

**iNetVOD<sub>SM</sub>**  
**Storm Media Player<sub>SM</sub>**  
**API Reference**  
**Version 1.0.9**

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## Disclaimers

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## Overview

This document defines the application programming interfaces (API) of requests/responses between a player device that is part of the iNetVOD<sub>SM</sub> service and the iNetVOD<sub>SM</sub> servers.

Please refer to the document "iNetVOD High-Level Overview" for an overview and background information regarding iNetVOD<sub>SM</sub> service.

Please refer to the document "iNetVOD Player Questionnaire" for background information regarding the configuration options available for a player device that is part of the iNetVOD<sub>SM</sub> service.

This document is a companion document to the "iNetVOD Player UI Reference" document. Both documents together form the specification for a player device that supports the iNetVOD<sub>SM</sub> service.

## Terms

### Streaming Media

Audio and/or video that is provided in an electronic form via a computer network. This includes media provided via a streaming protocol (like RTSP) and well as media data files (like AVI files).

### Player Device

The physical device(s) and its computer software that supports the viewing/listening of Streaming Media (audio and/or video). The Player Device initiates requests to the Service.

### Service

Computer software that runs on a server and is accessed by the Player Device in order to provide access to Streaming Media (audio and/or video). The Service fulfills requests from the Player Device.

### User

An individual who uses the Player Device to access Streaming Media.

### Member

A User who has enrolled in the Service.

### Provider

A company or service that provides Streaming Media.

### Show

A video/audio stream available for viewing/listening. A single piece of Streaming Media. The same Show may be available from multiple Providers.

### Rented Show

A Show that a Member has been granted permission from a Provider to access. The Show may or may not have a cost. The Member may be anonymous to the Provider.

## Data Formats

This API supports the following data formats:

- XML
- Binary

A Player Device may support either of these formats.

### ***XML***

For the XML data format, XML request documents are sent by the Player Device application to the Service using the HTTPS or HTTP protocol. An XML response document will be returned for each XML request document received by the Service.

The URL for the request will be defined by the Service and should be configurable by the Player Device.

XML documents will be encoded using UTF-8 encoding without the byte-order marks (BOM).

XML documents will contain the DOCTYPE element set to a URL as provided by the Service. This URL will point to a document definition file (DTD).

Each data field will be represented by an XML element. XML attributes will not be used. Missing or empty elements should be considered identical and will represent Null values.

### ***Binary***

For the Binary data format, binary request documents are sent by the Player Device application to the Service using the HTTPS or HTTP protocol. A binary response document will be returned for each binary request document received by the Service.

The URL for the request will be defined by the Service and should be configurable by the Player Device.

String data will be encoded using UTF-8 encoding without the byte-order marks (BOM).

Non-String data will be specified in "big-endian" format (i.e. the most significant bytes will proceed the least significant bytes).

Each binary data type has its own definition of a Null value. See "Base Data Types" below.

## Column Definitions

### ***Request/Response***

#### **Name**

The name of the field. For XML file formats, this is the name of the XML element.

#### **Description**

A brief description of the field.

**Type**

Data type field. Possible values are defined by "Base Data Types" below.

**Req**

Required Field.

For XML data formats:

A Required Field is an element that must exist in the XML document. The element may not be empty.

For a non-Required field, the element need not exist or may be empty.

For Binary data formats:

For a non-Required field, the element may contain the Null value as defined by the data type. See "Base Data Types" below.

**Rep**

Repeating Field. For Required Fields, 1 or more of this field must exist. For non-Required fields, 0 or more of this field may exist.

## Base Data Types

**String(n)**

A series of 0 or more Unicode characters where 'n' is the maximum number of characters. If 'n' is not specified, the maximum number of characters will be defined by  $+2^{15}$ .

For Binary data formats:

An Int16 (2-byte) length value will precede the character data. This length value defined the number of bytes, not necessary the number of characters. Characters will be encoded with UTF-8.

**Int16**

An integer number that can be represented in 16 bits. A allowable range of  $\pm 2^{15}$ .

For Binary data formats:

This value would consist of 2-bytes of data.

Null value is defined as -32768.

**Int32**

An integer number that can be represented in 32 bits. A allowable range of  $\pm 2^{31}$ .

For Binary data formats:

This value would consist of 4-bytes of data.

Null value is defined as -2147483648.

**Float64**

An floating-point number that can be represented in 64 bits.

