Iridium Satellite LLC ("Iridium") IWS Report Developer Guide

BETA Environment

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SOAP Developer Guide

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Revision History

Date	Version	Description	Author
05/13/2019	19.1.0.0	Add new call getProjectVersion	IWSSupport
		 Added cdrld to iopRawCallDataSearchCriteria object 	
		 Added multiple fields to certusRawCallDataEntry object 	
09/04/2018	1.4.3	Changes corresponding to Release 2 2018	IWSSupport
		Added new call getReportPlanNames for	
		reporting enhancement for plan selection	
		 Update fileListEntry object to include reportGenerationType to distinguish Scheduled 	
		vs OnDemand reports	
		 Updated output fields for getCertusRawUsage 	
		 Update ENUM reportParameterTypeEnum to 	
		include new parameter types for reporting	
		 Added reportServiceTypes ENUM as 	
		input/output parameter of	
		getReportPlanNames	
		 Add reportGenerationTypeEnum as output 	
22/22/22/2	1	parameter of getFileList	
03/29/2018	1.4.2	Changes corresponding to Release 1 2018 Add as a sectional filter suit said for a sectional filter suit said for a section of the secti	IWSSupport
		 Add requestorId as optional filter criteria for getScheduledReports 	
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		reportResultEnum	
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		 Add data range to the getReportTransactionLog 	
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		Add getSystemStatus	
		Add outageStatusEnum Correct type desumentation for	
		 Correct type documentation for getSBDRawUsageResponseImpl : 	
		totalNumberOfRecords , cepRadius	
01/10/2017	1.2.1	Add displayOrder and helpText to	IWSSupport
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		getReportParametersResponseImpl	Wie is a . A
		 Add reportCategory to getReportTypesRequestImpl 	
		Add displayTag to reportColumnEntryImpl	
		Add reportCategory to getReportTypesResponseImpl	
		 Add new method getReportCategory 	
09/01/2016	1.2.0	• Fall Release 2016 updates	IWSSupport
		• Rename enum subscriberAccountSearchTypeEnum to	
		usageSubscriberSearchTypeEnum	
		 Add ONDEMAND to recurringCycleTypeEnum 	
	<u> </u>	Add new call for createOnDemandReport	
11/06/2015	1.1.0	 Add usageUnitId to getUsageCallTypes request. 	IWSSupport

Date	Version	Description Author	
07/11/2015	1.0.0	Production release version updates.	IWSSupport
06/15/2015	1.0.0	New document for reporting endpoint	IWSSupport



1 Introduction

1.1 Welcome to Iridium Web Services

The Iridium Web Services API (IWS) is a robust interface that allows you to automate provisioning processes by integrating Iridium's billing and provisioning platforms into your core business operations. IWS is based on Java web services that use Simple Object Access Protocol (SOAP) / Extensible Markup Language (XML) requests and responses. This framework will enable you to create powerful, flexible solutions. Partner applications can be developed using JAVA, C++, Microsoft .Net or other programming languages.

This document details the methods and objects available through the IWS Report endpoint. This guide is an addendum to the IWS SOAP Developer Guide. All details regarding authentication and general use of IWS are detailed in the latest version of the IWS SOAP Developer Guide.

1.2 Iridium Report Web Services Connection Endpoints

There are multiple endpoints available for connecting to Iridium Web services. Initial development and testing should be performed on the training site. When Iridium is preparing a to release new functionality, we will often open up the Beta environment for developers to try out the new features. Both training and beta require different credentials than production, to ensure the safety of the environments and prevent errors by connecting to the wrong place.

Once a partner has been certified in the training environment they are provided with production credentials.

1.3 Beta

The endpoint address for beta environment (which is only available prior to new releases) is: https://iwsbeta.iridium.com:8443/iwsReport-current/iws-report

1.4 Training (SITEST)

The endpoint address for training environment, it is available at all times for testing the current production release. This environment is usually refreshed from production data shortly after each production release to ensure current data and latest code.

https://iwstraining.iridium.com:8443/iwsReport-current/iws-report

1.5 Production

The endpoint address for production environment is:

https://iws-report.iridium.com:8443/iwsReport-current/iws-report

1.6 Iridium for Partners Provisioning Resources

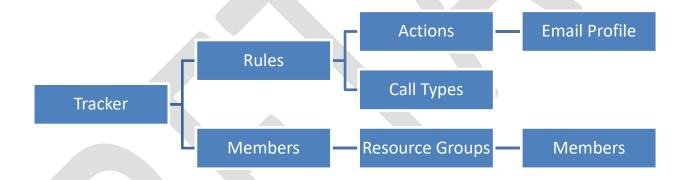
All presentations, training sessions, guides, contracts, forms, etc. can be found by searching for **IWS** on the Iridium for Partners website.

1.7 Developer Documentation (Iridium)

- Iridium WSDL Explorer (https://training.iridium.com/iwsexplorer/)
 - Select the appropriate endpoint on the top right of the page for the environment you wish to connect to:
 - Beta Report External
 - SITEST Report External
 - The WSDL itself is accessible if you click on the Iridium Web Services logo at the top of the page.

2 What is a Tracker?

A Tracker is a combination of **rules**, **actions**, **call types** and **resources** that monitor/track usage on either individual or groups of devices. Trackers were designed to be very flexible and allow you to customize what you track and how you track the resource.



Trackers are setup based on a particular service type. Once you have defined the Tracker name and service type to track, you then need to customize all of the other items that make up a tracker.

2.1 Prerequisites

Because the Tracker is a collection of **rules**, **actions**, **call types** and **resources**, you will need to either create new options or use the existing predefined options before you set one up.

2.2 Tracker Rules Profile

A **Tracker Rules Profile** is a reusable template that can be applied to multiple trackers. For example you may need to track the SBD usage for two different customers exactly the same way, however the email alerts need to go to those different customers. You would create one Tracker Rules Profile that can be used in two separate trackers.

A Tracker Rules Profile consists of *Profile Details* (name, service type, usage units, threshold balance), *Profile Actions* (action type, threshold, alert status and email details) and *Call Types*.

There are several pre-defined profiles for you to use. So it is always best to review these options before creating something new. If the existing options do not meet your needs, you can create your own customized Tracker Rule Profile.

The first step is to call addTrackerRulesProfile and establish the **name**, **Usage Units** (minutes, bytes, events, etc.) and **Threshold Balance** (the maximum usage to not exceed on a specific device) for this profile. You have the option to add a start date and end date; if a start date is not provided, it will default to the current date. The next step is to configure the Profile Actions (which have an option to use an email profile) and Call Types that apply.

2.3 Profile Actions

Profile Actions are added to the Profile using addTrackerActionProfile When adding a new action, define the attributes (start date, end date, action type, threshold (percentage or balance), alert status (if you want to be alerted) and you will either define the subject and body of the notification or you can select an Email Profile to be used (this is a pre-defined email subject and body).

Multiple Actions can be created if so desired.

2.4 Create an Email Profile

An email profile is an email template used for email notifications. The subject and the message are created one time and can be used repeatedly (instead of having to create a new email message for every tracker or tracker profile. An email profile is created using addEmailProfile. An email type (notify/reset), service type (not required), subject of email and body of email are defined in this call. Once saved to the system, this email profile will be available for selection when creating new Tracker Action Profiles or editing them.

2.5 Call Types

Call types are added to your Tracker Rules Profile to specify what types of usage should be tracked. The Call Type(s) available are dependent on the **Service Type** that is selected as part of the profile details.

Multiple call types can be added if so desired.

2.6 Create Resource Group(s)

A Resource Group is a collection of multiple devices. This option is ideal if you have multiple devices that are being tracked together (combined balance counter) or reported on as a group.

Resource Groups are created using **createResourceGroup**. A Name and a Service Type are defined for the group. A description can also be added, but is not required.

2.7 Add Members to Resource Group

Once you have created the Resource Group, you members can be added using updateResourceGroupMember. Members are added either individually (one by one) or via a bulk upload option.

To add individual members, you will need to specify the type of device and provide the corresponding number for that device. You have the option to add a start date and end date for each member. If you do not enter a start date, the date will default to the current date. If you enter only a start date, resource will be included as part of the group on that particular date. If a start and end date is provided, that is the date range that the individual resource will be included as part of the group.

To add a bulk file, the resources in that file must match the type selected. The file types supported are .xls or .csv.

2.8 Tracker Creation

The first step is to define the name, description, service type, start date, end date and email address(es) for the tracker. The email addresses provided in this step will receive the alert emails as specified in the Tracker Profile. From this point you begin to build and customize the different pieces that ultimately make up this tracker.

After the tracker is created, you may Edit the tracker details, add Rules and/or add Members to the tracker.

2.9 Define Tracker Rule

A new Tracker is created using **addTrackerRule**. The Tracker Rule defines the Reset Cycle (Billcycle, Daily, Monthly, Threshold) and the Rule Type (High or Low). A "High" rule will trigger when the threshold values are surpassed. A "Low" rule will trigger on the reset cycle if the usage has not reached the threshold specified and if you would like to be notified upon reset. A name is required; start and end dates are optional.

In addition to the above a **trackerRulesProfileId** must be specified to associate a Tracker Rules Profile to this rule. The Tracker Rule Profile was discussed above under prerequisites.

2.10 Add Member(s) to Tracker

Members are added to a Tracker using the addTrackerMember request. Members can be added either as individual members or in pre-defined groups of members (Resource Groups). Resource Groups are described above under prerequisites.

If adding individual members the "type" will be based upon the Service Type. You will enter the appropriate ID (i.e., for SBD you enter an IMEI) and then you have the option to set a start date and/or end date. The start date and end date will define when this resource/member is active in the tracker and is being monitored/tracked based on the profiles you have defined above.

If you prefer to add a group of resources, you must first define the Resource Group. If you have already defined a Resource Group, you will enter the ID for that group and will have the option to enter a start date and/or end date. As with the individual members, the start date and end date will define when the resource group members are active in the tracker and are being monitored/tracked based on the profiles you have defined above.

2.11 Email Parsing

The user has the ability to define dynamic email templates. By using the predefined options, a user can automatically have relevant information included within the email notices triggered by various actions. The system will replace the template text value with the corresponding data values at email generation.

Template	Replaced By
~~ACTION~~	The action type
~~ACTIONPCT~~ The threshold percent defined to trigger the action	
~~ACTIONTHRESH~~	The threshold value defined to trigger the action
~~CUMULATIVEBAL~~	The cumulative balance for the tracker rule at the time of the action
~~CURRBAL~~	The current balance for the tracker rule at the time of the action
~~CYCLESET~~	The reset cycle settings
~~LASTCYCLE~~	The date of the last reset action
~~MEMBERS~~	A list of members (first 5 only) linked to the tracker.
The date of the next scheduled reset action	
~~OWNER~~ The SP owner of the tracker	
~~PROFILENAME~~ The rules profile name	
~~RESETCYCLE~~ The reset cycle for the tracker rule	
~~RULENAME~~	The rule name
~~SVCTYPE~~	The service type defined for the tracker
~~TRACKERID~~ The numeric tracker ID	
~~TRACKERNAME~~ The tracker name	
~~TRACKERRULEID~~ The numeric tracker rule ID	
~~TRIGGERBAL~~ The calculated balance value which triggered the action	
~~UNIT~~	The usage unit name defined for the rule

Email Formatting Example

Template Subject: Tracker: ~~TRACKERID~~, ~~TRACKERNAME~~ has reached 100 percent

Generated Subject: Tracker: 10651, Tracker for 300125010905870 has reached 100 percent

Template Body:

The tracker has reached the trigger balance and generated this email. Please see details below regarding the current state of the tracker.

Owner: ~~OWNER~~
Tracker: ~~TRACKERID~~, ~~TRACKERNAME~~
Tracker Rule: ~~TRACKERRULEID~~, ~~RULENAME~~
Action Profile: ~~PROFILENAME~~
Service Type: ~~SVCTYPE~~
Tracker Units: ~~UNIT~~
Current Balance: ~~CURRBAL~~
Cumulative Balance: ~~CUMULATIVEBAL~~
Reset Cycle: ~~RESETCYCLE~~, Cycle settings: ~~CYCLESET~~
Last reset date: ~~LASTCYCLE~~
Next reset date: ~~NEXTCYCLE~~
Action: ~~ACTION~~
Action Threshold: ~~ACTIONTHRESH~~

Tracker Members: (first 5 shown) ~~MEMBERS~~

Trigger Balance: ~~TRIGGERBAL~~

Generated Body:

The tracker has reached the trigger balance and generated this email. Please see details below regarding the current state of the tracker.

Owner: 200001

Tracker: 10651, Tracker for 300125010909864123 Tracker Rule: 10652, 14K SBD Data watch Action Profile: 14K M2M Rules Profile

Service Type: M2M Tracker Units: KBYTE Current Balance: 165 Cumulative Balance: 165

Reset Cycle: BILLCYCLE, Cycle settings: NA

Last reset date: NA

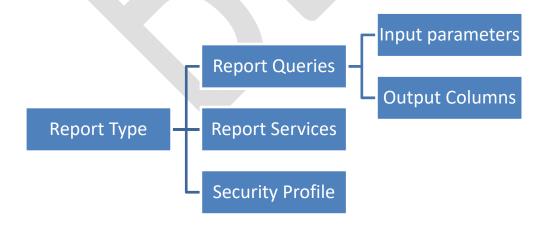
Next reset date: 11-JUL-2015 00:00:00

Action: NOTIFY Action Percent: 100 Action Threshold: NA Trigger Balance: 14

Tracker Members: (first 5 shown) 300125010909864123

3 What is a Report?

Reporting gives you the ability to choose a predefined Report (report type) to be distributed with select attributes, output columns and parameters. Instead of having to run a report, you can choose to have this report sent to you via email (report as an attachment or a link to the report) or loaded to an FTP site for pickup.



3.1 Report Types

Before you start the creation of a scheduled report, make yourself familiar with the different reports that are available. These are all existing datamart reports that are now available for scheduling.

- Account Sync
- M2M Device Search
- Prepaid Account Summary
- Prepaid Call History
- Provisioning History
- Resource Inventory
- SBD Device Search
- Scratch Card Details
- Scratch Card Summary
- Shared Plan Report
- Subscriber Base Report
- Subscriber Usage Summary
- Voucher Details
- Voucher Usage Details

3.2 Creation of an On Demand Report

To run a report immediately, one time users can request and on demand report.

Step 1: Select the **Report Type** (report)

Step 2: Choose background mode, if it is desired to get the results immediately in the response object, choose background mode false. If the report will generate a large result set, or it is desired to have the file link sent to the user choose background mode true and provide a delivery address.

Step 3: Select the report filters (input parameters) to generate the desired results.

Step 4: Select the Output Columns that you would like in your scheduled report

For requests not run in background, the results will provide a generic set of csv formatted rows which can be parsed. The results will be limited to the first 1000 rows. All results will also contain a url to retrieve the full result set in a csv file format.

Background requests will send an email to the requestor with a link to the file for download as well as a compressed file attachment.

3.3 Creation of a Scheduled Report

Now that you have familiarized yourself with the reports you are ready to create a scheduled report.

The first step will be to **name** your scheduled report, this should be a name that will be easily identifiable with the report type. Once you've named the report, select the **Report Type** (report), start date (date you want to start receiving the report) and end date (if desired).

Next step is to customize the options of this scheduled report, set your **Recurring Cycle** (would you like to receive the report Daily, Weekly, Monthly), **Cycle Settings** (day of the week, etc.), **Output Format** and **Delivery Type** (Email Link, Email File, FTP).

After you've customized your scheduled report options, enter the **Distribution Address(es)**. This is the email address(es) where you want the report sent. Multiple addresses should be separated by a semicolon (;). When the email is sent, choose if you would like it **Compressed** or not.

