

---

# Torrent SDK Documentation

*Release 5.12.1*

**Ion Torrent**

Jun 18, 2021



---

## Plugin Framework

---

<b>1</b>	<b>Torrent Suite™ Software Plugin System</b>	<b>3</b>
1.1	Getting Started with Plugins . . . . .	3
1.2	Plugin Reference . . . . .	6
1.3	Plugin Examples . . . . .	21
<b>2</b>	<b>Torrent Suite™ Software REST API</b>	<b>27</b>
2.1	Getting Started with the API . . . . .	27
2.2	API Reference . . . . .	29
2.3	API Examples . . . . .	237
2.4	Downloading Files: FASTA and FASTQ . . . . .	240
<b>3</b>	<b>Legal</b>	<b>245</b>



Release v5.12.

This document reviews all the points of interest for programmatically interfacing with Torrent Suite™ Software.

---



# CHAPTER 1

---

## Torrent Suite™ Software Plugin System

---

This section describes the plugin framework and explains how to create plugins using all the available features. To understand this section, we recommend that you have at a minimum a working knowledge of python, object-oriented programming and HTML/javascript.

### 1.1 Getting Started with Plugins

The plugin framework is primarily an extension of the analysis pipeline and executes custom python modules (plugins) at different points in the pipeline process. There are three reasons for writing a plugin:

1. Data Management: The transfer or backup of data to a secondary file server or remote site.
2. Quality Assurance/Quality Control: These plugins check the quality of the data and give you access to some of the larger and transient data used in signal processing, which are eventually deleted.
3. Application Analysis: This is broadest and most useful category which bridges the gap between general pipeline workflow and application-specific analysis and reporting.

There is nothing strict about these categories. They have no technical bearing on the functioning of the plugins other than a conceptual framework for deciding whether to use a plugin or not.

#### 1.1.1 Quick Start

Enter the following python code into a file called *MyPlugin.py* inside a new directory called *MyPlugin*.

```
import subprocess
from ion.plugin import *

class MyPlugin(IonPlugin):
    version = "1.0.0.0"

    def launch(self, data=None):
```

```
output = subprocess.check_output(['ls', '-l'])
with open("status_block.html", "w") as html_fp:
    html_fp.write("<html><body><pre>")
    html_fp.write(output)
    html_fp.write("</pre></body></html>")

if __name__ == "__main__":
    PlugininCLI()
```

Compress the *MyPlugin* directory (ZIP file format). See *Packaging & Installation* for help. Click *Install or Upgrade Plugin* to upload the archive on the Torrent Suite™ Software plugins page. Navigate to an existing Torrent Suite™ Software run report, click *Select Plugins to Run*, then select *MyPlugin*. The plugin code executes and the output displays in an iframe on the report.

### 1.1.2 Pipeline Overview

Plugins are fundamentally an ability to extend the functionality of the analysis pipeline. At certain stages of the pipeline execution, each of these stages is represented as a “Run Level”.

#### Configuration

Occasionally, you need to configure plugins before their execution. To do this, the Plugin Framework offers three different caches for storing the configurations for the two different workflows for executing a plugin.

#### Automated Pipeline Workflow

- **1st Priority:** Plan Configuration
- **2nd Priority:** Global Configuration

#### Manual Plugin Execution

- **1st Priority:** Instance Configuration
- **2nd Priority:** Global Configuration

#### Run Levels

One of the key attributes of any given plugin is the run level that directs the pipeline to execute the plugin at each of these stages specified in the module. It is important to remember that the same method is called in the plugin no matter what run level is currently being executed. So if you are going to use more than one run level, write the plugin code so it is conditionally based on the *Run Levels*.

When employing run levels, use one of the two following strategies. The conventional workflow covers almost all situations; therefore, it is the default approach.

#### Block Levels

When you use block-based run levels, we recommend that you use a combination of the three following run levels:

- PRE: This stage occurs before any significant processing happens, and is sufficient for preparation.
- BLOCK: Plugins are triggered once per block on the chip. This run level is never executed for runs that do not have block-level processing.
- POST: This stage occurs after the analysis pipeline is completely executed. When executed, the plugin results output directory is a child directory of the normal plugin output directory named “post”.