For XML data formats:

This value would be represented in the format: 9999.9999, with the maximum precision as can be supported in 64 bits. Other formats, such as scientific notation, are not supported.

For Binary data formats:

This value would consist of 8-bytes of data formatted as specified by IEEE 754.

Null value is defined as 2.2250738585072014e-308 (ANSI DBL\_MIN).

## **Boolean**

A Boolean value.

For XML data formats:

'true' and '1' will represent True values and 'false' and '0' will represent False values.

For Binary data formats:

This value would consist of a single unsigned byte of data.

'1' will represent True values and '0' will represent False values.

Null value is defined as 255.

## **Date**

A date value without a time component.

For XML data formats:

This type will be formatted as specified by ISO 8601 as a complete date, w/o the optional time component.

For Binary data formats:

This value would consist of 4-bytes of data. The first 2-bytes hold the value of the year, the next byte holds the value of the month, and the last byte holds the value of the day.

Null value is defined as 0 values for all 3 fields.

## **Timestamp**

A date and time value.

For XML data formats:

This type will be formatted as specified by ISO 8601.

For Binary data formats:

This value would consist of 7-bytes of data. The first 2-bytes hold the value of the year, the next byte holds the value of the month, the next byte holds the value of the day, the next byte holds the value of the hour, the next byte holds the value of the minute, and the last byte holds the value of the second.

Null value is defined as 0 values for all 6 fields.

## **Comp**

Composite Field. A group of base data types and/or other Composite fields.

For Binary data formats:

Repeating Composite fields will be preceded by a Count field (Int32). This Count field will define the number of same type Composite fields that follow.

Non-Required, non-Repeating Composite fields will be preceded by an IsNull field (Boolean). The IsNull field defines whether or not the Composite field will follow. A value of 0 indicates the Composite field will not follow.

Required, non-Repeating Composite fields contain neither a Count field nor an IsNull field.

## Identifier Types

Identifier Types are non-composite data types that encapsulate a specific type of values relating to uniquely identifying a particular entity.

<i>Name</i>	<i>Description</i>	<i>Type</i>
ManufacturerID	Service-assigned unique ID for the Player Device's Manufacturer	String(32)
ProviderID	Service-assigned unique ID for Provider	String(32)
ShowID	Service-assigned unique ID for Show	String(64)
RentedShowID	Unique ID for a single renting of a Show by a Member.	String(64)
CategoryID	Service-assigned unique ID for a Category. Possible values are defined by the Category data type (see below).	String(32)
RatingID	Industry-assigned unique ID for a Rating. Possible values are defined by the Rating data type (see below).	String(32)
CurrencyID	Unique ID for a Currency. Possible values are defined by ISO 4217:2001.	String(3)

## Closed Enumerators

Closed Enumerators are non-composite data types with a predetermined, finite set of values. These are defined as String(32) unless noted otherwise.

### ***IncludeAdult***

<i>Value</i>	<i>Description</i>
Never	Adult content should never be able to be accessed. It will never be returned in a Show search.
PromptPassword	Adult content can be accessed after prompting the user for a password.
Always	Adult content can be always be accessed. No password is required.

### ***ShowCostType***

<i>Value</i>	<i>Description</i>
Free	Show is free to Members and Non-Members (access may be anonymous).
Subscription	Show is free to Members of a certain subscription level (which may just mean membership is required).
PayPerView	Show has cost for each viewing (Member access only).

### ***LicenseMethod***

<i>Value</i>	<i>Description</i>
URLOnly	Show is accessed directly from a URL, secure or unsecured depending on Show.
LicenseServer	Player device acquires license from specific license server.

Note: additional methods will be added when new methods are required by Providers.



## Envelope

PlayerRqst and PlayerResp form the outer “envelope” of all requests and responses defined in this API.

### ***PlayerRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
Version	API Version as defined by this document (i.e. 1.0.0)	String(16)	Y	N
RequestID	Unique ID for request assigned by Player Device	String(64)	Y	N
SessionData	Value from SignonResp	String()	N*	N
RequestData	Container of request data	Comp	Y	N

Notes: SessionData is required for all requests except PingRqst and SignonRqst.

### ***PlayerResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RequestID	Echoed from PlayerRqst.RequestID	String(64)	Y	N
StatusCode	See Appendix A	Int32	Y	N
StatusMessage	User viewable message	String(1024)	N	N
ResponseData	Container for response data	Comp	N*	Y

Notes: ResponseData is required for all requests unless an error has occurred.