Next select the **Output Columns** that you would like in your scheduled report and define the **Parameters**. The Output Columns and Params are specific to the Report Type have chosen. The *Results Limit* gives you the option to limit the number of rows returned and delivered in your scheduled report. The *Start Row* gives you the option to begin the report on a specific row (or record) of the database. If these two fields are required for the report and you do not wish to specify, simply enter 1 in start row (so it will begin at the first row) and enter a high number in the results limit (so that it will return all rows).

4 Available Logs

A number of logs are available to assist with troubleshooting and confirmation of actions

4.1 Tracker Action Logs

- Identifies all actions that have occurred for a Tracker, such as notify and reset actions.
- Will contain links to any emails generated as a result of the action
- Will identify pre and post balance

4.2 Tracker Usage Logs

Identifies each call record that had an impact on a Tracker and the pre/post call balance

4.3 Tracker Email Logs

- Identifies the email notifications sent related to a Tracker
- Stores distribution list, subject, body, time sent.
- Will indicate an error if it was unable to be sent, but there is no visibility for bounced emails, or failure to receive etc.

4.4 Report Transaction Logs

- Identifies all reports generated related to a scheduled report request
- Includes link to file generated, scheduled time, generated time, status.
 - PENDING: waiting to be processed by report engine
 - INPROGRESS: currently being processed
 - COMPLETED: transaction completed.
 - ERROR: transaction failed.

5 Major Components

5.1 Authentication

Iridium Web Services uses its own built-in authentication scheme instead of using SOAPs header for basic or digest authentication. There are two levels of authentication. The first level of authentication allows your application to access and use all IWS web services. You will receive an Iridium Web Services username and secret key after submitting an IWS Test System Access Request form (which can be found in the Iridium IWS Certification Process Information Pack on Iridium for Partners) and accepting the Iridium Provisioning System Terms and Conditions of Use. These credentials are required to authenticate and access IWS. The table below outlines the fields that are common to every request in IWS:

Element/Field	Required?	Description
iwsUsername (type:string)	Yes	Username provided to you by Iridium for authentication against IWS.
signature (type:string)	Yes	Signature used when authenticating against IWS. It is generated using HMAC-SHA1 encryption. * See details below about how to generate this value.
serviceProviderAccountNumber (type:string)	No	The account number associated with the service provider account.
timestamp (type:dateTime)	Yes	This is the time the request was sent to IWS. This is also the same timestamp you will use when generating the signature for the request. All timestamps in IWS follow the ISO 8601 format.
caller (type:string)	No	This should be the login for the individual making requests into IWS. This will accept any string for auditing purposes. However, if the IWS user-related services have been used to setup your permissions, this should be the login for that user.
callerPassword (type:string)	No	This is the password for the above user. It will only be utilized by the IWS user-related services.

^{*} The signature is generated using the following steps:

Concatenate the values of the action and timestamp (in that order). The action is the web service operation name; for example, "authenticatedPing".

Calculate the HMAC-SHA1 and encode Step #1 using the Iridium-provided secret key as the key.

Convert the resulting value from Step #2 to Base64 encoded resulting in the signature used in the request.

You can test your signature and request by requesting the IWS web service request authenticatedPing.

An optional, secondary level authentication is available if you choose to create a role-based architecture when using IWS services. Passing caller and callerPassword credentials will enforce role-based authentication throughout IWS. The three roles are:

- SPN_SP_ADMIN (Administrator) access to all functions.
- SPN_SP_CSR (User) access to all subscriber, report, and utility actions. Not allowed to modify users.
- SPN_SP_REPORT (Read-only) access to view subscribers and generate reports.

If you choose to invoke roles-based access to the system, your requests to IWS must contain the primary and secondary authentication fields. The caller, callerPassword and access role directly correlate to SPNet Pro login access and, for simplicity, can be set up directly on SPNet Pro in the Manage Users section. For information on managing users on <u>SPNet Pro</u>, please reference the Iridium SPNet Pro User Guide <u>which can be found on Iridium For Partners</u>.

5.2 Variable Types / Values

There are a number of type fields utilized by IWS. Below are the rules regarding types, and the valid values for custom types.

Base types:

- string
- dateTime
- boolean
- int
- long
- double
- float

5.3 DateTime String Format

Most dateTime values are returned as string values to allow for acceptance of null values in the input and response. The format for all date variables of string type is: yyyy-MM-dd'T'HH:mm:ss'Z'

Examples:

```
<startDate>2012-01-01T00:00:00Z</startDate>
<endDate>2014-01-01T00:00:00Z</endDate>
```

**NOTE: All system dates are in GMT time zone. When entering effective dates, or start/end dates keep in mind to enter values in GMT, or errors may be returned for action effective in the past/future.

5.4 accountStatusEnum

Used for account status values. Values are of type String. Valid Values are:

Value	Description		
ACTIVE	The account is active and can be used to make requests/generate usage.		
PENDING	The device has outstanding provisioning service orders that haven't completed processing. It cannot be modified or used while it is in this state. NOTE: This is a derived state (i.e., determined from other pieces of data in the system).		
SUSPENDED	The service on the device has been suspended so that it cannot be used to make requests. While in this state, the account may or may not be generating monthly fees depending on the plan. An account in this state can have the service turned back on.		
DEACTIVE The service has been deactivated. It cannot be used to make requests and it is not generating monthly charges. A device in this state cannot be re-provisioned for use through the web services.			
ERROR	The account is in an error state. Contact Tier 2 for assistance to clear this condition.		

5.5 actionTypeEnum

Used for identifying action for type values. Values are of type String. Valid Values are:

Value	Description
ADD	Used to specify an add action for update calls
DELETE	Used to specify a delete action for update calls.

5.6 callDirectionEnum

Used for call direction values. Values are of type String. Valid Values are:

Value	Description
OUTGOING	The subscriber made the call.
INCOMING	The subscriber received the call.
EMERGENCY	The subscriber made a call to the emergency number.
CALLFORWARD	The subscriber forwarded the call to another number.

5.7 callStatusEnum

Used for call status values. Values are of type String. Valid Values are:

Value	Description
IN_PROGRESS	Call is still in progress
ENDED Call has completed, does not indicate reason for	
	completion.

5.8 callServiceCodeEnum

Used for call service code values. Values are of type String. Valid Values are:

Value	Description
ALL	All traffic returned
DATA	OpenPort data Call
DOWNLOAD	This will pull all MT usage that has completed.
ERROR	This will pull all MO usage that encountered errors.
NOTDELIVERED	This will pull all MO usage that hasn't yet been delivered.
PENDING	This will pull all pending MT usage.
SMS	This will pull SMS events
STREAMING	This will pull streaming calls (Certus Only)
UPLOAD	This will pull all MO usage.
VOICE	OpenPort Voice Call

5.9 errorCodeEnum

Used for identifying error type values. Values are of type String. Valid Values are:

Value	Description
CONFIG	Error related to configuration
AUTH	Authorization Error
FIELD	Field level validation Error
SYS	System Error

5.10 emailStatusEnum

Used for identifying email log record status values. Values are of type String. Valid Values are:

Value	Description
SENT	Email has been sent from server
PENDING	Email message is waiting to be picked up by the email
	process
ERROR	There was an error during email processing

5.11 emailTypeEnum

Used for identifying type of action which generated an email in the email log. Values are of type String. Valid Values are:

Value	Description
NOTIFY	Email was generated by a Tracker threshold action
RESET	Email was generated by a Tracker reset action

5.12 fixedDateRangeTypeEnum

Used for identifying fixed date range choices for report parameters. Values are of type String. Valid Values are:

Value	Description
ALL	All of time included
SPECIFIC	User will specify the date range to be used
TODAY	Today
YESTERDAY	Yesterday
WTD	Week to date
MTD	Month to date
CURRENTBILL	Current bill cycle
PREVBILL	Previous bill cycle
PREVMONTH	Previous month
YTD	Year to date

5.13 internalTypeEnum

Used for identifying monitor detail type values. Values are of type String. Valid Values are:

Value	Description
INTERNAL	For Iridium internal use only
SP	Open for customer use

5.14 memberTypeEnum

Used for identifying Tracker member type values. Values are of type String. Valid Values are:

Value	Description
MSISDN	Member is identified by MSISDN
IMEI	Member is identified by IMEI
ICCID	Member is identified by ICCID (Sim)
IMSI	Member is identified by IMSI
TALKGROUPID	Member is identified by Talkgroup ID
GROUP	Member is a reference to a resource group

5.15 outageStatusEnum

Used for identifying scheduled outage status values. Values are of type String. Valid Values are:

Value	Description
SCHEDULED	Outage is scheduled for future occurrence
WORKING	Outage is currently active
DONE	Outage has completed
CANCELLED	Outage was cancelled by administrators

5.16 recurringCycleTypeEnum

Used for identifying report generation cycle values. Values are of type String. Valid Values are:

Value	Description
DAILY	Report will be generated each day
MONTHLY	Report will be generated once per month
WEEKLY	Report will be generated once per week
HOURLY	Report will be generated once per hour.
ONDEMAND	Report will be generated only once, immediately

5.17 reportDeliveryTypeEnum

Used for identifying report delivery option values. Values are of type String. Valid Values are:

Value	Description
NONE	Report will be returned in the request only, no file
	delivered.
DIRECT	Report will be available for pickup via emailed link.
EMAIL	Report will be emailed to specified address list
FTP	Report will be transferred via FTP to specified server
	address.

5.18 reportOutputTypeEnum

Used for identifying report output file format. Values are of type String. Valid Values are:

Value	Description
EXCEL	File will be Excel format (.xls)
CSV	File will be text file with comma separated values
PDF	File will be PDF format
ACCESS	File will be access .mdb file format
EXCEL_2007	File will be Excel format (.xlsx)

5.19 resourceTypeEnum

Used for identifying resource group member type values. Values are of type String. Valid Values are:

Value	Description
MSISDN	Member is identified by MSISDN
IMEI	Member is identified by IMEI
ICCID	Member is identified by ICCID (Sim)
IMSI	Member is identified by IMSI
TALKGROUPID	Member is identified by Talkgroup ID

5.20 ReportGenerationTypeEnum

Used to identify file type generations. Values are of type String. Valid Values are:

	Value	Description
	SCHEDULED	Indicates the file was generated by scheduled report
ſ	ONDEMAND	Indicates the file was generated by on demand report

5.21 reportParameterTypeEnum

Used for identifying report parameter type values. Values are of type String. Valid Values are:

Value	Description
STRING	parameter is input string type
BOOLEAN	parameter is type TRUE or FALSE
NUMBER	parameter is type number
DATE	parameter is a date type
FIXEDDATERANGE	parameters will be an option list of date ranges which will
	be calculated at report run time.
ENUM	parameters will be an option list as defined by the enum
	specified
PICK	parameters will be an option list as defined by the param
	options comma separated values
PICK_SP	parameters used internally
PICK_SVC	parameters based on providers available services
PICK_GRP	parameter indicates a list of pool groups pulled using
	getAccountPoolingGroups
PICK_PLAN	parameter type requiring a plan name
PICK_MONTH	parameter type requiring a month

5.22 reportResultEnum

Used for identifying report result status values. Values are of type String. Valid Values are:

Value	Description
DONE	Report has completed as requested
WORKING	Report is taking longer than expected and has been
	queued
BUSY	Report is in progress
ERROR	Report request generated an error
TIMEOUT	Report request took too long to complete, resubmit with
	more refined search criteria.

5.23 reportServiceTypes

Used for identifying report result status values. Values are of type String. Valid Values are:

Value	Description
BURST_DEVICE	Service type for Burst Device
BURST_SERVICE	Service type for Burst Service
CERTUS	Service type for Certus
MACHINE_TO_MACHINE	Service type for M2M
OPEN_PORT	Service type for Openport
PAGING	Service type for Paging
PTT_DEVICE	Service type for PTT Device
PTT_TALKGROUP	Service type for PTT Talkgroup
SHORT_BURST_DATA	Service type for SBD
TELEPHONY	Service type for Telephony

5.24 sbdUsageSearchTypeEnum

Used for specifying SBD search type values. Values are of type String. Valid Values are:

Value	Description
ALL	This will pull all MT and Mobile Originated (MO) usage that
	has completed. This will not pull PENDING messages.
UPLOAD	This will pull all MO usage.
NOTDELIVERED	This will pull all MO usage that hasn't yet been delivered.
ERROR	This will pull all MO usage that encountered errors.
DOWNLOAD	This will pull all MT usage that has completed.
PENDING	This will pull all pending MT usage.

5.25 serviceTypeEnum

Used for specifying service type values. Values are of type String. Valid Values are:

Value	Description
ATS	This is used to locate ATS
BURST_DEVICE	This is used to locate GLOBAL DATA BROADCAST
	DEVICE (GDBDEVICE)
BURST_SERVICE	This is used to locate GLOBAL DATA BROADCAST
	SERVICE (GDBSERVICE)
CERTUS	This is used to locate CERTUS
MACHINE_TO_MACHINE	This is used to locate MACHINE TO MACHINE (M2M)
OPEN_PORT	This is used to locate OPEN PORT (OP)
PAGING	This is used to locate PAGING
SCRATCHCARD	This is used to locate SCRATCH CARD (SC)
SHORT_BURST_DATA	This is used to locate SHORT BURST DATA (SBD)
TELEPHONY	This is used to locate TELEPHONY
TELPREPAID	This is used to locate PREPAID
PTT_DEVICE	This is used to locate PUSH-TO-TALK DEVICE
PTT_TALKGROUP	This is used to locate PUSH-TO-TALK TALKGROUP

5.26 usageSubscriberSearchTypeEnum

Used for account searches. Values are of type String. Valid Values are:

Value	Description
ACCOUNT_NUMBER	Search by account number
IMSI	Search by IMSI associated to a sim
IMEI	Search by IMEI. For specific service IMEI values specify the
	serviceType value in the request.
MSISDN	Search by MSISDN or MSISDNC value
SIM_SERIAL_NUMBER	Search by sim serial (ICCID)

5.27 trackerActionTypeEnum

Used for identifying actions which can occur based on Tracker threshold triggers. Values are of type String. Valid Values are:

Value	Description
NOTIFY	On trigger, email notification will be sent
SUSPEND	On trigger suspend action will occur (Planned for future)
DEACTIVATE	On trigger deactivate action will occur (Planned for future)
CHANGE PLAN	On trigger change plan action will occur (Planned for
	future)

5.28 trackerResetCycleEnum

Used for specifying when a Tracker will reset balance to 0. Values are of type String. Valid Values are:

Value	Description
DAILY	Reset will occur daily
MONTHLY	Reset will occur monthly
BILLCYCLE	Reset will occur on bill cycle date at 00:00 GMT
THRESHOLD	Reset will occur each time 100% threshold is reached

5.29 trackerRuleTypeEnum

Used for identifying type of Tracker rule. Values are of type String. Valid Values are:

Value	Description
HIGH	Tracker will trigger when threshold values are surpassed
LOW	Tracker will trigger on reset cycle if usage has not reached
	the specified threshold value.

5.30 trackerStatusEnum

Used for identifying status values. Values are of type String. Valid Values are:

Value	Description
ACTIVE	This entry is currently active and available for assignment
OBSOLETE	This entry is no longer valid for new assignment, however prior links to this entry are grandfathered to use the attributes specified.

5.31 trackerTypeEnum

Used for identifying Tracker type values. Values are of type String. Valid Values are:

	Value	Description
	INTERNAL	Internal tracker for Iridium use ONLY
Γ	SP	Tracker for customer use.

5.32 usageDateTypeEnum

Used for identifying Tracker type values. Values are of type String. Valid Values are:

Value	Description
CALL_END	find all calls which completed during range specified
CALL_START	find all calls which started during range specified
LAST_MODIFIED	find all calls which started or completed during range
	specified (current results)
BETWEEN	find all calls which were updated/processed in report
	system during range specified (this will give most accurate
	results for synchronizing usage data)



6 SOAP Methods

6.1 addCommStatusConfig

addCommStatusConfig is used to set communication status configuration thresholds for red and amber status values. For reporting purposes green status will be automatically reflected for a terminal which has had a communication event more recently than the amber value. Communication status config entries can be specified for each service type. If a user does not add any entries for their account, the global system defaults will be utilized for reporting purposes.