## Conventional Workflow

This strategy is the default for non-block-level specific run levels and is used in a more conventional workflow.

- DEFAULT: Plugins are triggered at the end of pipeline processing after the four usual steps (see pipeline documentation for details).
- LAST: Plugins are executed after all other plugins that are not “LAST” have been executed. If there is more than one, all “LAST” run level plugins run concurrently.

## Internal Use Only

- SEPARATOR: Do not use.

## Run Types

Run Types define which type of data the plugin is capable of running on. This controls whether the plugin is executed on a specific report type when it is selected during planning. If no run types are defined, the plugin will be launched for thumbnail and Ion PGM™ System reports only. In order to auto-run on Ion GeneStudio™ S5 System/Ion Proton™ System reports, the plugin must include COMPOSITE in its runtypes specification.

- COMPOSITE: Plugin will run on Ion GeneStudio™ S5 System/Ion Proton™ System report.
- THUMB: Plugin will run on Ion GeneStudio™ S5 System/Ion Proton™ System thumbnail report.
- FULLCHIP: Plugin will run on Ion PGM™ System report.

## Dependencies

The term “dependency” is not quite accurate. This attribute ensures that when a plugin with a “dependency” is set to run at a run level, it is scheduled to run after the declared dependency that also shares that run level. If the declared dependency is not scheduled to run at the same run level, then the plugin runs without any special scheduling.

## OIA Integration

Currently, the “On Instrument Analysis” (OIA) is responsible for the first two portions of the pipeline execution. The OIA does not normally interfere with plugin execution. However, if you select the PRE run level, any OIA-based workflows are executed after the signal processing step. A pure Torrent Suite™ Software implementation’s PRE step is executed before the signal processing step.

### 1.1.3 Plugin Code

You must write the code for all plugins in python, therefore a basic understanding of both python and object oriented programming is required.

In order for the plugin to function, it must inherit from the base class IonPlugin contained in the module at ion.plugin. At a minimum, the version attribute and launch method need to be overridden.

## Legacy Note

Legacy plugins that use a bash script called “launch.sh” are obsolete and should not be replicated.

## Naming Your Plugin

It is important to include the name of your plugin in the following:

- The directory containing the python plugin file
- The name of the python plugin file (not including the required .py file extension)
- The name of the class declared within the python plugin file that derives the IonPlugin base class

NOTE: All are case-sensitive.

## Plugin Version

The version of the plugin must be a string that has the standard four-number formatting as follows:

*<Major>.<Minor>.<Revision>.<Build>*

## Launch Method

The one required override method to implement in the plugin class is the launch method, which has only the self argument, and an unused “Data” argument with the “None” default. This method performs all the required actions to achieve the goal of the plugin as well as to produce all the results files.

### 1.1.4 Packaging & Installation

There are two supported methods for packaging and installing plugins into the system: the debian packaging system and a simple zip archive method. This section describes only the zip archive method. The debian packaging system is described elsewhere because it is more advanced.

When you create a zip package, the contents must use a file structure with a root folder that has the same name as the plugin. All other contents are a child of this root folder:

Linux Bash Shell: ‘zip -r –exclude=\*.git\* PluginName.zip PluginDirectory’

After you create the archive, go to [http://TS\\_hostname/configure/plugins/](http://TS_hostname/configure/plugins/) on the Torrent Suite™ Software, then click “Install or Upgrade Plugin” to submit your new archive.

## 1.2 Plugin Reference

### 1.2.1 Plugin Files

- **Plugin Python File:** The primary file for implementing the logic contained in the plugin. The name of this file must be *<PluginName>.py* and be contained in the top level directory, which also has the same name as the plugin. Names are case-sensitive.
- **Configuration Interfaces:** There are three different configuration interfaces, all of which are optional. If your plugin does not require any configuration to execute, you do not need to implement all of the following:
  - *instance.html*: If present, this page appears when a plugin is run from the Manual Launch button on the Run Report page.
  - *plan.html*: When you create a plan in the Plugin chevron, you have the option of launching a configuration interface for that plan. If not present, you can still select the plugin to run, but there will be no configuration data.