## Request/Response Data

### ***RequestData***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RequestType	Type for actual request. Possible values: <ul style="list-style-type: none"> <li>• PingRqst</li> <li>• SignonRqst</li> <li>• SystemDataRqst</li> <li>• EnableAdultAccessRqst</li> <li>• ShowSearchRqst</li> <li>• ShowDetailRqst</li> <li>• ProviderEnrollRqst</li> <li>• SetProviderRqst</li> <li>• CheckShowAvailRqst</li> <li>• RentShowRqst</li> <li>• RentedShowListRqst</li> <li>• RentedShowRqst</li> <li>• DownloadShowListRqst</li> <li>• WatchShowRqst</li> <li>• ReleaseShowRqst</li> </ul>	String(64)	Y	N
PingRqst	PingRqst data	Comp	One, and only one, of these data structures, as defined by RequestType.	
SignonRqst	SignonRqst data	Comp		
SystemDataRqst	SystemDataRqst data	Comp		
EnableAdultAccessRqst	EnableAdultAccessRqst data	Comp		
ShowSearchRqst	ShowSearchRqst data	Comp		
ShowDetailRqst	ShowDetailRqst data	Comp		
ProviderEnrollRqst	ProviderEnrollRqst data	Comp		
SetProviderRqst	SetProviderRqst	Comp		
CheckShowAvailRqst	CheckShowAvail data	Comp		
RentShowRqst	RentShow data	Comp		
RentedShowListRqst	RentedShowList data	Comp		
RentedShowRqst	RentedShow data	Comp		
DownloadShowListRqst	DownloadShowListRqst data	Comp		
WatchShowRqst	WatchShow data	Comp		
ReleaseShowRqst	ReleaseShow data	Comp		

### ***ResponseData***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ResponseType	Type for actual response. Possible values: <ul style="list-style-type: none"> <li>• PingResp</li> <li>• SignonResp</li> <li>• SystemDataResp</li> <li>• EnableAdultAccessResp</li> <li>• ShowSearchResp</li> <li>• ShowDetailResp</li> <li>• ProviderEnrollResp</li> </ul>	String(64)	Y	N

	<ul style="list-style-type: none"> <li>• SetProviderResp</li> <li>• CheckShowAvailResp</li> <li>• RentShowResp</li> <li>• RentedShowListResp</li> <li>• RentedShowResp</li> <li>• DownloadShowListResp</li> <li>• WatchShowResp</li> <li>• ReleaseShowResp</li> </ul>			
PingResp	PingResp data	Comp	One, and only one, of these data structures, as defined by ResponseType.	
SignonResp	SignonResp data	Comp		
SystemDataResp	SystemDataResp data	Comp		
EnableAdultAccessResp	EnableAdultAccessResp data	Comp		
ShowSearchResp	ShowSearchResp data	Comp		
ShowDetailResp	ShowDetailResp data	Comp		
ProviderEnrollResp	ProviderEnrollResp data	Comp		
SetProviderResp	SetProviderResp data	Comp		
CheckShowAvailResp	CheckShowAvail data	Comp		
RentShowResp	RentShow data	Comp		
RentedShowListResp	RentedShowList data	Comp		
RentedShowResp	RentedShow data	Comp		
DownloadShowListResp	DownloadShowListResp data	Comp		
WatchShowResp	WatchShow data	Comp		
ReleaseShowResp	ReleaseShow data	Comp		

## Ping

Verifies that the Service can be accessed.

### ***PingRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

### ***PingResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

## Signon

Validates UserID/Password for Member and returns a unique value identifying a single session for the user. This session value is used in subsequent requests.

### ***SignonRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
UserID	UserID registered with the Service (encrypted)	String(64/128)	Y	N
Password	Password registered with the Service (encrypted)	String(16/32)	Y	N
Player	Data identifying the Player Device making the request	Player	Y	N

Note: UserID and Password have two lengths, an unencrypted length and an encrypted length.

### ***SignonResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
SessionData	Server defined data for subsequent requests.	String()	Y	N
SessionExpires	Time when this SessionData is no longer valid	Timestamp	Y	N
MemberState	Summary info for Member	Comp	Y	N

## Status Codes

<i>Number</i>	<i>Value</i>	<i>Description</i>
1000	InvalidUserIDPassword	UserID or Password is not valid

## SystemData

Returns parameters to be used when searching. This includes the available Providers, Categories, and Ratings.