A typical request (addCommStatusConfigRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
serviceType (type: serviceTypeEnum)	Yes	See Service types
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
redThreshold	No	Numeric value for number of minutes since last communication. Must be > amber value if amber value is specified. If left blank no devices will reach red status.
amberThreshold	No	Numeric value for number of minutes since last communication. Must be < amber value if red value is specified. If left blank no devices will reach amber status.

A typical success response would look like: (addCommStatusConfigResponseImpl)

Element/Field	Required?	Description
commStatusConfigDetail (type: commStatusConfigEntryImpl)	Yes	Array of config entries
cscld (type: string)	Yes	Unique ID for each communication status config entry (system generated)
owner (type: string)	Yes	Owner of config entry. Will contain SP account number, or 'GLOBAL' for system defined defaults.
serviceType (type: serviceTypeEnum)	Yes	See Service types
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
redThreshold (type: string)	No	Numeric value for number of minutes since last communication. Must be > amber value if amber value is specified. If left blank no devices will reach red status.
amberThreshold(type: string)	No	Numeric value for number of minutes since last communication. Must be < amber value if red value is specified. If left blank no devices will reach amber status.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=addCommStatusConfig

6.2 addTrackerActionProfile

This call adds actions to be linked to a Tracker Rules Profile definition. Each Tracker Rules Profile can have a one to many relationship with Tracker Rules Profile actions.

Typical IWS request (addTrackerActionProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
trackerRulesProfileId (type: string)	Yes	Id of parent Tracker Rules Profile.
actionType (type: trackerActionTypeEnum)	No	Action type to be executed when threshold is reached. Default value is NOTIFY.
thresholdPercentage (type: string)	No	The percentage of the threshold balance which will trigger action. Either percentage or balance must be specified, but not both.
thresholdBalance (type: string)	No	The balance value which will trigger action. Either percentage or balance must be specified, but not both.
alertStatus (type: boolean)	Yes	Set to true or false for alerts
		TRUE: alertStatus will be set for members of this Tracker when this action is triggered.
		FALSE: alertStatus will not be modified by this action being triggered.
emailProfileId (type: string)	No	Enter the email profile ID to utilize predefined email templates. (If specified then subject and body will be ignored.)
subject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.

Element/Field	Required?	Description
body (type: string)	No	Enter body for email alerts. See <u>Email</u> <u>parsing</u> . Max 2000 chars.

A typical success response will contain a fully populated Tracker action entry object (addTrackerActionProfileResponseImpl):

Element/Field	Required?	Description
TrackerActionTypeProfile (type: trackerActionTypeProfileEntryImpl)	Yes	Array of Tracker Action Type Profiles.
actionProfileId (type: string)	Yes	System generated Id of the Tracker action profile.
startDate (type: string)	Yes	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	Yes	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
trackerRulesProfileId (type: string)	Yes	Id of parent Tracker Rules Profile.
actionType (type: trackerActionTypeEnum)	Yes	Action type to be executed when threshold is reached. Default value is NOTIFY.
thresholdPercentage (type: string)	Yes	The percentage of the threshold balance which will trigger action. Either percentage or balance must be specified, but not both.
thresholdBalance (type: string)	Yes	The balance value which will trigger action. Either percentage or balance must be specified, but not both.
alertStatus (type: string)	Yes	Set to true or false for alerts TRUE: alertStatus will be set for members of this Tracker when this action is triggered. FALSE: alertStatus will not be modified by this action being triggered. (Default value)
emailProfileId (type: string)	No	The email profile ID to utilize predefined email templates. (If specified then subject and body will be ignored.)

Element/Field	Required?	Description
subject (type: string)	Yes	Subject for email alerts. See <u>Email parsing</u> . Max 100 chars.
body (type: string)	Yes	Body for email alerts. See Email parsing. Max 2000 chars.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=addTrackerActionProfile

6.3 addTrackerCallTypeProfile

This call is used to add call types linked to the parent Tracker Rules Profile definition. Each Tracker Rules Profile can have a one to many relationship with the Tracker call type profile records. A typical request (addTrackerCallTypeProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
trackerRulesProfileId (type: string)	Yes	Id of parent Tracker Rules Profile.
callTypeId (type: string)	Yes	Call Type Id to add to profile
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.

Typical success response will look like: (addTrackerCallTypeProfileResponseImpl)

Element/Field	Required?	Description
TrackerCallTypeProfile (type: trackerCallTypeProfileEntryImpl)	Yes	Array of Tracker Call Type Profiles.
trackerRulesProfileId (type: string)	Yes	Profile to which call type is linked to
callTypeId (type: string)	Yes	ld of the call type.
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=addTrackerCallTypeProfiles

6.4 addTrackerMember

This call is used to add members to Trackers. Each Tracker may have one to many members. Tracker members may be specific device reference, or link to resource group. A typical request (addTrackerMemberRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	Yes	Id of an existing usage tracker
memberType (type: memberTypeEnum)	Yes	See MemberTypeEnum
memberId (type: string)	Yes	This must reference a valid device or the ID of a valid resource group.

Element/Field	Required?	Description
startDate (type: string)	No	Date Time value specifying start time when member will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when member will be included as part of this Tracker. Null value will indicate record continues indefinitely.

A typical success response will contain the following. (trackerMemberResponseImpl)

Element/Field	Required?	Description
member (type: trackerMemberEntryImpl)	Yes	Array of Tracker members
trackerMemberId (type: Long)	Yes	ld of Tracker member created
memberType (type: memberTypeEnum)	Yes	See MemberTypeEnum
memberId (type: string)	Yes	This must reference a valid device or the ID of a valid resource group.
startDate (type: string)	No	Date Time value specifying start time when member will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when member will be included as part of this Tracker. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: string)	Yes	User ID performing last update
updatedDate (type: string)	No	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=addTrackerMember

6.5 addTrackerRule

This call is used to add rule entries linked to the a Tracker and referencing a Tracker Rules Profile definition. Each Tracker can have one to many rules. A typical request (addTrackerRuleRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
trackerId (type: string)	Yes	Link to parent Tracker Id
trackerRulesProfileId (type: string)	Yes	Reference link to Tracker Rules Profile which will define the actions for this rule.
resetCycle (type: trackerResetCycleEnum)	No	Defines the schedule for resetting the Tracker Rule balance to 0. See TrackerResetCycleEnum
cycleSetting (type: long)	No	Defines the specific settings to trigger Tracker rule balance reset based on resetCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1) BILLCYCLE – leave blank, reset occurs on billcycle day) THRESHOLD – leave blank, auto reset at threshold balance.
notifyOnReset (type: boolean)	Yes	TRUE: Email address(es) on Tracker will be notified each reset action. FALSE: no email will be sent on reset actions.
name (type: string)	Yes	Name for Rule, must be unique per Tracker ID.
trackerRuleType (type: trackerRuleTypeEnum)	Yes	See <u>TrackerRuleTypeEnum</u>

A typical successful response will contain the following. (trackerRuleResponseImpl)

Element/Field	Required?	Description
trackerRule (type: trackerRuleEntryImpl)	Yes	Array of Tracker rules
trackerRuleId (type: Long)	Yes	Id of Tracker rule created
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
trackerld (type: string)	Yes	Link to parent Tracker Id
trackerRulesProfileId (type: string)	Yes	Reference link to Tracker Rules Profile which will define the actions for this rule.
resetCycle (type: trackerResetCycleEnum)	No	Defines the schedule for resetting the Tracker rule balance to 0. See TrackerResetCycleEnum
cycleSetting (type: string)	No	Defines the specific settings to trigger tracker rule balance reset based on resetCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1) BILLCYCLE – leave blank, reset occurs on billcycle day) THRESHOLD – leave blank, auto reset at threshold balance.
nextCycleDate (type: string)	Yes	Date of next scheduled reset for Tracker Rule
lastCycleDate (type: string)	No	Date of last reset action for Tracker Rule
name (type: string)	Yes	Name for Rule, must be unique per Tracker ID.
notifyOnReset (type: boolean)	Yes	TRUE: Email address(es) on tracker will be notified each reset action. FALSE: no email will be sent on reset actions.

Element/Field	Required?	Description
trackerRuleType (type: trackerRuleTypeEnum)	Yes	See <u>TrackerRuleTypeEnum</u>
currentBalance (type: string)	Yes	The current balance of the usage Tracker Rule.
cumulativeBalance (type: string)	Yes	The total balance since inception for the usage Tracker Rule.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: string)	Yes	User ID performing last update
updatedDate (type: string)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=addTrackerRule

6.6 addTrackerRulesProfile

This call is used to add call types linked to the parent Tracker Rules Profile definition. Each Tracker Rules Profile can have a one to many relationship with the tracker call type profile records. A typical request (addTrackerCallTypeProfileRequest) will contain the following attributes:

IWS call used to add Tracker Rules Profile entries. Typical IWS request (addTrackerRulesProfileRequestImpl) looks like

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
name (type: string)	Yes	Name for Tracker Rules Profile
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rule Profile. See Service Types.
usageUnitId (type: string)	Yes	Usage Unit ID gathered from getUsageUnits call. Denotes the units expected for the profile. This field is informational, and does not indicate only calls with this billing unit will be counted. (linked call types determine which calls are included)
thresholdBalance (type: string)	Yes	Target balance for triggered actions.
status (type: trackerStatusEnum)	No	Defaults to ACTIVE on creation. Can be set to OBSOLETE if it is desired to make this rule profile unavailable for future Tracker Rules. Changing to OBSOLETE does not inactivate current rules linked to this profile, setting end date will make the entry no longer valid.

A typical successful response will contain the following. (addTrackerRulesProfileResponseImpl)

Element/Field	Required?	Description
trackerRulesProfile (type: trackerRulesProfileEntryImpl)	Yes	Array of Tracker Rules
trackerRulesProfileId (type: string)	Yes	System generated unique ID for Rules profile entry.
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
owner (type: string)	Yes	Owner for the rule profileGLOBAL for universal shared profiles,SP account number
profileName (type: string)	Yes	Name for Tracker Rules Profile (40 chars max)
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rule Profile. See Service Types.
usageUnitId (type: string)	Yes	Usage Unit ID gathered from getUsageUnits call. Denotes the units expected for the profile. This field is informational, and does not indicate only calls with this billing unit will be counted. (linked call types determine which calls are included)
thresholdBalance (type: string)	Yes	Target balance for triggered actions.
status (type: trackerStatusEnum)	No	Defaults to ACTIVE on creation. Can be set to OBSOLETE if it is desired to make this rule profile unavailable for future tracker rules. Changing to OBSOLETE does not inactivate current rules linked to this profile, setting end date will make the entry no longer valid.
createdBy (type: string)	Yes	User ID who created the record

Element/Field	Required?	Description
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=addTrackerRulesProfile

6.7 addEmailProfile

This call is used to create new email profiles. Email profiles are used to create a template for email messages generated by NOTIFY actions. A typical request (addEmailProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
emailType (type: emailTypeEnum)	Yes	See <u>Email Types</u>
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
msgSubject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.
msgBody (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.

A typical successful response will contain the following. (addEmailProfileResponseImpl)

Element/Field	Required?	Description
emailProfileDetail (type: emailProfileEntryImpl)	Yes	Array of email profiles
trackerEmailProfileId (type:string)	Yes	System generated unique ID for the email profile entry.
owner (type: string)	Yes	 Owner for the rule profile GLOBAL for universal shared profiles, SP account number

Element/Field	Required?	Description
owner(type:string)	Yes	serviceProviderAccountnumber
emailType (type: emailTypeEnum)	Yes	See Email Types
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
msgSubject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.
msgBody (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=addEmailProfile

6.8 createOnDemandReport

This call is used to create new on demand report requests. On Demand reports will be utilized for report requests to be automatically generated and sent to users one time, immediately. A typical request (createOnDemandReportRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
onDemandReportDetails (type: onDemandReportDetailsEntryImpl)	Yes	On Demand report object
reportId (type: string)	Yes	ID for Report type to be generated as a result of this request. Obtained from getReportTypes.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
background (type: string)	Yes	True – run report in background immediately and send results to deliveryAddrs address list False – run report immediately and send results in response object.
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramld (type: string)	Yes	Parameter ID. Obtained from getReportTypes
value (type: string)	Yes	Value to be submitted for input parameter at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns

Element/Field	Required?	Description
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
columnIds (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10) If not provided all report columns will be included in the output file.
reportId (type: string)	Yes	Service type for resource group. See Service Types.
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new trackers or report requests.

A typical successful response will contain the following (createOnDemandReportResponseImpl)

Element/Field	Required?	Description
totalNumberOfReports (type: string)	Yes	Count of reports returned
link (type: string)	No	URL for file download.
transactionId (type: string)	No	Id for transaction being executed
error (type: string)	No	Error message if applicable
report (type: reportResultDetailsEntryImpl)	No	Report results object – this will be empty if background request was submitted.
row (type: string)	No	Generic csv row format for result set. By default up to 1000 rows will be returned. If the request generated more results, the user can link to the provided url for full csv file download.

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=createOnDemandReport

6.9 createScheduledReport

This call is used to create new scheduled report requests. Scheduled reports will be utilized for report requests to be automatically generated and sent to users on a predefined recurring basis. A typical request (createScheduledReportRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
scheduledReportDetails (type: scheduledReportDetailsEntryImpl)	Yes	Scheduled report object
reportId (type: string)	Yes	ID for Report type to be generated as a result of this request. Obtained from getReportTypes.
name (type: string)	Yes	Display name for report request
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
recurringCycle (type: recurringCycleTypeEnum)	Yes	Defines the recurring schedule for generating the reports. See Recurring Cycles
cycleSettings (type: int)	Yes	Defines the specific settings to trigger report generation based on recurringCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1)
outputSettings (type: outputSettingsEntryImpl)	Yes	
outputFormat (type: reportOutputTypeEnum)	Yes	Type of file to be generated. See Output Format Types

Element/Field	Required?	Description
deliveryType (type: reportDeliveryTypeEnum)	Yes	Type of report delivery. See Report Delivery Types
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
status (type: trackerStatusEnum)	Yes	See <u>Tracker Status</u>
compressed (type: boolean)	Yes	TRUE: compress output files in zip format. FALSE: do not compress output files.
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramId (type: string)	Yes	Parameter ID. Obtained from getReportTypes
value (type: string)	Yes	Value to be submitted for input parameter at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes

Element/Field	Required?	Description
columnIds (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10) If not provided all report columns will be included in the output file.
reportId (type: string)	Yes	Service type for resource group. See Service Types.
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new trackers or report requests.

A typical successful response will contain the following (getScheduledReportsResponseImpl)

Element/Field	Required?	Description
totalNumberOfReports (type: string)	Yes	Count of reports returned
totalNumberOfDetailRecords (type: string)	Yes	Count of detail records included
scheduledReports	Yes	Array of reports
scheduledReport (type: scheduledReportEntryImpl)	Yes	Scheduled report object
scheduledRequestId (type:string)	Yes	System generated unique ID for the report request
scheduledReportDetails (type: getScheduledReportDetailsEntryImpl)	Yes	Service type for resource group. See Service Types.
reportId (type: string)	Yes	ID for Report type to be generated as a result of this request. Obtained from getReportTypes.
name (type: string)	Yes	Display name for report request

Element/Field	Required?	Description
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
recurringCycle (type: recurringCycleTypeEnum)	Yes	Defines the recurring schedule for generating the reports. See Recurring Cycles
cycleSettings (type: int)	Yes	Defines the specific settings to trigger report generation based on recurringCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1)
outputSettings (type: outputSettingsEntryImpl)	Yes	
outputFormat (type: reportOutputTypeEnum)	Yes	Type of file to be generated. See Output Format Types
deliveryType (type: reportDeliveryTypeEnum)	Yes	Type of report delivery. See Report Delivery Types
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
status (type: trackerStatusEnum)	Yes	See <u>Tracker Status</u>

Element/Field	Required?	Description
compressed (type: boolean)	Yes	TRUE: compress output files in zip format. FALSE: do not compress output files.
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramId (type: string)	Yes	Parameter ID. Obtained from getReportTypes
value (type: string)	Yes	Value to be submitted for input paramete at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
columnIds (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10) If not provided all report columns will be included in the output file.

https://training.iridium.com/iwsexplorer/index.php?call=createScheduledReport

6.10 createResourceGroup

This call is used to create new resource group. Resource Groups will define a group of devices, of the same service, to be tracked or reported on (FUTURE) in a single request. It is recommended to create resource groups for larger sets of devices that are desired to be linked often. A typical request (createResourceGroupRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
groupName (type: string)	Yes	Display name for resource group retrieval (must be unique within service provider) Max 40 chars.
serviceType (type: serviceTypeEnum)	Yes	Service type for resource group. See Service Types.
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new trackers or report requests.

