```
      <string>****</string>
    </value>
  </member>
  <member>
    <name>008:1:TrustBundleFile:Trust Bundle</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
   <name>009:1:BaseClientKeyURL:Client key request URL</name>
    <value>
      <string>http://10.10.107.31</string>
    </value>
  </member>
  <member>
    <name>010:1:outputType:Output Type</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>011:1:outputID:Output ID</name>
    <value>
      <i4>0</i4>
    </value>
  </member>
  <member>
    <name>012:1:subDirectory:Subdirectory Path</name>
    <value>
      <string>HlsKeys</string>
    </value>
  </member>
  <member>
    <name>013:1:accountId:Account ID</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>014:1:UserName:User Name</name>
    <value>
      <string/>
    </value>
  </member>
  <member>
    <name>015:1:UserPassword:User Password</name>
    <value>
      <string>****</string>
    </value>
```

```
                    </member>
                    <member>
                      <name>016:1:keySeed:Playready key seed</name>
                      <value>
                        <string/>
                      </value>
                    </member>
                  </struct>
                </value>
                <value>
                  <struct>
                    <member>
                      <name>001:1:KeyServerUrl:Key Server URL</name>
                      <value>
                        <string>http://10.10.88.145:8080/flashaccessserver/
rgbtest</string>
                      </value>
                    </member>
                    <member>
                      <name>002:1:tcpPort:TCP port number</name>
                      <value>
                        <i4>0</i4>
                      </value>
                    </member>
                    <member>
                      <name>003:1:keyServerVendor:Key Server Vendor Name</name>
                      <value>
                        <string>InternalFlashAccess</string>
                      </value>
                    </member>
                    <member>
                      <name>004:1:UserKey:UserKey</name>
                      <value>
                        <string/>
                      </value>
                    </member>
                    <member>
                      <name>005:1:ClientCertFile:Client Certificate</name>
                      <value>
                        <string/>
                      </value>
                    </member>
                    <member>
                      <name>006:1:ClientKeyFile:Client Key</name>
                      <value>
                        <string/>
                      </value>
                    </member>
                    <member>
                      <name>007:1:ClientKeyPass:Client Key Password</name>
```

```
                    <value>
                      <string>****</string>
                    </value>
                  </member>
                  <member>
                    <name>008:1:TrustBundleFile:Trust Bundle</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                   <name>009:1:BaseClientKeyURL:Client key request URL</name>
                    <value>
                      <string>http://10.10.88.145:8080/flashaccessserver/
rgbtest</string>
                    </value>
                  </member>
                  <member>
                    <name>010:1:outputType:Output Type</name>
                    <value>
                      <i4>0</i4>
                    </value>
                  </member>
                  <member>
                    <name>011:1:outputID:Output ID</name>
                    <value>
                      <i4>0</i4>
                    </value>
                  </member>
                  <member>
                    <name>012:1:subDirectory:Subdirectory Path</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>013:1:accountId:Account ID</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>014:1:UserName:User Name</name>
                    <value>
                      <string/>
                    </value>
                  </member>
                  <member>
                    <name>015:1:UserPassword:User Password</name>
                    <value>
```

```
                    <string>****</string>
                  </value>
                </member>
                <member>
                  <name>016:1:keySeed:Playready key seed</name>
                  <value>
                    <string/>
                  </value>
                </member>
              </struct>
            </value>
          </data>
        </array>
      </value>
    </param>
  </params>
</methodResponse>
```

30. sysconfig.license.update

This method updates the configured license server for *Packager* with a new license key. You can enter either the key itself or the location where the license key file is stored.

Method Help Text

```
This method updates the Licenses on the currently active License Server
using TFTP, HTTP, local file, or copied key strings.

When copying key strings, select all of the strings in the file and paste
into the File URL box.

NOTE: Internal file URL only works for License files accessible on the local
filesystem of the host running this TransAct software.

NOTE: Verify the currently configured or active License Server to ensure you
are updating the desired Server!
```

Return Value

Result:
string:Result of License update request.

Parameter Descriptors

Refer to Table 29 for a complete list of parameter descriptors.

Table 29. sysconfig.license.update API parameters

Parm Name	Type	Numeric Selectors	Description
`username`	string	n/a	Enter user name
`password`	string	n/a	Enter user password

`licenseFileUrl`	string	n/a	Enter the full HTTP or TFTP URL to the remote license key file. For example:
			`http://remotehost/path/to/licenseFile.key`
			`tftp://remotehost/path/to/licenseFile.key`
			Notes:
			• This field can also accept a path to a file located on the local host.
			• Format should be: `file://<full_path_to_file>` For example: `file:///tmp/file.key`
			The easiest method of updating a license is to copy and paste the entire license key strings from the key file you received from RGB Customer Support

Sample Request

```
<?xml version="1.0"?>
<methodCall>
  <methodName>sysconfig.license.update</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
    <param>
      <value>
        <string>*D
mL7jQqIp,Yvap0xluEidLlSirh,r1IgZPokemanBAVBP3GwC314QEGo1qI0QYlWi3gL-
Hi105YhMcX v2tUBgC2Lnxf9XESFaImCrushingYouBbdediSIpesbRGTfTbQA-
Hyg,vD4YU:g7blIyILikeCheeseKhAOeaxIAqDX-vTaPN3O# "TAP" version "Packager",
expires Midnight of Aug 24, 2015, exclusive##AID=8e300d7d-a53c-420-af68-
5319009c5a596405</string>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>Operation successful.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

31. sysconfig.restart

This method restarts the *Packager* application. All current packaging operations for the device will terminate.

Method Help Text

```
Help:
This method causes an immediate restart of the TransAct Application.

Help:
WARNING: This command will terminate all outstanding jobs!

PROMPT_YESNO:WARNING: This operation causes an immediate restart of the
TransAct Application! Continue?
```

Return Value

```
Return:
string:Result of the command request.
```

Parameter Descriptors (2)

Refer to Table 30 for a complete list of parameter descriptors.

Table 30. sysconfig.restart API parameters

Parm Name	Type	Numeric Selectors (for *Int* type)	Description
username	string	n/a	Enter user name
password	string	n/a	Enter user password

Sample Request

```
<?xml version="1.0"?>
<methodCall>
```

```
  <methodName>sysconfig.restart</methodName>
  <params>
    <param>
      <value>
        <string>admin</string>
      </value>
    </param>
    <param>
      <value>
        <string>ripcode!</string>
      </value>
    </param>
  </params>
</methodCall>
```

Sample Response

```
<?xml version="1.0" encoding="UTF-8"?>
<methodResponse>
  <params>
    <param>
      <value>
        <string>TransAct Applications are being restarted.  Web Interface
connection to this device will be unresponsive for several seconds until the
restart is complete.</string>
      </value>
    </param>
  </params>
</methodResponse>
```

CHAPTER 5

Contacting RGB Customer Support

This chapter provides information on how to contact RGB Customer Support.

Contacting RGB Customer Support

RGB Customer Support is available 24x7. If after reviewing this section you still require assistance, please contact RGB Customer Support via any of the following methods:

Table 31. Contacting RGB Customer Support

Method	Contact Information
E-mail	support@rgbnetworks.com
Internet	http://www.rgbnetworks.com/support/rgb-customer-portal.php
Inside North America	1.877.RGB.NETW // (1.877.742.6389)
Outside the North America	+1.408.701.2800

Information Required for Troubleshooting

Prior to contacting customer support, it will be useful to gather debug information using the following API methods:

```
sysconfig.debug.info.execute
sysconfig.debug.info.retrieve
```

Issuing these commands will create a `debuginfo.tgz` file which can be downloaded from a URL.