### ***SystemDataRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

### ***SystemDataResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
Provider	All available Providers	Provider	Y	Y
Category	All available Categories	Category	Y	Y
Rating	All available Ratings	Rating	Y	Y

## EnableAdultAccess

Only for Members with IncludeAdult preference is set to PromptPassword. This request allows a Member to enable adult content access for current session. Adult access will expire when session expires.

### ***EnableAdultAccessRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
Password	Adult password to enable access (encrypted)	String(16/32)	Y	N

Note: Password has two lengths, an unencrypted length and an encrypted length.

### ***EnableAdultAccessResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

## ShowSearch

Searches for and returns a list of Shows, filtered by the criteria specified in the request. ProviderID, CategoryID, and RatingID must be values from the data returned from SystemData request.

### ShowSearchRqst

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
Search	Keyword or partial name of Show.	String(64)	N	N
ProviderID	Indicates to only return Shows from specified Provider. If not specified, Shows from all Providers will be considered for search.	ProviderID	N	Y
CategoryID	Indicates to only return Shows in specified Category. If not specified, all Shows, regardless of Category, will be considered for search.	CategoryID	N	Y
RatingID	Indicates to only return Shows with specified Rating. If not specified, all Shows, regardless of Rating, will be considered for search.	RatingID	N	Y
MaxResults	The maximum number of Shows to be returned in response. This allows the Player Device to control the number of Shows to be returned, possibly to limit memory requirements. ShowSearchResp.ReachedMax will be True.	Int16	Y	N

### ShowSearchResp

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowSearch	Summary information for Shows found from search.	ShowSearch	N	Y
ReachedMax	True if search results exceed ShowSearchRqst.MaxResults.	Boolean	Y	N



## ShowDetail

Requests the complete details of a Show.

### ***ShowDetailRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowID	Service-assigned unique ID for Show	ShowID	Y	N

### ***ShowDetailResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowDetail	Details of the specified Show.	ShowDetail	Y	N

## ProviderEnroll

Creates a new Provider membership for the Member.

### ***ProviderEnrollRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N

### ***ProviderEnrollResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

## SetProvider

Adds or updates the Member's membership credentials for Provider. The credentials will not be authenticated at the Provider until an API that requires them (such as CheckShowAvail).

### ***SetProviderRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N
UserID	UserID registered with Provider (encrypted)	String(64/128)	Y	N
Password	Password registered with Provider (encrypted)	String(16/32)	Y	N

Note: UserID and Password have two lengths, an unencrypted length and an encrypted length.

### ***SetProviderResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

## CheckShowAvail

Requests Show's availability, costs and rental periods for the specified Member.

### CheckShowAvailRqst

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N
ShowCost	Particular cost and rental period (as returned from ShowDetail.ShowCost).	ShowCost	Y	N

### CheckShowAvailResp

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowCost	Confirmation of the cost of the Show for this Member. Money or short description of cost. May vary from ShowCost passed in the request.	ShowCost	Y	N

## Status Codes

<i>Number</i>	<i>Value</i>	<i>Description</i>
1003	InvalidProviderUserIDPassword	UserID or Password is not valid for Provider

## RentShow

Commits a rental of a Show at the Provider. Charges may be incurred.

### ***RentShowRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N
ApprovedCost	The amount the Member thinks they will be charged. Should be copied from CheckShowAvailResp.ShowCost.	ShowCost	Y	N

### ***RentShowResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N
License	Specifics for the licensing of the Show.	License	Y	N

## RentedShowList

Request to get a summary list of Shows that the Member has rented that have not yet expired, to be displayed in the UI. May not contain adult Shows, depending on current adult access setting.

### ***RentedShowListRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

### ***RentedShowListResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowSearch	Summary of Shows that have been rented and have not yet expired.	RentedShowSearch	N	Y

## RentedShow

Request to details of a single Show that Member has rented and that has not yet expired.

### ***RentedShowRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N

### ***RentedShowResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShow	Details of a Show that has been rented.	RentedShow	Y	N

## DownloadShowList

Request to get a list of downloadable Shows that the Member has rented that have not yet expired. This list is only intended for background processes so that Shows may be downloaded independent of UI. This list will contain both non-adult and adult Shows, regardless of current adult access setting.