A typical successful response will contain the following (createResourceGroupResponseImpl)

Element/Field	Required?	Description
resourceGroupDetail (type: resourceGroupDetailsEntryImpl)	Yes	Array of resource groups
groupId (type:string)	Yes	System generated unique ID for the resource group.
serviceType (type: serviceTypeEnum)	Yes	Service type for resource group. See Service Types.
owner (type: string)	Yes	Owner for the rule profile GLOBAL for universal shared profiles, SP account number
groupName (type: string)	Yes	Display name for resource group retrieval (must be unique within service provider) Max 40 chars.

Element/Field	Required?	Description
description (type: string)	No	Description for the group Max 100 chars.
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new trackers or report requests.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=createResourceGroup

6.11 createTracker

This call is used to create a new tracker definition. The tracker definition defines the primary attributes to be associated with each of the rules. A tracker can only apply to single service. A tracker will not perform any actions until members and rules are linked to it. A typical request (createTrackerRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerType (type: trackerTypeEnum)	No	The tracker type will default to EXTERNAL if not passed. INTERNAL is used by IRIDIUM. See Tracker Types
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.

Element/Field	Required?	Description
serviceType (type: serviceTypeEnum)	Yes	Service type associated for a tracker. See Service Types.
name (type: string)	Yes	Display name for tracker retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group Max 100 chars.
emailAddresses (type: string)	Yes	A comma delimited string of email addresses. All notifications related to this tracker will be sent to this list

A typical successful response will contain the following. (trackerResponseImpl)

Element/Field	Required?	Description
tracker (type: trackerEntryImpl)	Yes	Array of tracker definitions
trackerType (type: trackerTypeEnum)	No	The tracker type will default to EXTERNAL if not passed. INTERNAL is used by IRIDIUM. See Tracker Types
trackerld (type: string)	Yes	Unique system generated Id for tracker definition
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
serviceType (type: serviceTypeEnum)	Yes	Service type associated for a tracker. See Service Types.
name (type: string)	Yes	Display name for tracker retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group Max 100 chars.

Element/Field	Required?	Description
emailAddresses (type: string)	Yes	A comma delimited string of email addresses. All notifications related to this tracker will be sent to this list
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: string)	Yes	User ID performing last update
updatedDate (type: string)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=createTracker

6.12 getCertusRawUsage

This call is used to get raw usage details for Certus devices. A typical request (getCertusRawUsageRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
certusCriteria (type: certusRawCallDataSearchCriteriaImpl)		
callId (type: string)	No	Specific call ID to search for
callType (type: callServiceCodeEnum)	No	Filter results by specific call type. See <u>Call</u> <u>types</u>
resourceType (type: usageSubscriberSearchTypeEnum)	No	Type of resource to search for raw usage details
value (type: string)	No	Value of resource ID to be searched.
dateType (type: usageDateTypeEnum)	No	See <u>usageDateTypeEnum</u>
searchStartDate (type: date)	No	Search for usage generated after the search start date provided.
searchEndDate (type: date)	No	Search for usage generated before the search start end provided.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

If the request is successful, a CDR object will be returned: (getCertusRawUsageResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
certusRawUsageEntries		Array of details
certusRawUsageEntry (type: certusRawCallDataEntryImpl)	Yes	Raw usage object
cdrld (type: long)	Yes	The unique ID of the processed call record assigned by the system.
sessionId (type:string)	Yes	The unique ID of the call assigned by the network element.
accountNumber (type:string)	Yes	The account number of the subscriber that made the call.
serviceProviderAccountNumber (type:string)	Yes	The account number of the service provider.
msisdn (type:string)	Yes	If this is a VOICE call, this will contain the phone number that made the call. If this is a DATA call, it will always be null.
duration (type:long)	Yes	If this is a VOICE call, this will contain the length of the call.
		If this is a DATA call, it will always be 0.
bytesUp (type:long)	Yes	If this is a DATA call, this will contain the number of bytes uploaded on the call.
		If this is a VOICE or STREAMING call, it will always be 0.

Element/Field	Required?	Description
bytesDown (type:long)	Yes	If this is a DATA call, this will contain the number of bytes downloaded on the call.
		If this is a VOICE or STREAMING call, it will always be 0.
totalBytes (type:long)	Yes	If this is a DATA call, this will contain the total number of bytes transmitted on the call.
		If this is a VOICE or STREAMING call, it will always be 0.
status (type:callStatusEnum)	Yes	See <u>Call Status</u> .
imei (type:string)	Yes	The IMEI on the account.
imsi (type:string)	Yes	The IMSI representing the SIM on the account.
direction (type:callDirectionEnum)	Yes	See <u>Call Directions</u> .
		If this is a DATA call, it will always be OUTGOING.
startTime (type:string)	Yes	The start time of the call. Format for date string: yyyy-MM-dd'T'HH:mm:ss'Z'
endTime (type:string)	Yes	The end time of the call. Format for date string: yyyy-MM- dd'T'HH:mm:ss'Z'
ipAddress (type:string)	Yes	If this is a DATA call, this will contain the IP address that made the call.
		If this is a VOICE call, it will always be null.
serviceCode (type:callServiceCodeEnum)	Yes	This represents the type of call made.
		See <u>Call Service Codes</u> .
callingFrom (type:string)	Yes	If this is a VOICE call, this is where the call originated from (MSISDN).
		If this is a DATA call, it will always be null.
callingTo (type:string)	Yes	If this is a VOICE call, this is where the call terminated.
		If this is a DATA call, it will always be null.
location (type:string)	Yes	Latitude and longitude representing where the call originated.

Element/Field	Required?	Description
supplementaryService (type:int)	Yes	If this is a VOICE call, it will either be 0 or 29 (used in conjunction with call forwarding).
		If this is a DATA call, it will always be 0.
shortCode (type:string)	No	Parsed value from callingTo number to identify short code used
dialedNumber (type:string)	No	Parsed value from callingTo number to identify dialed digits
ratingCallType (type:string)	No	Refined indicator for call type to more easily match to Billing call types DATA, ISU-ISU, PSTN-ISU, LOCALNUM_INC, VM CHECK, CF-VOICEMAIL, SHORTCODE
SDFID (type:string)	No	Rating ID for Secondary Data Flow (link to Data Extract)
sdfName (type:string)	No	Name of Secondary Data Flow utilized
streamingSpeed (type:string)	No	Speed of streaming session requested
terminationCode (type:int)	No	termination code for session
callingMsidn (type:string)	No	Identifier for msisdn utilized for the voice call

https://training.iridium.com/iwsexplorer/index.php?call=getCertusRawUsage

6.13 getCommStatusConfig

This call is used to retrieve communication status configuration entries A typical request (getCommStatusConfigRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
cscld (type: string)	No	Retrieve specific entry by providing unique ID.
serviceType (type: serviceTypeEnum)	No	Retrieve only profiles linked to service type specified. See <u>Service Types</u> .

Element/Field	Required?	Description
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following (getCommStatusConfigResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
commStatusConfigDetails		Array of details
commStatusConfigDetail (type: commStatusConfigEntryImpl)	Yes	Detail object
cscld (type: string)	Yes	Unique ID for each communication status config entry (system generated)
owner (type: string)	Yes	Owner of config entry. Will contain SP account number, or 'GLOBAL' for system defined defaults.
serviceType (type: serviceTypeEnum)	Yes	See Service types

Element/Field	Required?	Description
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
redThreshold (type: string)	No	Numeric value for number of minutes since last communication. Must be > amber value if amber value is specified. If left blank no devices will reach red status.
amberThreshold(type: string)	No	Numeric value for number of minutes since last communication. Must be < amber value if red value is specified. If left blank no devices will reach amber status.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getCommStatusConfig

6.14 getEmailProfiles

This call is used to retrieve email profiles. Email profiles are used to create a template for email messages generated by NOTIFY actions. A typical request (getEmailProfilesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
emailProfileId (type: string)	No	Retrieve specific entry by providing unique ID.

Element/Field	Required?	Description
emailType (type: emailTypeEnum)	No	Retrieve only profiles linked to email type specified. See Email Types
serviceType (type: serviceTypeEnum)	No	Retrieve only profiles linked to service type specified. See <u>Service Types</u> .
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getEmailProfilesResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
emailProfileDetails		Array of details
emailProfileDetail (type: emailProfileEntryImpl)	Yes	Email profile object
trackerEmailProfileId (type:string)	Yes	System generated unique ID for the email profile entry.
owner (type: string)	Yes	Owner for the rule profile GLOBAL for universal shared profiles, SP account number
emailType (type: emailTypeEnum)	Yes	See Email Types
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
msgSubject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.

Element/Field	Required?	Description
msgBody (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getEmailProfiles

6.15 getFileList

This call is used to retrieve a list of files available for download. This may include generated scheduled reports as well as possible future file types. A typical request (getFileListRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
requestId (type: string)	No	Retrieve files associated with a specific scheduled report request by providing unique request id.
requestName (type: string)	No	Retrieve files associated with a specific scheduled report request by providing the request name (wildcards allowed).
reportId (type: string)	No	Retrieve files associated with a specific report type providing the report type ID (obtained from getReportTypes).
searchStartDate (type: string)	No	Search for files generated after the search start date provided.
searchEndDate (type: string)	No	Search for files generated before the search start end provided.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getFileListResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
generatedFiles		Array of details
generatedFile (type: fileListEntryImpl)	Yes	file object
generatedFileId (type:string)	Yes	System generated unique ID for the file entry.
scheduledRequestId (type: string)	No	Request ID which generated the file.
reportType (type: reportTypeBaseEntryImpl)	No	Report type associated with the transaction
reportId (type: string)	No	Report type associated with the transaction
reportTypeName (type: string)	Yes	Report Type name
fileName (type:string)	Yes	File name
fileDeletionDate (type: string)	Yes	Date file scheduled for deletion from storage.
createdDate (type: string)	Yes	Date file was generated.
createdBy (type: string)	No	User ID who created the record
rowsGenerated (type: string)	No	Number of rows included in the report output.
reportOutputType (type: string)	Yes	File format type.

Element/Field	Required?	Description
fileSize (type: string)	No	Size of file in bytes.
compressed (type: Boolean)	Yes	TRUE: File is in compressed zip format FALSE: File is stored uncompressed
fileDownloadURL (type: string)	No	URL for file retrieval. This url includes secure token for retrieval.
reportGenerationType (type: reportGenerationTypeEnum)	No	Indicates the type of report the file was generated for. See reportGenerationTypeEnum

https://training.iridium.com/iwsexplorer/index.php?call=getFileList

6.16 getIOPRawUsage

This call is used to get raw usage details for OpenPort devices. A typical request (getIOPRawUsageRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
iopCriteria (type: iopRawCallDataSearchCriteriaImpl)		
cdrld (type: string)	No	Specific call ID to search for
callType (type: callServiceCodeEnum)	No	Filter results by specific call type. See <u>Call</u> <u>types</u>
resourceType (type: usageSubscriberSearchTypeEnum)	No	Type of resource to search for raw usage details
value (type: string)	No	Value of resource ID to be searched.
searchStartDate (type: date)	No	Search for usage generated after the search start date provided.
searchEndDate (type: date)	No	Search for usage generated before the search start end provided.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

If the request is successful, a CDR object will be returned: (getIOPRawUsageResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
iopRawUsageEntries		Array of details
iopRawUsageEntry (type: iopRawCallDataEntryImpl)	Yes	Raw usage object
cdrld (type: long)	Yes	The unique ID of the processed call record assigned by the system.
sessionId (type:string)	Yes	The unique ID of the call assigned by the network element.
accountNumber (type:string)	Yes	The account number of the subscriber that made the call.
serviceProviderAccountNumber (type:string)	Yes	The account number of the service provider.
msisdn (type:string)	Yes	If this is a VOICE call, this will contain the phone number that made the call. If this is a DATA call, it will always be null.
duration (type:long)	Yes	If this is a VOICE call, this will contain the length of the call.
		If this is a DATA call, it will always be 0.
totalBytes (type:long)	Yes	If this is a DATA call, this will contain the total number of bytes transmitted on the call.
		If this is a VOICE call, it will always be 0.
status (type:callStatusEnum)	Yes	See <u>Call Status</u> .

Element/Field	Required?	Description
imei (type:string)	Yes	The IMEI on the account.
imsi (type:string)	Yes	The IMSI representing the SIM on the account.
direction (type:callDirectionEnum)	Yes	See Call Directions. If this is a DATA call, it will always be OUTGOING.
startTime (type:string)	Yes	The start time of the call. Format for date string: yyyy-MM-dd'T'HH:mm:ss'Z'
endTime (type:string)	Yes	The end time of the call. Format for date string: yyyy-MM- dd'T'HH:mm:ss'Z'
ipAddress (type:string)	Yes	If this is a DATA call, this will contain the IP address that made the call.
		If this is a VOICE call, it will always be null.
serviceCode (type:callServiceCodeEnum)	Yes	This represents the type of call made. See <u>Call Service Codes</u> .
callingFrom (type:string)	Yes	If this is a VOICE call, this is where the call originated from (MSISDN).
		If this is a DATA call, it will always be null.
callingTo (type:string)	Yes	If this is a VOICE call, this is where the call terminated.
		If this is a DATA call, it will always be null.
location (type:string)	Yes	Latitude and longitude representing where the call originated.
supplementaryService (type:int)	Yes	If this is a VOICE call, it will either be 0 or 29 (used in conjunction with call forwarding).
		If this is a DATA call, it will always be 0.
		1

https://training.iridium.com/iwsexplorer/index.php?call=getIOPRawUsage

6.17 getProjectVersion

The getProjectVersion request is used to display the current version of IWS.

The getProjectVersion request consists of the following pieces of data: (getProjectVersionRequestImpl)

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .

A typical response will contain the following. (getProjectVersionResponseImpl)

Element/Field	Required?	Description
Version (type:string)	Yes	Version Id of the application

6.18 getReportColumns

This call is used to retrieve output columns which will be generated for a given report type. A typical request (getReportColumnsRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
reportId (type: string)	Yes	Retrieve columns associated to a specific report type. Valid values obtained from getReportTypes.

A typical successful response will contain the following. (getReportColumnsResponseImpl)

Element/Field	Required?	Description
reportColumns		Array of columns
column (type: reportColumnEntryImpl)	Yes	Report Output Column Object
queryld (type: int)	Yes	Query ID which will generate the output
columnId (type: int)	Yes	Column ID
columnName (type:string)	Yes	Name of output column
columnDescr (type: string)	No	Description for column
columnReq (type: boolean)	Yes	TRUE: Column is required in output requests FALSE: Column is optional and can be removed from report requests.

To generate sample requests and responses use: https://training.iridium.com/iwsexplorer/index.php?call=getReportColumns

6.19 getReportParameters

This call is used to retrieve input parameters which are available as filter criteria during report generation for a given report type. A typical request (getReportParametersRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
reportId (type: string)	Yes	Retrieve columns associated to a specific report type. Valid values obtained from getReportTypes.