- config.html: This interface is presented in the plugin configuration interface and sets up the default configuration, which is used if neither of the other two configuration caches are present.
- **Static Files:** HTML files included in or generated by a plugin may need to load static assets (JS/CSS/Images). Include these files in a directory called **pluginMedia** in the root plugin directory. Reference the static files using the following URL pattern: /pluginMedia/<PluginName>/example.css
- **Documentation:**
  - about.html: If present, this information is accessible from the plugins manage menu on the plugin page.

## 1.2.2 Base Class

All plugins must create one and only one class that inherits from the IonPlugin base class. The IonPlugin base class requires that the following attributes and methods be overridden, although some are optional.

### Attributes & Properties

Attribute Name	Re-required	Type	De-fault	Description
name	No	string	Empty	Stores the name of the plugin in addition to the name of the class itself for logging.
version	Yes	string	Empty	The four number version number for the plugin.
runtypes	No	list(string)	Empty	Indicates if this plugin is used for wholechip and/or thumbnails.
features	No	list(string)	Empty	Holds a list of current features enabled for this plugin.
runlevels	Yes	list(string)	Empty	Holds a list for each run level that this plugin executes during the pipeline execution.
depends	No	list(string)	Empty	Lists all plugins which are executed before this one, if present.
major_block	No	boolean	False	If true, indicates that this plugin's output is presented as part of the run report.
requires	No	list(string)	[ 'BAM' ]	Currently unused.
output	No	dictio-nary	Empty	Currently unused.
results	No	dictio-nary	Empty	Currently unused.
exit_status	No	int	Empty	Currently unused.
context	No	dictio-nary	Empty	Currently unused.
blockcount	No	int	0	Currently unused.
plugin	No	Plugin	None	Currently unused.
analysis	No	Result	None	Currently unused.
pluginresult	No	Plugin-Result	None	Currently unused.
startplugin	No	dictio-nary	None	This returns "an" in the memory dictionary of the startplugin.json.

## Methods

Method Name	Re-required	Return Type	Description
launch_wrapper	No	None	Do not use.
generate_output	No	None	Currently unused.
pre_block	No	None	Currently unused.
post_block	No	None	Currently unused.
pre_launch	No	boolean	Run prior to launch. Return False if you do not want the plugin to execute.
post_launch	No	None	Currently unused.
launch	Yes	boolean	If true, this indicates that this plugin's output is presented as part of the run report.
getUserInput	No	None	Currently unused.
bar-codetable_columns	No	list	This method returns a list of columns to be used to generate the plugin barcodes table ui.
bar-codetable_data	No	dictionary	This returns a dictionary to populate the contents of the plugin barcodes table ui.
get_restobj	No	dictionary	This method returns a dictionary based on a REST API function call.

## Enums

Import the enumerations from the ion.plugin.constants module. Since enumerations are not supported in python 2, you implement them by creating a type with static members according to the following scheme.

- **Feature**
  - EXPORT: Used to indicate that this plugin is run last because it exports data.
- **Run Types**
  - COMPOSITE: Block based chip runs.
  - THUMB: A thumbnail result.
  - FULLCHIP: Ion PGM™ System Full chip results.
- **Run Levels**
  - PRE
  - DEFAULT
  - BLOCK
  - POST
  - SEPARATOR
  - LAST

### 1.2.3 Execution Environment

When you execute plugins, they are controlled with a script which is written to the results output directory call ion\_plugin\_\*<Plugin Name>\*\_launch.sh. The plugin framework creates this file and directs the Grid Engine to execute this as the entry point for the plugin execution. The file handles the following:

- Updating the status in the database to be reflected in the run results page

- Setting up environmental variables (these are used in legacy plugins)
- Setting the umask to 0000
- Preventing core files from being written from core dumps
- Implementing the use of the output.json to create output (currently incomplete)

## Run Levels

To use the run levels, you must assign them to your plugin class. If none are assigned the plugin will use DEFAULT runlevel. The run levels, block and conventional, are described in the Getting Started section. While it is technically possible, we do not recommend that you assign run levels from both groups concurrently.