### ***DownloadShowListRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

### ***DownloadShowListResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
DownloadShow	Details of downloadable Shows that have been rented and have not yet expired.	DownloadShowSearch	N	Y



## WatchShow

Initiates the watching of a Show. This allows the Provider to return the licensing information for the Show and to optionally start the Show's rental period.

### ***WatchShowRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N

### ***WatchShowResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
License	Specifics for the licensing of the Show.	License	Y	N

## ReleaseShow

Release a Rented Show from the rental list.

### ***ReleaseShowRqst***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N

### ***ReleaseShowResp***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
(none)				

## Internal Data Structures

Data structures contained within the higher level requests and responses.

### ***Player***

Data describing the Player Device.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ManufacturerID	Service-assigned unique ID for the Player Device's Manufacturer.	ManufacturerID	Y	N
ModelNo	Manufacturer-assigned model number for the particular revision of the Player Device.	String(32)	Y	N
SerialNo	Manufacturer-assigned unique serial number for each Player Device.	String(64)	Y	N
Version	The revision (build version) of the software running on the Player Device.	String(16)	Y	N

### ***MemberState***

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
MemberPrefs	Members preferences	MemberPrefs	Y	N
MemberProvider	Provider-relative info for Member	MemberProvider	N	Y

### ***MemberPrefs***

Member preferences

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
IncludeAdult	Flag indicating if Adult Shows can be found during search.	IncludeAdult	Y	N

### ***Provider***

Data for Provider

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N
Name	Provider's displayable name	String(64)	Y	N

### ***Category***

Data for a Category

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
CategoryID	See CategoryID	CategoryID	Y	N
Name	Category's displayable name	String(32)	Y	N

## Values

The valid values for this data as of the version of this document. The Service will return the current set. Player Device applications should not be dependant upon this set. This data may change over time.

<i>CategoryID</i>	<i>Name</i>
action	Action
classics	Classics
comedy	Comedy
drama	Drama
family	Family
romance	Romance
scifi	Sci-Fi
thriller	Thriller
western	Western

## ***Rating***

Data for a Rating

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RatingID	See RatingID	RatingID	Y	N
Name	Rating's displayable name	String(32)	Y	N

## **Values**

The valid values for this data as of the version of this document. The Service will return the current set. Player Device applications should not be dependant upon this set. This data may change over time.

<i>RatingID</i>	<i>Name</i>
g	G
pg	PG
pg13	PG-13
r	R
nc17	NC-17
tv-y	TV-Y
tv-y7	TV-Y7
tv-y7fv	TV-Y7-FV
tv-g	TV-G
tv-pg	TV-PG
tv-14	TV-14
tv-ma	TV-MA

## ***MemberProvider***

Data for Provider-relative info for a Member. One entry per Member for each Provider they are enrolled.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N

## ***ShowSearch***

Data for Show

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
Name	Show's displayable title	String(64)	Y	N

EpisodeName	For TV shows, name of episode	String(64)	N	N
ReleasedOn	For TV shows, the original air date. For Movies, the theatre release date.	Timestamp	N	N
ReleasedYear	Year show was released.	Int16	N	N
PictureURL	URL to image of Show	String(4096)	N	N
ShowProvider	Providers that offer Show	ShowProvider	Y	Y

## ***ShowProvider***

Providers that offer Show

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ProviderID	Service-assigned unique ID for Provider	ProviderID	Y	N
ShowCost	Money or short description of cost. Not Member-specific cost. May contain multiple costs for varying rental periods.	ShowCost	Y	Y

## ***ShowDetail***

Brief description of Show from a single Provider

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
Name	Show's displayable title	String(64)	Y	N
EpisodeName	For TV shows, name of episode	String(64)	N	N
EpisodeNumber	For TV shows, number assigned to episode	String(32)	N	N
ReleasedOn	For TV shows, the original air date. For Movies, the theatre release date.	Timestamp	N	N
ReleasedYear	Year show was released if ReleasedOn is not available.	Int16	N	N
Description	Multi-line description of show	String()	N	N
RunningMins	Total running minutes of show	Int16	N	N
PictureURL	URL to image of Show	String(4384)	N	N
CategoryID	Categories for this Show (maybe be 0 or more)	CategoryID	N	Y
RatingID	Movie/TV rating	RatingID	N	N
IsAdult	True is show is Adult content	Boolean	Y	N
ShowProvider	Providers that offer this Show.	ShowProvider	Y	Y