A typical successful response will contain the following. (getReportParametersResponseImpl)

Element/Field	Required?	Description
inputParamaters		Array of input parameters
parameter (type: reportParamEntryImpl)	Yes	Report Input Parameter Object
queryld (type: int)	Yes	Query ID which will generate the output
paramld (type: int)	Yes	Input parameter ID
paramName (type:string)	Yes	Name of input parameter
paramType (type: reportParameterTypeEnum)	No	Input Parameter Type. See <u>Parameter</u> <u>Types</u>
paramOption (type: string)	No	Valid options for paramType PICK or enum type for paramType ENUM.
paramRequired (type: boolean)	Yes	TRUE: Parameter is required in report request
		FALSE: Parameter is optional for report requests.
paramWildcard (type: boolean)	Yes	TRUE: Wildcard values are supported for this parameter
		FALSE: Wildcard values are not supported for this parameter

Element/Field	Required?	Description
defaultValue (type:string)	No	Defines the default value for the parameter if not specified.
displayOrder (type:string)	No	Defines the order value for the parameter for use in SPNet.
helpText (type:string)	No	A short definition of the parameters use.

https://training.iridium.com/iwsexplorer/index.php?call=getReportParameters

6.20 getReportPlanNames

This call is used to retrieve a list of plan names used for reporting. A typical request (getReportPlanNamesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
serviceType (type: reportServiceTypes)	Yes	Input service type. See Report Service Types

A typical successful response will contain the following. (getReportPlanNamesResponseImpl)

Element/Field	Required?	Description
reportPlanNames		Array of report plan names
reportPlanName (type: reportPlanNameImpl)	Yes	Report Plan Name Object
serviceType (type: reportServiceTypes)	Yes	Query ID which will generate the output
reportPlanName (type: string)	Yes	Input parameter ID

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=getReportPlanNames

6.21 getReportTransactionLog

This call is used to retrieve the transactions for generated reports. A typical request (getReportTransactionLogRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
requestId (type: string)	Yes	Retrieve columns associated to a specific report type. Valid values obtained from getReportTypes.
searchStartDate (type: string)	No	Limit search results to logs after start date specified
searchEndDate (type: string)	No	Limit search results to logs before end date specified
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getReportTransactionLogResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
ReportTransactionLogDetails		Array of details
ReportTransactionLogDetail (type: reportTransactionLogEntryImpl)	Yes	Report transaction object
transactionId (type: string)	Yes	Unique system generated ID for transaction record
requestId (type: string)	No	Request ID which generated the transaction.
fileId (type:string)	No	System generated ID for file generated by the transaction

Element/Field	Required?	Description
status (type: string)	No	Status of transaction. PENDING: waiting to be processed by report engine INPROGRESS: currently being processed COMPLETED: transaction completed. ERROR: transaction failed.
internalType (type: internalTypeEnum)	No	See <u>Internal Types</u>
reportId (type: string)	No	Report type associated with the transaction
reportType (type: reportTypeBaseEntryImpl)	No	Report type associated with the transaction
reportId (type: string)	No	Report type associated with the transaction
reportTypeName (type: string)	Yes	Report Type name
reportName (type: string)	Yes	Report name
outputFormat (type: reportOutputTypeEnum)	No	Type of file generated. See <u>Report Types</u> .
createdDate (type: string)	No	Date/Time transaction was created.
generationDate (type: string)	No	Date/Time file processing completed.
internalErrorDescription (type: string)	No	Internal error description in case of transaction failure
externalErrorDescription (type: string)	No	External error description in case of transaction failure

https://training.iridium.com/iwsexplorer/index.php?call=getReportTransactionLog

6.22 getReportTypes

This call is used to retrieve valid report types. The response will include the report type details, as well as arrays for output columns and input parameters associated with the report. A typical request (getReportTypesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
reportId (type: long)	No	Value of the specific report for response
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.
reportCategory (type:string)	No	Provide a value If it is desired to filter reportTypes by category
		See getReportCategory

A typical successful response will contain the following (getReportTypesResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
reportTypes		Array of details
reportType (type: reportTypeEntryImpl)	Yes	Report Type object
internalType (type: internalTypeEnum)	Yes	See <u>Internal Types</u>
reportId (type: string)	Yes	Report type associated with the transaction
reportName (type:String)	Yes	Report name
reportDescription (type:String)	Yes	The description of the report type
reportColumns	Yes	Array of objects
column (type: reportColumnEntryImpl)	Yes	Column Object
queryld (type: int)	Yes	Query ID which will generate the output

Element/Field	Required?	Description
columnId (type: int)	Yes	Column ID
columnName (type:string)	Yes	Name of output column
columnDescr (type: string)	No	Description for column
columnReq (type: boolean)	Yes	TRUE: Column is required in output requests FALSE: Column is optional and can be removed from report requests.
displayTag	No	For Future use to enable SPNet to add context links based on returned report data.
inputParameters	Yes	Array of objects
parameter (type: reportParamEntryImpl)	Yes	Parameter Object
queryld (type: int)	Yes	Query ID which will generate the output
paramld (type: int)	Yes	Input parameter ID
paramName (type:string)	Yes	Name of input parameter
paramType (type: reportParameterTypeEnum)	No	Input Parameter Type. See <u>Parameter</u> <u>Types</u>
paramOption (type: string)	No	Valid options for paramType PICK or enum type for paramType ENUM.
paramRequired (type: boolean)	Yes	TRUE: Parameter is required in report request FALSE: Parameter is optional for report requests.
paramWildcard (type: boolean)	Yes	TRUE: Wildcard values are supported for this parameter FALSE: Wildcard values are not supported for this parameter
reportCategory	No	See getReportCategory

https://training.iridium.com/iwsexplorer/index.php?call=getReportTypes

6.23 getReportCategory

This call is used to retrieve valid filter conditions for the getReportTypes. The response will include an array of report categories. These categories can be submitted in the getReportTypes call to filter the list of reports. A typical request (getReportCategoryRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .

A typical successful response will contain the following (getReportCategoryResponseImpl)

Element/Field	Required?	Description
reportCategories	Yes	Array of details
reportCategory (type:String)	Yes	Available report categories.

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=getReportCategory

6.24 getResourceGroupMembers

This is used to retrieve the current members of a group. To only retrieve members currently associated with the group, provide an effective date as part of the search criteria. A typical request (getResourceGroupMembersRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
groupId (type: string)	Yes	Unique ID for the resource group
resourceType (type resourceTypeEnum)	No	Type of resource. See <u>Resource Types</u> .
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getResourceGroupMembersResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
resourceGroupMembers		Array of details
resourceGroupMember (type: resourceGroupMemberDetailsEntryImp I)	Yes	Resource group member object
groupId (type: string)	Yes	Unique ID for the resource group
resourceld (type: string)	Yes	The value of the device string.
startDate (type: string)	Yes	Timestamp when added to the group
endDate (type: string)	Yes	Timestamp when removed from the group
resourceType (type resourceTypeEnum)	No	Type of resource. See <u>Resource Types</u> .
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

 $\underline{https://training.iridium.com/iwsexplorer/index.php?call=getResourceGroupMembers}$

6.25 getResourceGroups

This call is used to gather the resource group definitions. A typical request (getResourceGroupsRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
groupId (type: string)	No	Specify if only one resource group is desired
groupName (type: string)	No	wildcard search for groups by name
Status (type trackerStatusEnum)	No	See <u>Tracker Status</u>
serviceType (type: serviceTypeEnum)	No	Retrieve only profiles linked to service type specified. See <u>Service Types</u> .
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getResourceGroupsResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
resourceGroupDetails		Array of details
resourceGroupDetail (type: resourceGroupDetailsEntryImpl)	Yes	Resource group object
groupId (type: int)	Yes	unique IDentifier for the group.
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
owner (type: string)	Yes	Owner for the rule profile GLOBAL for universal shared profiles, SP account number
groupName (type: string)	Yes	Display name for resource group

Element/Field	Required?	Description
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. OBSOLETE indicates the group unavailable for new trackers or report requests.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification
activeMemberCount (type: int)	Yes	Provides count of active members at time of effective date provided in search criteria.

https://training.iridium.com/iwsexplorer/index.php?call=getResourceGroups

6.26 getSBDRawUsage

This call is used to get raw Short Burst Data usage details for SBD and M2M devices. A typical request (getSBDRawUsageRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
sbdCriteria (type: sbdRawCallDataSearchCriterialmpl)		
cdrld (type: string)	No	Specific call ID to search for
callType (type: callServiceCodeEnum)	No	Filter results by specific call type. See <u>Call</u> <u>types</u>
resourceType (type: usageSubscriberSearchTypeEnum)	No	Type of resource to search for raw usage details
value (type: string)	No	Value of resource ID to be searched.
searchStartDate (type: date)	No	Search for usage generated after the search start date provided.
searchEndDate (type: date)	No	Search for usage generated before the search start end provided.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

If the request is successful, a CDR object will be returned: (getSBDRawUsageResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: int)	Yes	Indicates the total number of records available that meet the search criteria provided.
sbdRawUsageEntries		Array of details
sbdRawUsageEntry (type: sbdRawCallDataEntryImpl)	No	raw usage object
cdrld (type: long)	Yes	The unique ID of the processed call record assigned by the system.
sessionId (type: long)	Yes	The unique ID of the call assigned by the network element.
imei (type:string)	Yes	This is the IMEI of the device.
callType (type:string)	Yes	See SBD Call Types
spAccountNo (type:string)	Yes	The account number of the service provider.
spName (type:string)	Yes	The name of the service provider
accountNumber (type:string)	Yes	The account number for the device
sessionTime (type:string)	Yes	The time session started
timeReceived (type:string)	Yes	The time the session record was received at the gateway
timeInserted (type:string)	Yes	The time the session record was stored at the gateway
status (type:string)	Yes	This is the status of the upload. Completed calls will have a value of 'Normal'

Element/Field	Required?	Description
callStatus (type:string)	Yes	This is the status of the call. '00 - Transfer OK', '01 - MT Message Too Large', '02 - Transfer OK Bad Location', '11 - MO Queue Full', '13 - Incomplete Transfer', '14 - SBD Protocol Error', '15 - SBD Denial'
messageSize (type: long)	Yes	This is the size of the upload payload in bytes.
mtMessageSize (type: long)	No	The size of any corresponding MT payload in bytes.
moMsn (type: long)	Yes	This is the user provided mobile originated message sequence number.
moStatus (type:string)	Yes	Protocol revision 2 status of MO transfer. Failure indicates an MO CRC mismatch with the SSD.
mtStatus (type:string)	No	Protocol revision 2 status of MT transfer. Failure indicates an MT CRC mismatch with the SSD.
mtMsn (type: long)	No	This is the user provided mobile terminated message sequence number.
callDuration (type: long)	Yes	Duration of session in seconds.
cepRadius (type: int)	Yes	This is the Circular Error Probability to show accuracy.
latitude (type:string)	Yes	This is the latitude representing where the device is physically located.
longitude (type:string)	Yes	This is the longitude representing where the device is physically located.
protocolRevision (type:string)	Yes	SBD protocol revision used by the originating SSD
transportLayer (type:string)	Yes	Transport layer used for session
sessionType (type:string)	Yes	SBD Session type of the session: 'MO Session', 'Answer To Ring', 'Registration', 'Send & Forget'
dsc (type: long)	Yes	Delivery Short Code set by the SSD

Element/Field	Required?	Description
attachFlag (type:string)	Yes	Ring alert attach / detach flag set by the SSD
locUpdateReq (type:string)	Yes	Location update request flag set by the SSD
gdpCapableFlag (type:string)	Yes	Flag indicating SSD is GBP-capable and GBP information requested
ipCapableFlag (type:string)	Yes	Flag indicating SSD is IP-capable and IP information requested
locationType (type:string)	Yes	Flag set by the SSD indicating the type of location being provided in the call
isuDoppler (type: long)	Yes	ISU geolocation Doppler measurement
isuTiming (type: long)	Yes	ISU geolocation timing measurement
pmvn (type:string)	Yes	SBD Parameter Master Version Number
metadata (type:string)	No	User provided metadata (FOR FUTURE USE)
moDeliveries (type: sbdMoActivitiesImpl)	No	Array of upload delivery details corresponding to the primary upload.
udCdrld (type:string)	No	Unique ID of MO correlated upload delivery record
udAutoId (type:string)	No	Network generated unique ID for the upload delivery
udTimeSent (type:string)	No	Time sent for upload delivery
udDeliveryTime (type:string)	No	Time in microseconds that it took to deliver a DirectMO message

Element/Field	Required?	Description
udDeliveryStatus (type:string)	No	Current status of the MOM delivery from the SPP to the destination 'Delivered', 'DeliveryConfirmed', 'NotDelivered', 'SSDtoSSD_PayloadInvalid', 'SSDtoSSD_QueueFull', 'SSDtoSSD_UeueFull', 'SSDtoSSD_UeueFull', 'SSDtoSSD_UeueFull', 'SSDtoSSD_UeueFull', 'DirectIP_Timeout', 'DirectIP_QueueOverflow', 'DirectIP_Deleted', 'DirectIP_Flushed', 'InvalidEmail'
udDeliveredTo (type:string)	No	Selected delivery string for this delivery (e-mail address, IP address, IMEI)
udDeliveredToPort (type:string)	No	If DirectIP delivery, the port the message was delivered to
udDdeliveryMethod (type:string)	No	Selected delivery method for this delivery ('Email', EmailBody', 'EmailPlainText', 'DirectIP', 'SSD')
mtDownloads (type: sbdMtActivitiesImpl)	No	Array of download details corresponding t the primary upload.
dCdrld (type: string)	Yes	Unique ID of MT correlated download record
dAutoId (type:string)	Yes	Network generated unique ID for the download
dTimeReceived (type:string)	Yes	The time the MTM is received by either th DMT or EMT process
dTimeSent (type:string)	No	Time the MTM was delivered to the SSD (marked as "Delivered")

Element/Field	Required?	Description
dMessageStatus (type:string)	Yes	Current status of the MTM delivery New – just received Queued – ready to be delivered (1st in queue) Delivered – successfully delivered to SSD Pend – waiting to be delivered (not 1st in queue) DeletePend – marked for deletion from queue Deleted –ready for deletion by dbCleanup DeliveredAndHeld – left in queue after delivery (triggered by DSC) Processing – temporary state to support multi-threaded processing PendTimeout – value used by scripts allowing message to be transitioned to timeout Timeout – transitioned from PendTimeout by Host Server
dMessageSize (type: string)	Yes	Size of the MTM payload
dSource (type: string)	Yes	Source of the MTM enum ('Email', 'DMT', 'SSD', 'Web', Other')
dConfirmAddress (type: string)	Yes	Email address or IP address from which the MTM was received and to which the confirmation email was sent upon receipt (if email)
dMtFilename (type:string)	Yes	Filename of the email attachment containing the MTM
dOptionalFlags (type:string)	Yes	Disposition flag received via MT DirectIP
dPriority (type: string)	Yes	Priority level of the MT message

https://training.iridium.com/iwsexplorer/index.php?call=getSBDRawUsage

6.27 getScheduledReports

This call is used to retrieve scheduled report requests. Scheduled reports will be utilized for report requests to be automatically generated and sent to users on a predefined recurring basis. A typical request (getScheduledReportsRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
scheduledRequestId (type: string)	No	Retrieve information for a specific request id.
requestName (type: string)	No	Retrieve requests by request name. Wildcard values permitted.
reportId (type: string)	No	Retrieve requests based on type of report to be generated. Valid values obtained from getReportTypes.
requestorId (type: string)	No	Retrieve request based on the id of the requestor that created the scheduled report.
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
hideInputAndOutput (type: boolean)	Yes	TRUE: input Parameters and Output Columns will not be included in response FALSE: input Parameters and Output Columns will not be included in response
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following (getScheduledReportsResponseImpl)