## Clusters

To accomplish clustering, the execution of the plugins is queued through a grid engine which, for single servers, is executed on the same computer as the one hosting the web site. In a cluster, the plugins are run only on the computer nodes and never on the head node. Consider the following when writing a plugin:

- The plugin is not run on the head node, so any references to “localhost” are incorrect. For example, if you are making a REST call and you have hard-coded the domain name of the url to be localhost, this attempts to call the REST API from the compute node, which results in an error. Instead, ensure that any REST API calls use the protocol and domain name in the *startplugin.json* contents *runinfo->net\_location*.
- To distribute the executable code to the compute nodes, the system piggy-backs on the commonly shared NFS mount “/results” by creating a child folder at “/results/plugins/”. This means that the stability of the plugin framework is going to be intimately tied to the stability of the network. Ensure that the connection to the results folder is as stable and redundant as reasonably possible.

## Dependencies

Due to the method of distribution of plugin logic over NFS mounts, there are very few libraries on the compute nodes during run time. To work around this, package all dependencies (beyond the standard python libraries) into the install file with the core logic so they are also installed into the /results/plugins/<Plugin Name> directory on the NFS mount to be redistributed out to the compute nodes.

## REST API Extensions

The plugin framework currently gives you an option of extending the REST API with custom endpoints by implementing a python file in the root of the plugin folder, which must have the name “extend.py”. By implementing a method in this module with a single dictionary argument named “bucket”, which is described below, the extension is exposed through the REST API for execution using the following url:

http(s)://{{HOSTNAME}}/rundb/api/v1/plugin/{{PLUGIN}}/extend/{{METHOD\_NAME}}

```
bucket["request_get"] = request.GET
# assume json
if request.method == "POST":
    bucket["request_post"] = json.loads(request.body)
bucket["user"] = request.user
bucket["request_method"] = request.method
bucket["name"] = plugin.name
bucket["version"] = plugin.version
```

```
# not sure if we want this or not, keep it for now
bucket["config"] = plugin.config
```

## 1.2.4 Configuration

In many situations for plugins, there needs to be some sort of configuration declared before the plugin run time. This means that the plugin needs to implement an interface to allow users to configure it. Users can select from three configuration options in Torrent Suite™ Software: global, plan, and manual. The HTML pages can reference static assets, see [Plugin Files](#).

### Global Configuration

Include an HTML file named *config.html* in your root plugin directory to enable global configuration. This HTML window appears in an iframe on the global plugin configuration page at */configure/plugins/*. Click the  (Settings) next to a plugin, then select “Configure”.

#### Reading Configuration

Read from the plugin api endpoint. “/rundb/api/v1/plugin/” + TB\_plugin.pk + “/” Or Read the window.TB\_plugin js variable.

#### Writing Configuration

Write to the plugin api endpoint with a PUT request. “/rundb/api/v1/plugin/” + TB\_plugin.pk + “/”

### Plan Configuration

Include an HTML file named *plan.html* in your root plugin directory to enable plan configuration. This HTML window appears in an iframe on the planning screen plugin configuration page at */plan/page\_plan\_plugins/*. Click the checkbox next to a plugin, then select “Configure”.

#### Reading Configuration

Read the window.TB\_plugin js variable, then wait for window.restoreForm to be called with the last data passed to serializeForm.

#### Writing Configuration

window.serializeForm is called by the parent frame to gather the current configuration when users click “Save” in the parent frame.

### Manual Configuration

Include an HTML file named *instance.html* in your root plugin directory to enable manual configuration. The HTML window appears in an iframe on the report page at */report/<ID>/*. Click “Select Plugins To Run”, then select a plugin.

#### Reading Configuration

Read the window.TB\_plugin js variable.