## ***RentedShowSearch***

Brief description of Show that has been rented by a Member.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
ProviderID	Provider from where the Show was rented.	ProviderID	Y	N
Name	Show's displayable title	String(64)	Y	N
EpisodeName	For TV shows, name of episode	String(64)	N	N
ReleasedOn	For TV shows, the original air date. For Movies, the theatre release date.	Timestamp	N	N
ReleasedYear	Year show was released if ReleasedOn is not available.	Int16	N	N

PictureURL	URL to image of Show	String(4096)	N	N
RentedOn	Date/time when show was rented	Timestamp	Y	N
AvailableUntil	Date/time when rental period expires. If not specified, then Show never expires.	Timestamp	N	N

## ***RentedShow***

Detail description of Show that has been rented by a Member.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N
ShowID	Service-assigned unique ID for Show	ShowID	Y	N
ProviderID	Provider from where the Show was rented.	ProviderID	Y	N
Name	Show's displayable title	String(64)	Y	N
EpisodeName	For TV shows, name of episode	String(64)	N	N
EpisodeNumber	For TV shows, number assigned to episode	String(32)	N	N
ReleasedOn	For TV shows, the original air date. For Movies, the theatre release date.	Timestamp	N	N
ReleasedYear	Year show was released if ReleasedOn is not available.	Int16	N	N
Description	Multi-line description of show	String()	N	N
RunningMins	Total running minutes of show	Int16	N	N
PictureURL	URL to image of Show	String(4096)	N	N
CategoryID	Categories for this Show (maybe be 0 or more)	CategoryID	N	Y
RatingID	Movie/TV rating	RatingID	N	N
IsAdult	True is show is Adult content	Boolean	Y	N
ShowCost	Money or short description of cost. Member-specific cost.	ShowCost	Y	N
RentedOn	Date/time when show was rented	Timestamp	Y	N
AvailableUntil	Date/time when rental period expires. If not specified, then Show never expires.	Timestamp	N	N

## ***DownloadShow***

Details for downloading a Show that has been rented by a Member.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
RentedShowID	Unique ID for a single renting of a Show by a Member.	RentedShowID	Y	N
ShowURL	URL of Show.	String(4096)	Y	N
DataFileName	Name to be used for data file of Show when stored to the local file system of the player device.	String(128)	Y	N

## ***Money***

Data for a monetary value in a particular currency.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
CurrencyID	See CurrencyID	CurrencyID	Y	N
Amount	The amount of the currency	Float64	Y	N

## ShowCost

The cost of a Show is not always represented in pure Money form. The cost may be free or part of a subscription service. This structure captures those variations.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
ShowCostType	The type of cost for the Show.	ShowCostType	Y	N
Cost	Show's cost if can be represented in monetary terms.	Money	N	N
CostDisplay	Displayable description of the Cost. If Cost is defined, this value should be a representation of Cost (i.e. showing currency symbol with amount).	String(32)	Y	N
RentalWindowDays	Rental window in days for this cost.	Int16	N	N
RentalPeriodHours	Rental period in hours for this cost.	Int16	N	N

## License

Details for accessing content from Provider within their licensing scheme.

<i>Name</i>	<i>Description</i>	<i>Type</i>	<i>Req.</i>	<i>Rep.</i>
LicenseMethod	What is the particular license for this Show.	LicenseMethod	Y	N
ShowURL	URL of Show, possibly Member-specific.	String(4096)	Y	N
LicenseURL	URL of License server.	String(4096)	N*	N
ContentID	Unique ID of content for License server. Not the same as ShowID.	String(64)	N*	N
UserID	Member UserID to authenticate against License server (encrypted).	String(64/128)	N*	N
Password	Member Password to authenticate against License server (encrypted).	String(16/32)	N*	N

Note: LicenseURL, ContentID, UserID, and Password are required when LicenseMethod is LicenseServer.

Note: UserID and Password have two lengths, an unencrypted length and an encrypted length.

## Appendix A – All Status Codes

<i>Number</i>	<i>Value</i>	<i>Description</i>
0	Success	Request fulfilled successfully
1000	InvalidUserIDPassword	UserID or Password is not valid
1001	InvalidSession	Session is invalid or has timed out. May be returned from any request.
1003	InvalidProviderUserIDPassword	UserID or Password is not valid for Provider
9999	UnknownError	Catch-all error code when specific error is not known.