Element/Field	Required?	Description
totalNumberOfReports (type: string)	Yes	Count of reports returned
totalNumberOfDetailRecords (type: string)	Yes	Count of detail records included
scheduledReports	Yes	Array of reports
scheduledReport (type: scheduledReportEntryImpl)	Yes	Scheduled report object
scheduledRequestId (type:string)	Yes	System generated unique ID for the report request
scheduledReportDetails (type: getScheduledReportDetailsEntryImpl)	Yes	Service type for resource group. See Service Types.
reportTypeBase (type: reportTypeBaseEntryImpl)	Yes	Report Type object
reportId (type: string)	Yes	Report Type ID
reportTypeName (type: string)	Yes	Name for report type
name (type: string)	Yes	Display name for report request
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
recurringCycle (type: recurringCycleTypeEnum)	Yes	Defines the recurring schedule for generating the reports. See Recurring Cycles
cycleSettings (type: int)	Yes	Defines the specific settings to trigger report generation based on recurringCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1)

Element/Field	Required?	Description
outputSettings (type: outputSettingsEntryImpl)	Yes	
outputFormat (type: reportOutputTypeEnum)	Yes	Type of file to be generated. See Output Format Types
deliveryType (type: reportDeliveryTypeEnum)	Yes	Type of report delivery. See Report Delivery Types
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
status (type: trackerStatusEnum)	Yes	See <u>Tracker Status</u>
compressed (type: boolean)	Yes	TRUE: compress output files in zip format. FALSE: do not compress output files.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: string)	Yes	User ID performing last update
updatedDate (type: string)	No	Date of last modification
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramId (type: string)	Yes	Parameter ID. Obtained from getReportTypes

Element/Field	Required?	Description
value (type: string)	Yes	Value to be submitted for input parameter at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
columnids (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10)
		If not provided all report columns will be included in the output file.

https://training.iridium.com/iwsexplorer/index.php?call=getScheduledReports

6.28 getSubscriberUsage

This call is used to get summary level usage details for all services being processed (SBD, M2M, OpenPort, Telephony). A typical request (getSubscriberUsageRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
subscriberCriteria (type: subscriberCallDataSearchCriteriaImpl)		
cdrld (type: string)	No	Specific call ID to search for
callType (type: string)	No	Filter results by specific call type. Choices obtained from getUsageCalltypes.
resourceType (type: usageSubscriberSearchTypeEnum)	No	Type of resource to search for raw usage details
value (type: string)	No	Value of resource ID to be searched.
searchStartDate (type: date)	No	Search for usage generated after the search start date provided.
searchEndDate (type: date)	No	Search for usage generated before the search start end provided.

Element/Field	Required?	Description
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

If the request is successful, a CDR object will be returned: (getSubscriberUsageResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
subscriberUsageDetailEntries		Array of details
subscriberUsageDetailEntry (type: subscriberCallDataEntryImpl)	Yes	usage object
cdrld (type: long)	Yes	The unique ID of the processed call record assigned by the system.
sessionId (type:string)	Yes	The unique ID of the call assigned by the network element.
accountNumber (type:string)	Yes	The account number of the subscriber that made the call.
spAccountNum (type:string)	Yes	The account number of the service provider.
callTypeName (type: string)	Yes	Call Type Name
msisdn (type:string)	Yes	If applicable, this will contain the phone number that made the call.
duration (type: string)	Yes	Duration of the call in seconds
totalBytes (type: string)	Yes	Total bytes transferred
bytesUp (type: long)	Yes	Total bytes up transferred
bytesDown(type: long)	Yes	Total bytes down transferred
eventCount(type: int)	Yes	Count of events
smsMOCount (type: long)	Yes	Count of SMS MO messages
smsMTCount (type: long)	Yes	Count of SMS MT messages
imei (type:string)	Yes	The ICCID for the sim.

Element/Field	Required?	Description
iccid (type:string)	Yes	The IMEI on the account.
imsi (type:string)	Yes	The IMSI representing the SIM on the account.
callDirection (type:callDirectionEnum)	Yes	See <u>Call Directions</u> . If this is a DATA call, it will always be OUTGOING.
startTime (type:string)	Yes	The start time of the call. Format for date string: yyyy-MM-dd'T'HH:mm:ss'Z'
endTime (type:string)	Yes	The end time of the call. Format for date string: yyyy-MM-dd'T'HH:mm:ss'Z'
ipAddress (type:string)	Yes	If this is a DATA call, this will contain the IP address that made the call. If this is a VOICE call, it will always be null.
callType (type:callServiceCodeEnum)	Yes	This represents the type of call made. See <u>Call Service Codes</u> .
callingNum (type:string)	Yes	Origination call number
calledNum (type:string)	Yes	Destination call number

https://training.iridium.com/iwsexplorer/index.php?call=getSubscriberUsage

6.29 getSystemStatus

The getSystemStatus request is used to get the current status of the IWS system. This call can be useful to determine if the system is currently accepting requests or not.

The getSystemStatus request consists of the following pieces of data: (getSystemStatusResponseImpl)

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .

A typical response will contain the following. (getSystemStatusResponseImpl)

Element/Field	Required?	Description
status (type: systemStatusImpl)	Yes	The results of the status request
cbrmTime (type:string)	Yes	Current system time.

Element/Field	Required?	Description
		Format for date string: yyyy-MM- dd'T'HH:mm:ss'Z'
openForBusiness (type:boolean)	Yes	TRUE – IWS accepting requests FALSE – IWS currently not accepting requests.
maintenanceOccurring (type: boolean)	Yes	TRUE – IWS accepting requests FALSE – IWS currently not accepting requests.
outageReason (type:string)	Yes	Description for outage.
iwsVersion (type:string)	Yes	Current version running for IWS.
wsdlRevision (type:string)	Yes	Current WSDL version.
obsolete (type:boolean)	Yes	TRUE – WSDL is obsolete FALSE – WSDL is current
affectedElements	No	List of components currently not in an enabled status
affectedElement (type: string)	No	Affected Element
outageScheduleItems	No	List of future scheduled outages
outageScheduleItem(type: outageScheduleItemImpl)	No	Outage Item detail object
outageId (type:string)	Yes	Unique ID for the outage
startTime (type:string)	Yes	Start Time for outage
endTime (type:string)	Yes	End Time For Outage
name (type:string)	Yes	Name of scheduled outage.
description (type:string)	Yes	Description of scheduled outage item.
emergency (type:boolean)	Yes	TRUE – Emergency outage. FALSE – Scheduled outage.
status (type: outageStatusEnum)	Yes	Current status of the outage
affectedElements	No	List of affected elements.
affectedElement (type:string)	No	Affected element name.

6.30 getTelRawUsage

This call is used to get raw Telephony and ATS usage details. A typical request (getTelRawUsageRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
telCriteria (type: telRawCallDataSearchCriterialmpl)		
callId (type: string)	No	Specific call ID to search for
callType (type: callServiceCodeEnum)	No	Filter results by specific call type. See <u>Call</u> <u>types</u>
resourceType (type: subscriberAccountSearchTypeEnum)	No	Type of resource to search for raw usage details
value (type: string)	No	Value of resource ID to be searched.
searchStartDate (type: date)	No	Search for usage generated after the search start date provided.
searchEndDate (type: date)	No	Search for usage generated before the search start end provided.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

If the request is successful, a CDR object will be returned: (getTelRawUsageResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Indicates the total number of records available that meet the search criteria provided.
telRawUsageEntries		Array of details
telRawUsageEntry (type: telRawCallDataEntryImpl)	No	raw usage object
cdrld (type: string)	Yes	The unique ID of the processed call record assigned by the system.

Element/Field	Required?	Description
imsi (type:string)	Yes	This is the IMSI of the device.
callType (type:string)	Yes	See <u>Call Types</u>
spAccountNo (type:string)	Yes	The account number of the service provider.
spName (type:string)	Yes	The name of the service provider
accountNumber (type:string)	Yes	The account number for the device
chargingStartTimestamp (type:string)	Yes	The time session started
createdTs (type:string)	Yes	The time the call was loaded into raw usage.
market (type:string)	Yes	The market identifier for the type of call/subscriber
iccid (type:string)	Yes	The ICCID for the SIM
msisdn(type:string)	Yes	The MSISDN used for the session
status (type:string)	Yes	Completion Status for the call.
chainReference (type:string)	Yes	The reference to a connected request ID for multi-segment call records
networkSesssionId (type:string)	Yes	The unique network identifier for the session
requestId (type:string)	Yes	request ID for the session
serviceType (type:string)	Yes	Service Type: 0: Voice, SMS 1: Data
serviceCode (type:string)	Yes	Bearer Service used for session: 11: Voice Call 21: SMS MO 22: SMS MT 25: Data 26: Data 27: M2M Rudics Data
basicService (type:string)	Yes	TELV: Voice TELD: DATA TELS: SMS
sourceNetwork (type:string)	Yes	Network handling the call
imei (type:string)	Yes	IMEI for device, if available
aNumber (type:string)	Yes	origination number
bNumber (type:string)	Yes	dialed digits

Element/Field	Required?	Description
description (type:string)	Yes	Call type description
duration (type:string)	Yes	Duration of session in seconds
durationUom (type:string)	Yes	Duration unit of measure
quantity (type:string)	Yes	Quantity to be billed
numberOfUnits (type:string)	Yes	Number of units (used for SMS)
numberOfUnitsUom (type:string)	Yes	Unit of measure for units
callCompletionIndicator (type:string)	Yes	
serviceIndicator (type:string)	Yes	Type of call placed: 0: prepaid 1: scratch 2: captain 3: postpaid 5: icg credit 6: icg pilot 7: roaming 8: ATS
calledNumber (type:string)	Yes	Normalized Destination Number for Call
callingNumber (type:string)	Yes	Normalized Number originating call
terminateCause (type:string)	Yes	termination cause code
terminateSubCause (type:string)	Yes	termination cause sub code
tzOffset (type:string)	No	offset for local time zone where ISU unit was located.
specialIndicator (type:string)	Yes	Additional data to assist with call type identification.

https://training.iridium.com/iwsexplorer/index.php?call=getTelRawUsage

6.31 getTrackers

This call is used to retrieve tracker records. A typical request (getTrackersRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	No	Search by specific tracker ID

Element/Field	Required?	Description
name (type: string)	No	Search by tracker name. Wildcard searches allowed.
serviceType (type: serviceTypeEnum)	No	Retrieve only profiles linked to service type specified. See <u>Service Types</u> .
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackersResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records
trackers	Yes	Array of records
tracker (type: trackerEntryImpl)	Yes	Tracker object
trackerType (type: trackerTypeEnum)	No	See <u>Tracker Types</u>
trackerId (type: string)	Yes	Unique system generated Id for tracker definition
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.

Element/Field	Required?	Description
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
serviceType (type: serviceTypeEnum)	Yes	Service type associated for a tracker. See Service Types.
name (type: string)	Yes	Display name for tracker retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group Max 100 chars.
emailAddresses (type: string)	Yes	A comma delimited string of email addresses. All notifications related to this tracker will be sent to this list
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getTrackers

6.32 getTrackerActionLog

This call is used to retrieve tracker action log entries. Tracker action logs will contain information for each action related to a tracker. This will include triggered events, as well as recurring reset actions. A typical request (getTrackerActionLogRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	No	Tracker Id
trackerRuleId (type: string)	No	Tracker Rule Id
searchStartDate (type: date)	No	Search for actions generated after the search start date provided.

Element/Field	Required?	Description
searchEndDate (type: date)	No	Search for actions generated before the search start end provided.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackerActionLogResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records
trackerActionLogDetails	Yes	Array of log records
trackerActionLogDetail (type: trackerActionLogEntryImpl)	Yes	Action Log Detail object
trackerRuleId (type: string)	Yes	Tracker Rule ID linked to the action
actionProfileId (type: string)	Yes	Id for action profile which triggered the action. This will be 0 for RESET action types not triggered by usage thresholds.
firedTs(type: string)	Yes	Timestamp of when the action was triggered
seqNo (type: string)	Yes	sequence in case multiple actions fired at same time.
actionType (type: string)	Yes	Type of action
emailId (type: string)	No	Id of tracker email. Used in getTrackerEmailLog.
preActionBalance (type: string)	Yes	Balance before action
postActionBalance (type: string)	Yes	Balance after action

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerActionLog

6.33 getTrackerActionProfiles

This call is used to retrieve tracker action profiles. A typical request (getTrackerActionProfilesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
actionProfileId (type: string)	No	Action Profile ID to search entry. If no action ID is provided then retrieve all for the specific SP.
trackerRulesProfileId (type: string)	No	Search for all action profiles linked to the specified Tracker Rules Profile ID
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following (getTrackerActionProfilesResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records.
trackerActionProfiles	No	Array of tracker action profile objects

Element/Field	Required?	Description
trackerActionProfile (type: trackerActionProfileEntryImpl)	No	
actionProfileId (type: string)	Yes	System generated Id of the tracker action profile.
startDate (type: string)	Yes	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	Yes	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
trackerRulesProfileId (type: string)	Yes	ld of parent Tracker Rules Profile.
actionType (type: trackerActionTypeEnum)	Yes	Action type to be executed when threshold is reached. Default value NOTIFY.
thresholdPercentage (type: string)	Yes	The percentage of the threshold balance which will trigger action. Either percentage or balance must be specified, but not both.
thresholdBalance (type: string)	Yes	The balance value which will trigger action. Either percentage or balance must be specified, but not both.
alertStatus (type: string)	Yes	Set to true or false for alerts
		TRUE: alertStatus will be set for members of this tracker when this action is triggered.
		FALSE: alertStatus will not be modified by this action being triggered. (Default value)
emailProfileId (type: string)	No	The email profile ID to utilize predefined email templates. (If specified then subject and body will be ignored.)
subject (type: string)	Yes	Subject for email alerts. See <u>Email parsing</u> . Max 100 chars.
body (type: string)	Yes	Body for email alerts. See Email parsing. Max 2000 chars.

Element/Field	Required?	Description
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerActionProfiles

6.34 getTrackerCallTypeProfiles

This call is used to retrieve call type profiles. A typical request (getTrackerCallTypeProfilesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
callTypeId (type: int)	No	Call type ID to be searched for
trackerRulesProfileId (type: int)	No	Profile to which call type is linked to
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical response (getTrackerCallTypeProfilesResponseImpl) looks like:

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records.
trackerCallTypeProfiles	No	Array of Call Type profiles
trackerCallTypeProfile (type: trackerCallTypeProfileEntryImpl)	No	Tracker call type profile object
trackerRulesProfileId (type: string)	Yes	Profile to which call type is linked to
callTypeId (type: string)	Yes	Id of the call type.
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerCallTypeProfiles

6.35 getTrackerEmailLog

This call is used to retrieve tracker email log entries. Tracker email logs will contain information for each email sent to a user as a result of the various tracker actions. This will include triggered events, as well as recurring reset actions. A typical request (getTrackerEmailLogRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	No	Search for email logs related to a particular Tracker Id
trackerRuleId (type: string)	No	Search for email logs related to a particular Tracker Rule Id
emailId (type: string)	No	Specific email ID for retrieval
searchStartDate (type: date)	No	Search for email notifications generated after the search start date provided.
searchEndDate (type: date)	No	Search for email notifications generated before the search start end provided.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackerEmailLogResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records
trackerEmailLogDetails	Yes	Array of log records
trackerEmailLogDetail (type: trackerEmailLogEntryImpl)	Yes	Email Log Detail object
emailId (type: string)	Yes	Unique ID for each email
trackerRuleId (type: string)	Yes	ld for rule which email is linked
actionProfileId (type: string)	Yes	Id for action profile which triggered email
emailAddresses (type: string)	Yes	Email address list comma delimited
subject (type: string)	Yes	Subject of Email
emailBody (type: string)	Yes	Body of email
sentDate (type: string)	No	Timestamp for sending.
status (type: emailStatusEnum)	Yes	Status of the email notification. See <u>Email</u> <u>Status</u>

To generate sample requests and responses use: https://training.iridium.com/iwsexplorer/index.php?call=getTrackerEmailLog

6.36 getTrackerMembers

This call is used to retrieve members for a tracker. A typical request (getTrackerMembersRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	Yes	Retrieve members for a given tracker
trackerMemberId (type: string)	No	Retrieve a specific member by Member id
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackerMembersResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records
trackerMembers	Yes	Array of member records
trackerMember (type: trackerMemberEntryImpl)	Yes	Tracker Member object
trackerMemberld (type: Long)	Yes	ld of tracker member created

Element/Field	Required?	Description
memberType (type: memberTypeEnum)	Yes	See MemberTypeEnum
memberId (type: string)	Yes	This must reference a valid device or the ID of a valid resource group.
startDate (type: string)	No	Date Time value specifying start time when member will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when member will be included as part of this tracker. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerMembers

6.37 getTrackerRules

This call is used to retrieve tracker rules. A typical request (getTrackerRulesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	Yes	Retrieve members for a given tracker
trackerRuleId (type: string)	No	Retrieve a specific rule by Rule id
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.