#### Writing Configuration

Write to the results endpoint with a POST request. “/rundb/api/v1/results/” + TB\_result + “/plugin/” Then call the following to close the iframe. window.parent.\$().colorbox.close()

## Barcode Table UI

Plugin Barcode Table UI is an optional service provided by the plugin framework. It allows plugins to generate a simple GUI that can be used to select which barcodes to process and specify per-barcode parameters. The table is similar to the barcode sample table in plan screen with one row per barcode and columns specified by the plugin. This UI is provided for manual plugin launch only and is an opt-in service for plugins to use if desired.

### Defining table columns

```
def barcodetable_columns(self):
    # plugin class method to specify which columns to display
    # inputs: none
    # outputs: list of columns and options to show
    columns_list = [
        {
            "field": "selected",
            "editable": True
        },
        {
            "field": "barcode_name",
            "editable": False
        },
        {
            "field": "sample",
            "editable": False
        },
        ...
    ]
    return columns_list
```

List of available columns can be retrieved from framework by executing the following command line:

```
python /results/plugins/<myPlugin>/<myPlugin>.py --bctable-columns
```

### Providing default table contents (optional)

Plugin barcode table will be populated on page load from existing samples information entered during run planning. Additionally, the plugin can modify or augment this initial data if it specifies the following function:

```
def barcodetable_data(self, data, planconfig={}, globalconfig={}):
    # plugin class method to specify default table contents
    # inputs:
    #   data - same structure as in barcodes.json
    #   planconfig - plugin configuration from planning (plan.html)
    #   globalconfig - plugin global configuration (config.html)
    # outputs:
    #   data, modified as needed
    return data
```

### Changing instance.html

The plugin's instance.html must add the contents of barcodes table to the plugin data before POSTing it to the results API. This data will be written to startplugin.json file at plugin runtime under "pluginconfig" section.

Helper TB\_plugin\_functions js variable is available to interact with the barcode table UI:

- **TB\_plugin\_functions.get\_plugin\_barcodetable()** returns table data as json object
- **TB\_plugin\_functions.update\_plugin\_barcodetable(data)** can be used to update the table with data json object

- `TB_plugin_functions.plugin_barcodetable_div` barcode table DIV element

## 1.2.5 Input Files

The plugin framework creates two different files for general plugin consumption as its inputs. The variables, which are communicated to the plugin from the framework, are spread across two separate JSON files.

### barcodes.json

This file has all the references required for iterating through all of the barcodes for a particular run.