Element/Field	Required?	Description
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackerRulesResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records
trackerRules	Yes	Array of Tracker Rule records
trackerRule (type: trackerRuleEntryImpl)	Yes	Tracker Rule object
trackerRuleId (type: long)	Yes	ld of tracker rule created
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
trackerld (type: string)	Yes	Link to parent tracker Id
trackerRulesProfileId (type: long)	Yes	Reference link to Tracker Rules Profile which will define the actions for this rule.
resetCycle (type: trackerResetCycleEnum)	No	Defines the schedule for resetting the tracker rule balance to 0. See TrackerResetCycleEnum

Element/Field	Required?	Description
cycleSetting (type: string)	No	Defines the specific settings to trigger tracker rule balance reset based on resetCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1) BILLCYCLE – leave blank, reset occurs on billcycle day) THRESHOLD – leave blank, auto reset at threshold balance.
nextCycleDate (type: string)	Yes	Date of next scheduled reset for tracker rule
lastCycleDate (type: string)	No	Date of last reset action for tracker rule
name (type: string)	Yes	Name for Rule, must be unique per Tracker ID.
notifyOnReset (type: boolean)	Yes	TRUE: Email address(es) on tracker will be notified each reset action. FALSE: no email will be sent on reset actions.
trackerRuleType (type: trackerRuleTypeEnum)	Yes	See <u>TrackerRuleTypeEnum</u>
currentBalance (type: string)	Yes	The current balance of the usage tracker rule.
cumulativeBalance (type: string)	Yes	The total balance since inception for the usage tracker rule.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerRules

6.38 getTrackerRulesProfiles

This call is used to retrieve Tracker Rules Profiles. A typical request (getTrackerRulesProfilesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
trackerRulesProfileId (type: int)	No	Specific Rules Profile to retrieve
profileName (type: string)	No	Name of profiles to search for, wildcard values allowed.
serviceType (type: serviceTypeEnum)	No	Retrieve only profiles linked to service type specified. See <u>Service Types</u> .
Status (type trackerStatusEnum)	No	See <u>Tracker Status</u>
effectiveDate (type: string)	No	Effective date for filtering results. Searches with an effective date provided will retrieve all records where the effective date supplied is between the start date and the end date of the result. If not provided all date ranges will be included.
includeFuture (type: boolean)	Yes	TRUE: Retrieve all rows with effective date between start and end plus future records FALSE: Retrieve only records which include effective date between start and end.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records.

Element/Field	Required?	Description
trackerRulesProfiles	No	Array of Tracker Rules profiles
trackerRulesProfile (type: trackerRulesProfileEntryImpl)	No	Tracker Rules Profile object
trackerRulesProfileId (type: string)	Yes	System generated unique ID for Rules profile entry.
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.
owner (type: string)	Yes	Owner for the rule profile GLOBAL for universal shared profiles, SP account number
profileName (type: string)	Yes	Name for Tracker Rules Profile (40 chars max)
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
usageUnitId (type: string)	Yes	Usage Unit ID gathered from getUsageUnits call. Denotes the units expected for the profile. This field is informational, and does not indicate only calls with this billing unit will be counted. (linked call types determine which calls are included)
thresholdBalance (type: string)	Yes	Target balance for triggered actions.
status (type: trackerStatusEnum)	No	Defaults to ACTIVE on creation. Can be set to OBSOLETE if it is desired to make this rule profile unavailable for future Tracker rules. Changing to OBSOLETE does not inactivate current rules linked to this profile, setting end date will make the entry no longer valid.

Element/Field	Required?	Description
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerRulesProfiles

6.39 getTrackerUsageLog

This call is used to retrieve tracker usage log entries. Tracker usage logs will contain information for each call record that had an impact to the Tracker balance. A typical request (getTrackerUsageLogRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerRuleId (type: string)	No	Search for email logs related to a particular Tracker Rule Id
cdrld (type: string)	No	Specific call ID for retrieval
searchStartDate (type: date)	No	Search for email notifications generated after the search start date provided.
searchEndDate (type: date)	No	Search for email notifications generated before the search start end provided.
limit (type: int)	No	This will limit the number of results returned. If not specified, will default to the configured system limit (currently 1000).
startRow (type: int)	No	If paging is desired, this can be used in conjunction with the limit in order to pull result sets back in chunks.

A typical successful response will contain the following. (getTrackerUsageLogResponseImpl)

Element/Field	Required?	Description
totalNumberOfRecords (type: string)	Yes	Count of response records

Element/Field	Required?	Description
trackerUsageLogDetails	Yes	Array of log records
trackerUsageLogDetail (type: trackerUsageLogEntryImpl)	Yes	Usage Log Detail object
trackerRuleId (type: string)	Yes	Rule Id
cdrld (type: string)	No	Call id
balanceImpact (type: string)	Yes	Impact to Tracker balance as a result of this call. ** Note- A call may have a balance impact, but not change the current balance of a Tracker rule. This will occur if the call timestamp is prior to the Tracker rule last reset date when processed. In this scenario cumulative balance will be updated.
originalBal (type: string)	Yes	Tracker Rule Balance before call
newBal (type: string)	Yes	New Tracker Rule balance after call.
processedDt (type: string)	Yes	Date call was processed into the Tracker.

https://training.iridium.com/iwsexplorer/index.php?call=getTrackerUsageLog

6.40 getUsageCallTypes

This call is used to retrieve the call types available for usage processing. A typical request (getUsageCallTypesRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
serviceType (type: serviceTypeEnum)	Yes	See <u>Service types</u>
usageUnitId (type:string)	No	Usage Unit Id to filter results by certain units.

If the request is successful, a usage call type object will be returned: (getUsageCallTypesResponseImpl)

Element/Field	Required?	Description
usageCallTypes	Yes	Array of records
usageCallType (type: usageCallTypeEntryImpl)	Yes	Usage Call type object

Element/Field	Required?	Description
callTypeId (type: string)	Yes	Unique IDentifier for record, system generated.
callType (type:string)	Yes	Unique IDentifier for each call type
serviceType (type:serviceTypeEnum)	Yes	See Service Types.
usageUnit (type: usageUnitEntryImpl)	Yes	See <u>Usage Units</u>
unitId (type: int)	No	Unique ID for unit
unitName (type: string)	No	Display name for unit
description (type:string)	No	Description

https://training.iridium.com/iwsexplorer/index.php?call=getUsageCallTypes

6.41 getUsageUnits

This call is used to retrieve the usage units available for usage. A typical request (getUsageUnitsRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
serviceType (type: serviceTypeEnum)	No	See <u>Service types</u>

If the request is successful, a usage unit object will be returned: (getUsageUnitsResponseImpl)

Element/Field	Required?	Description
usageUnits (type: usageUnitEntryImpl)	Yes	Array of usage units
usageUnitId (type: string)	Yes	Unique IDentifier for record.
unitName (type:string)	Yes	Display name of unit
description (type:string)	No	Description.

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=getUsageUnits

6.42 updateCommStatusConfig

This call is used to update Communication Status Configuration entries.

Update Rules:

- Threshold values may be modified.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.
- Changing threshold values will cause a new record to be created with current time as the start time, and previously valid record will be modified to have the end date to current time – 1 second.

A typical request (updateCommStatusConfigRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
cscld (type: string)	Yes	Unique ID for record to be modified
serviceType (type: serviceTypeEnum)	Yes	See <u>Service types</u>
oldStartDate (type: string)	No	Original start date of record to be modified Format: yyyy-MM-dd'T'HH:mm:ss'Z'
newStartDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
redThreshold (type: string)	No	Numeric value for number of minutes since last communication. Must be > amber value if amber value is specified. If left blank no devices will reach red status.
amberThreshold (type: string)	No	Numeric value for number of minutes since last communication. Must be < amber value if red value is specified. If left blank no devices will reach amber status.

A typical response would look like (updateCommStatusConfigResponseImpl):

Element/Field	Required?	Description
commStatusConfigDetail (type: commStatusConfigEntryImpl)	Yes	Array of communication Status config entries
cscld (type: string)	Yes	Unique ID for each communication status config entry (system generated)
owner (type: string)	Yes	Owner of config entry. Will contain SP account number, or 'GLOBAL' for system defined defaults.
serviceType (type: string)	Yes	See Service types
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
redThreshold (type: string)	No	Numeric value for number of minutes since last communication. Must be > amber value if amber value is specified. If left blank no devices will reach red status.
amberThreshold(type: string)	No	Numeric value for number of minutes since last communication. Must be < amber value if red value is specified. If left blank no devices will reach amber status.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=updateCommStatusConfig

6.43 updateEmailProfile

This call is used to update Email Profile entries.

Update Rules:

- Email type may not be modified
- Subject and Body may be updated.

A typical request (updateEmailProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
emailProfileId (type:string)	Yes	System generated Id
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
msgSubject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.
msgBody (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.

A typical successful response will contain the following: (updateEmailProfileResponseImpl)

Element/Field	Required?	Description
emailProfileDetail (type: emailProfileEntryImpl)	Yes	Email profile object
trackerEmailProfileId (type:string)	Yes	System generated unique ID for the email profile entry.
owner (type: string)	Yes	Owner for the rule profileGLOBAL for universal shared profiles,SP account number
emailType (type: emailTypeEnum)	Yes	See Email Types
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
msgSubject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.

Element/Field	Required?	Description
msgBody (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateEmailProfile

6.44 updateResourceGroup

This call is used to update Resource group definitions.

Update Rules:

- Name, description and status may be modified
- Service type may not be modified.

A typical request (updateResourceGroupRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
groupId (type: string)	Yes	Unique ID for the group to be modified.
groupName (type: string)	No	Display name for resource group retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new Trackers or report requests.

A typical successful response will contain the following. (updateResourceGroupResponseImpl)

Element/Field	Required?	Description
resourceGroupDetail (type: resourceGroupDetailsEntryImpl)	Yes	Resource group object
groupId (type: int)	Yes	unique IDentifier for the group.
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
owner (type: string)	Yes	Owner for the rule profileGLOBAL for universal shared profiles,SP account number
groupName (type: string)	Yes	Display name for resource group
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. OBSOLETE indicates the group unavailable for new Trackers or report requests.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=updateResourceGroup

6.45 updateResourceGroupMember

This call is used to add or remove a member from a resource group. Unless this is a bulk action, this will process one device at a time (i.e., full member list is not updated every time).

A typical request (updateResourceGroupMemberRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
groupId (type: int)	Yes	Unique ID for the resource group
actionType (type: actionTypeEnum)	Yes	ADD – add member(s) to group DELETE – change end date to current time stamp

Element/Field	Required?	Description
resourceType (type: resourceTypeEnum)	Yes	Type of resources.
bulkAction (type: Boolean)	Yes	TRUE – indicates this request is for a bulk action FALSE – indicates this request is a single transaction
startDate (type: string)	No	The start date of when the change is to become effective. If empty it will default to current date.
endDate (type: string)	No	The end date of when the member is no longer part of this group.
devices	No	An array of device strings to be added
device (type: string)	Yes	The value of the device string. Individual member id, can be IMEI, IMSI, MSISDN, or ICCID

A successful action will return an empty response.

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=updateResourceGroupMember

6.46 updateScheduledReport

This call is used to update Scheduled Report request entries.

Update Rules:

- Name, End Date, recurring cycle, cycle settings, output settings, requestor, compressed flag may be modified.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.
- Changing values beyond name values will cause a new record to be created with current time
 as the start time, and previously valid record will be modified to have the end date to current
 time 1 second.
- Input Parameters and Output Columns will be replaced by the update values, be sure to specify full set of new values for these objects.

A typical request (updateScheduledReportRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .

Element/Field	Required?	Description
scheduledRequestId (type: string)	Yes	ID for request to be updated
scheduledReportDetails (type: updateScheduledReportDetailsEntryIm pl)	Yes	Scheduled report object
name (type: string)	Yes	Display name for report request
oldStartDate (type: string)	No	Date Time value specifying original start time of record to be modified.
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
recurringCycle (type: recurringCycleTypeEnum)	Yes	Defines the recurring schedule for generating the reports. See Recurring Cycles
cycleSettings (type: int)	Yes	Defines the specific settings to trigger report generation based on recurringCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1)
outputSettings (type: outputSettingsEntryImpl)	Yes	
outputFormat (type: reportOutputTypeEnum)	Yes	Type of file to be generated. See Output Format Types
deliveryType (type: reportDeliveryTypeEnum)	Yes	Type of report delivery. See Report Delivery Types

Element/Field	Required?	Description
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
status (type: trackerStatusEnum)	Yes	See <u>Tracker Status</u>
compressed (type: boolean)	Yes	TRUE: compress output files in zip format. FALSE: do not compress output files.
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramld (type: string)	Yes	Parameter ID. Obtained from getReportTypes
value (type: string)	Yes	Value to be submitted for input parameter at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
columnIds (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10) If not provided all report columns will be included in the output file.

Element/Field	Required?	Description
reportId (type: string)	Yes	Service type for resource group. See Service Types.
description (type: string)	No	Description for the group
status (type trackerStatusEnum)	No	Defaults to ACTIVE on creation. Setting to OBSOLETE will make the group unavailable for new Trackers or report requests.

A typical successful response will contain the following (getScheduledReportsResponseImpl)

Element/Field	Required?	Description
totalNumberOfReports (type: string)	Yes	Count of reports returned
totalNumberOfDetailRecords (type: string)	Yes	Count of detail records included
scheduledReports	Yes	Array of reports
scheduledReport (type: scheduledReportEntryImpl)	Yes	Scheduled report object
scheduledRequestId (type:string)	Yes	System generated unique ID for the report request
scheduledReportDetails (type: getScheduledReportDetailsEntryImpl)	Yes	Service type for resource group. See Service Types.
reportId (type: string)	Yes	ID for Report type to be generated as a result of this request. Obtained from getReportTypes.
name (type: string)	Yes	Display name for report request
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this tracker. Null value will indicate record continues indefinitely.

Element/Field	Required?	Description
recurringCycle (type: recurringCycleTypeEnum)	Yes	Defines the recurring schedule for generating the reports. See Recurring Cycles
cycleSettings (type: int)	Yes	Defines the specific settings to trigger report generation based on recurringCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1)
outputSettings (type: outputSettingsEntryImpl)	Yes	
outputFormat (type: reportOutputTypeEnum)	Yes	Type of file to be generated. See Output Format Types
deliveryType (type: reportDeliveryTypeEnum)	Yes	Type of report delivery. See Report Delivery Types
deliveryAddrs (type: string)	Yes	Comma separated email address list for report delivery, or ftp address with credentials.
requestorId (type: string)	Yes	User ID for requestor. This will default to user submitting request, but can be overridden if submitting on behalf of another user. At report runtime this ID will be verified for access to the report and the data requested.
status (type: trackerStatusEnum)	Yes	See <u>Tracker Status</u>
compressed (type: boolean)	Yes	TRUE: compress output files in zip format. FALSE: do not compress output files.
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification
createdBy (type: string)	Yes	User ID who created the record

Element/Field	Required?	Description
updatedBy (type: string)	No	Date of creation
inputParameters (type: inputReportParameterEntryImpl)	Yes	Array of input parameters. All parameters identified as required by the getReportTypes output information must be provided in a report request.
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
paramId (type: string)	Yes	Parameter ID. Obtained from getReportTypes
value (type: string)	Yes	Value to be submitted for input parameter at run time.
ouputColumns (type: outputReportColumnsEntryImpl)	No	Array of Output Columns
queryld (type: int)	Yes	Query ID for parameter input. Obtained from getReportTypes
columnIds (type: string)	Yes	A comma separated list of output columns to include in the report file. All columns identified as required must be included in the list. (Ex. 1,2,3,4,6,8,10)
		If not provided all report columns will be included in the output file.

https://training.iridium.com/iwsexplorer/index.php?call=updateScheduledReports

6.47 updateTracker

This call is used to update Tracker definition entries.

Update Rules:

- End Date, Name, description and email addresses may be updated.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.

A typical request (updateTrackerRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerId (type: string)	Yes	ld of Tracker created
oldStartDate (type: string)	Yes	The start date for the record to be modified
newStartDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
name (type: string)	Yes	Display name for Tracker retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group Max 100 chars.
emailAddresses (type: string)	Yes	A comma delimited string of email addresses. All notifications related to this Tracker will be sent to this list

A typical successful response will contain the following. (trackerResponseImpl)

Element/Field	Required?	Description
tracker (type: trackerEntryImpl)	Yes	Array of Tracker definitions
trackerType (type: trackerTypeEnum)	No	The Tracker type will default to EXTERNAL if not passed. INTERNAL is used by IRIDIUM. See Tracker Types
trackerId (type: string)	Yes	Unique system generated Id for Tracker definition
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.

Element/Field	Required?	Description
serviceType (type: serviceTypeEnum)	Yes	Service type associated for a Tracker. See Service Types.
name (type: string)	Yes	Display name for Tracker retrieval (must be unique within service provider) Max 40 chars.
description (type: string)	No	Description for the group Max 100 chars.
emailAddresses (type: string)	Yes	A comma delimited string of email addresses. All notifications related to this Tracker will be sent to this list
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateTracker

6.48 updateTrackerActionProfile

This call is used to update Tracker action profile entries.

Update Rules:

- Action type, threshold percentage, threshold balance, alert status, email profile, subject or body values may be modified.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.
- Changing Action type, threshold percentage, threshold balance, alert status values will cause a
 new record to be created with current time as the start time, and previously valid record will be
 modified to have the end date to current time 1 second.

A typical request (updateTrackerActionProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
actionProfileId (type: string)	Yes	Action Profile ID to update

Element/Field	Required?	Description
oldStartDate (type: string)	Yes	The start date for the record to be modified
newStartDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
trackerRulesProfileId (type: string)	Yes	Id of parent Tracker Rules Profile.
actionType (type: trackerActionTypeEnum)	No	Action type to be executed when threshold is reached. Default value NOTIFY.
thresholdPercentage (type: string)	No	The percentage of the threshold balance which will trigger action. Either percentage or balance must be specified, but not both.
thresholdBalance (type: string)	No	The balance value which will trigger action. Either percentage or balance must be specified, but not both.
alertStatus (type: boolean)	Yes	Set to true or false for alerts
		TRUE: alertStatus will be set for members of this Tracker when this action is triggered.
		FALSE: alertStatus will not be modified by this action being triggered.
emailProfileId (type: string)	No	Enter the email profile ID to utilize predefined email templates. (If specified then subject and body will be ignored.)
subject (type: string)	No	Enter subject for email alerts. See Email parsing. Max 100 chars.
body (type: string)	No	Enter body for email alerts. See Email parsing. Max 2000 chars.

A typical successful response will contain the following (updateTrackerActionProfileResponseImpl)

Element/Field	Required?	Description
trackerActionProfile (type: trackerActionProfileEntryImpl)	No	
actionProfileId (type: string)	Yes	System generated Id of the Tracker action profile.
startDate (type: string)	Yes	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	Yes	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
trackerRulesProfileId (type: string)	Yes	ld of parent Tracker Rules Profile.
actionType (type: trackerActionTypeEnum)	Yes	Action type to be executed when threshold is reached. Default value NOTIFY.
thresholdPercentage (type: string)	Yes	The percentage of the threshold balance which will trigger action. Either percentage or balance must be specified, but not both.
thresholdBalance (type: string)	Yes	The balance value which will trigger action. Either percentage or balance must be specified, but not both.
alertStatus (type: string)	Yes	Set to true or false for alerts TRUE: alertStatus will be set for members of this Tracker when this action is triggered. FALSE: alertStatus will not be modified by this action being triggered. (Default value)
emailProfileId (type: string)	No	The email profile ID to utilize predefined email templates. (If specified then subject and body will be ignored.)
subject (type: string)	Yes	Subject for email alerts. See <u>Email parsing</u> . Max 100 chars.
body (type: string)	Yes	Body for email alerts. See Email parsing. Max 2000 chars.

Element/Field	Required?	Description
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateTrackerActionProfile

6.49 updateTrackerCallTypeProfile

This call is used to update call types linked to a Tracker Rules Profile entries.

Update Rules:

- New start Date must be now or in the future.
- End Date must be > start date, and in the future.

A typical request (updateTrackerCallTypeProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
trackerRulesProfileId (type: string)	Yes	Profile to which call type is linked to
callTypeId (type: string)	Yes	Call Type Id to add to profile
oldStartDate (type: string)	Yes	The start date for the record to be modified
newStartDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.

A typical response (updateTrackerCallTypeProfileResponseImpl) looks like:

Element/Field	Required?	Description
trackerCallTypeProfile (type: trackerCallTypeProfileEntryImpl)	No	Tracker call type profile object
trackerRulesProfileId (type: string)	Yes	Profile to which call type is linked to
callTypeId (type: string)	Yes	ld of the call type.
startDate (type: string)	No	Date Time value specifying when configuration entry is valid. If not specified system time (GMT) will be populated.
endDate (type: string)	No	Date Time value specifying when configuration entry is no longer valid. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
createdDate (type: string)	Yes	Date of creation
updatedBy (type: string)	Yes	User ID performing last update
updatedDate (type: string)	Yes	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateTrackerCallTypeProfile

6.50 updateTrackerMember

This call is used to update Tracker member entries.

Update Rules:

- End Date must be > start date, and in the future.
- Setting end date effectively ends the membership of the device to the Tracker.

A typical request (updateTrackerMemberRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
trackerMemberId (type: string)	Yes	Unique Id of Tracker member to update
endDate (type: string)	No	New end date for member link to Tracker.

A typical successful response will contain the following. (trackerMembersResponseImpl)

Element/Field	Required?	Description
trackerMember (type: trackerMemberEntryImpl)	Yes	Tracker Member object
trackerMemberId (type: Long)	Yes	Id of Tracker member created
memberType (type: memberTypeEnum)	Yes	See MemberTypeEnum
memberId (type: string)	Yes	This must reference a valid device or the ID of a valid resource group.
startDate (type: string)	No	Date Time value specifying start time when member will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when member will be included as part of this Tracker. Null value will indicate record continues indefinitely.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

To generate sample requests and responses use:

https://training.iridium.com/iwsexplorer/index.php?call=updateTrackerMember

6.51 updateTrackerRule

This call is used to update Tracker rule entries.

Update Rules:

- Rules profile, reset cycle, cycle settings, notify, name and type values may be modified.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.
- Changing Rules profile, reset cycle, cycle settings or type values will cause a new record to be
 created with current time as the start time, and previously valid record will be modified to have
 the end date to current time 1 second.

A typical request (updateTrackerRuleRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
oldStartDate (type: string)	Yes	The start date for the record to be modified
newStartDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
trackerRuleId (type: string)	Yes	ID of rule entry to be updated
trackerRulesProfileId (type: string)	Yes	Reference link to Tracker Rules Profile which will define the actions for this rule.
resetCycle (type: trackerResetCycleEnum)	No	Defines the schedule for resetting the Tracker rule balance to 0. See TrackerResetCycleEnum
cycleSetting (type: long)	No	Defines the specific settings to trigger Tracker rule balance reset based on resetCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1) BILLCYCLE – leave blank, reset occurs on billcycle day) THRESHOLD – leave blank, auto reset at threshold balance.
notifyOnReset (type: boolean)	Yes	TRUE: Email address(es) on tracker will be notified each reset action. FALSE: no email will be sent on reset actions.
name (type: string)	Yes	Name for Rule, must be unique per Tracker ID.
trackerRuleType (type: trackerRuleTypeEnum)	Yes	See <u>TrackerRuleTypeEnum</u>

A typical successful response will contain the following. (trackerRulesResponseImpl)

Element/Field	Required?	Description
trackerRule (type: trackerRuleEntryImpl)	Yes	Tracker Rule object
trackerRuleId (type: long)	Yes	ld of Tracker rule created
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
trackerId (type: string)	Yes	Link to parent Tracker Id
trackerRulesProfileId (type: long)	Yes	Reference link to Tracker Rules Profile which will define the actions for this rule.
resetCycle (type: trackerResetCycleEnum)	No	Defines the schedule for resetting the Tracker rule balance to 0. See TrackerResetCycleEnum
cycleSetting (type: string)	No	Defines the specific settings to trigger Tracker rule balance reset based on resetCycle value: DAILY – time of day (between 0 and 23, default 0) WEEKLY – day of week (between 0 and 6, 0 = Sunday, default 0) MONTHLY – day of month (between 1 and 31, if month ends before specified value last day of month will be used, default 1) BILLCYCLE – leave blank, reset occurs on billcycle day) THRESHOLD – leave blank, auto reset at threshold balance.
nextCycleDate (type: string)	Yes	Date of next scheduled reset for Tracker rule
lastCycleDate (type: string)	No	Date of last reset action for Tracker rule
name (type: string)	Yes	Name for Rule, must be unique per Tracker ID.

Element/Field	Required?	Description
notifyOnReset (type: boolean)	Yes	TRUE: Email address(es) on Tracker will be notified each reset action. FALSE: no email will be sent on reset actions.
trackerRuleType (type: trackerRuleTypeEnum)	Yes	See <u>TrackerRuleTypeEnum</u>
currentBalance (type: string)	Yes	The current balance of the usage Tracker rule.
cumulativeBalance (type: string)	Yes	The total balance since inception for the usage Tracker rule.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateTrackerRule

6.52 updateTrackerRulesProfile

This call is used to update Tracker Rules profile entries.

Update Rules:

- End Date, name, unit, balance, status values may be modified.
- New start Date must be now or in the future.
- End Date must be > start date, and in the future.
- Changing End Date, name, unit, or balance values will cause a new record to be created with current time as the start time, and previously valid record will be modified to have the end date to current time – 1 second.

A typical request (updateTrackerRulesProfileRequestImpl) will contain the following attributes:

Element/Field	Required?	Description
Authentication Data	Yes	See Authentication.
trackerRulesProfileId	Yes	Unique Id for Rules profile entry.
oldStartDate (type: string)	Yes	The start date for the record to be modified

Element/Field	Required?	Description
newStartDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
name (type: string)	Yes	Name for Tracker Rules Profile
usageUnitId (type: string)	Yes	Usage Unit ID gathered from getUsageUnits call. Denotes the units expected for the profile. This field is informational, and does not indicate only calls with this billing unit will be counted. (linked call types determine which calls are included)
thresholdBalance (type: string)	Yes	Target balance for triggered actions.
status (type: trackerStatusEnum)	No	Defaults to ACTIVE on creation. Can be set to OBSOLETE if it is desired to make this rule profile unavailable for future Tracker rules. Changing to OBSOLETE does not inactivate current rules linked to this profile, setting end date will make the entry no longer valid.

$\label{thm:local_problem} A \ typical \ response \ (update Tracker Rules Profile Response Impl) \ looks \ like:$

Element/Field	Required?	Description
trackerRulesProfile (type: trackerRulesProfileEntryImpl)	No	Tracker Rules Profile object
trackerRulesProfileId (type: string)	Yes	System generated unique ID for Rules profile entry.
startDate (type: string)	No	Date Time value specifying start time when rule will be included as part of this Tracker. If not specified system time (GMT) will be populated during insert.

Element/Field	Required?	Description
endDate (type: string)	No	Date Time value specifying end time when rule will be included as part of this Tracker. Null value will indicate record continues indefinitely.
owner (type: string)	Yes	Owner for the rule profile GLOBAL for universal shared profiles, SP account number
profileName (type: string)	Yes	Name for Tracker Rules Profile (40 chars max)
serviceType (type: serviceTypeEnum)	Yes	Service type for Tracker Rules Profile. See Service Types.
usageUnitId (type: string)	Yes	Usage Unit ID gathered from getUsageUnits call. Denotes the units expected for the profile. This field is informational, and does not indicate only calls with this billing unit will be counted. (linked call types determine which calls are included)
thresholdBalance (type: string)	Yes	Target balance for triggered actions.
status (type: trackerStatusEnum)	No	Defaults to ACTIVE on creation. Can be set to OBSOLETE if it is desired to make this rule profile unavailable for future Tracker rules. Changing to OBSOLETE does not inactivate current rules linked to this profile, setting end date will make the entry no longer valid.
createdBy (type: string)	Yes	User ID who created the record
updatedBy (type: string)	No	Date of creation
createdDate (type: Date)	Yes	User ID performing last update
updatedDate (type: Date)	No	Date of last modification

https://training.iridium.com/iwsexplorer/index.php?call=updateTrackerRulesProfile

6.53 userAuthenticate

The userAuthenticateRequest request authenticate user credentials.

The userAuthenticateRequest request consists of the following pieces of data: (userAuthenticateRequestImpl)

Element/Field	Required?	Description
Authentication Data	Yes	See <u>Authentication</u> .
username (type: string)	Yes	Username for the user to be authenticated.
password (type:string)	Yes	Password for user account.

If the request is successful, the account status will be modified and an empty response will be returned.

7 Reusable Objects

IWS was designed using an object-oriented approach. There are common elements utilized across many of the requests and responses. The objects below appear throughout the services.

7.1 User

This is the object that represents the user account object for SPNetPro access. (userImpl)

Element/Field	Required?	Description
allAccessInfo	No	
accessInfo (type: userAccessInfoImpI)	No	Array of access levels. A user may have more than one access level if they are granted access to multiple accounts.
role (type: roleTypeEnum)	No	See <u>Role Types</u> .
spAcct (type: string)	No	Service Provider account number.
serviceProviderName (type:string)	No	Service Provider Name
userPrefs (type:string)	No	User Preferences.
username (type: string)	Yes	Username
password (type:string)	No	Password
status (type: StatusEnum)	No	Account status. See <u>User Account Status</u> .
contactinfo (type: contactinfolmpl)	Yes	Array of contact information
salutation (type:string)	No	Salutation, for example: Mr., Mrs., Dr.
company (type: string)	Yes	Company name
firstName (type: String)	Yes	User first name.
lastName (type: string)	Yes	User last name
middleName (type: string)	Yes	User middle name.
address (type: string)	Yes	Mailing address
city (type: string)	Yes	City
state (type: string)	Yes	State (if USA)
postalCode (type: string)	Yes	Postal code for mailing address.
country (type: string)	Yes	Country
email (type: string)	Yes	Email address
phone (type: string)	No	Phone Number
contactType (type: contactTypeEnum)	No	Contact Type. See Contact Types.