#### Developer Option

By default all the barcodes where the filtered key is true are not included in the barcodes.json file. You can overwrite this behavior by adding “PLUGINS\_INCLUDE\_FILTERED\_BARCODES = True” to the local\_settings.py and restarting the ionPlugin service.

```
nonbarcoded: {
    aligned <bool>: Flags if the reads in bam_file are aligned to the reference_
    ↵genome.
    bam_file <string>: Name of reads file. (May or may not be aligned to the_
    ↵reference.)
    bam_filepath <string>: Full file path to bam_file on the local torrent server._
    ↵(File may not exist if read_count is 0.)
    control_sequence_type <string>: Currently either ERCC Mix 1 or ERCC Mix 2 and_
    ↵only defined in plan screen for RNA Sequencing. (Purpose unspecified.)
    filtered <bool>: Flags if the barcode passed the |TS| analysis pipeline filtering_
    ↵criteria.
    hotspot_filepath <string>: Full file path to HotSpot target regions (BED) file on_
    ↵the local torrent server. (" if not used.)
    genome_urlpath <string>: URL path used to specify the genome for applications_
    ↵like IGV. Typically the path to the FASTA file on the local torrent server.
    nucleotide_type <string>: Currently either DNA or RNA depending on application._
    ↵Primarily used to distinguish barcodes with AmpliSeq DNA+RNA runs.
    read_count <int>: Total number of barcode-assigned reads in bam_file (prior to_
    ↵alignment).
    reference <string>: Common (short) name of the reference genome used in the_
    ↵pipeline for this barcode, e.g. hg19
    reference_fullpath <string>: Full file path to the to the reference sequences in_
    ↵FASTA format on the local torrent server. (May be " for unaligned reads.)
    sample <string>: Name of the sample associated with this barcode. (May be_
    ↵associated with multiple barcodes.)
    sample_id <string>: Sample identification code associated with sample.
    target_region_filepath <string>: Full file path to target regions (BED) file on_
    ↵the local torrent server. (" if not used.)
}
barcode_name: {
    aligned <bool>: Flags if the reads in bam_file are aligned to the reference_
    ↵genome.
    bam_file <string>: Name of reads file. (May or may not be aligned to the_
    ↵reference.)
    bam_filepath <string>: Full file path to bam_file on the local torrent server.
    barcode_adapter <string>: DNA adapter sequence used to separate barcode_sequence_
    ↵from sequenced read.
    barcode_annotation <string>: User-specified annotation for this barcode.
    barcode_description <string>: Description text associated with this barcode.
    barcode_index <int>: Index of barcode in the barcode set, starting at 1.
```

```

barcode_name <string>: Name of the barcode in the barcode set (barcode_name).
barcode_sequence <string>: DNA sequence used to identify this barcode.
barcode_type <string>: User-specified type for this barcode.
control_sequence_type <string>: Currently either ERCC Mix 1 or ERCC Mix 2 and
↳ only defined in plan screen for RNA Sequencing. (Purpose unspecified.)
filtered <bool>: Flags if the barcode passed the |TS| analysis pipeline filtering
↳ criteria.
hotspot_filepath <string>: Full file path to HotSpot target regions (BED) file on
↳ the local torrent server. (""if not used.)
genome_urlpath <string>: URL path used to specify the genome for applications
↳ like IGV. Typically the path to the FASTA file on the local torrent server.
nucleotide_type <string>: Currently either DNA or RNA depending on application.
↳ Primarily used to distinguish barcodes with AmpliSeq DNA+RNA runs.
read_count <int>: Total number of barcode-assigned reads in bam_file (prior to
↳ alignment).
reference <string>: Common (short) name of the reference genome used in the
↳ pipeline for this barcode, e.g. hg19
reference_fullpath <string>: Full file path to the to the reference sequences in
↳ FASTA format on the local torrent server. (May be "for unaligned reads.)
sample <string>: Name of the sample associated with this barcode. (May be
↳ associated with multiple barcodes.)
sample_id <string>: Sample identification code associated with sample.
target_region_filepath <string>: Full file path to target regions (BED) file on
↳ the local torrent server. (""if not used.)
}

```

Example barcodes.json **for** a barcoded run (TSS v5.0.3)

```
{
  "IonXpress_001": {
    "aligned": true,
    "bam_file": "IonXpress_001_rawlib.bam",
    "bam_filepath": "/results/analysis/output/Local/with_many_samples_017/IonXpress_
↳ 001_rawlib.bam",
    "barcode_adapter": "GAT",
    "barcode_annotation": "",
    "barcode_description": "",
    "barcode_index": 1,
    "barcode_name": "IonXpress_001",
    "barcode_sequence": "CTAAGGTAAAC",
    "barcode_type": "",
    "control_sequence_type": "",
    "filtered": false,
    "genome_urlpath": "/auth/output/tmap-f3/hg19/hg19.fasta",
    "hotspot_filepath": "",
    "nucleotide_type": "DNA",
    "read_count": 20,
    "reference": "hg19",
    "reference_fullpath": "/results/referenceLibrary/tmap-f3/hg19/hg19.fasta",
    "sample": "First Sample name",
    "sample_id": "",
    "target_region_filepath": ""
  },
  "IonXpress_033": {
    "aligned": true,
    "bam_file": "IonXpress_033_rawlib.bam",
    "bam_filepath": "/results/analysis/output/Local/with_many_samples_017/IonXpress_
↳ 033_rawlib.bam",
    "barcode_adapter": "GAT",
  }
}
```

```
"barcode_annotation":"",
"barcode_description":"",
"barcode_index":33,
"barcode_name":"IonXpress_033",
"barcode_sequence":"TTCTCATTGAAC",
"barcode_type":"",
"control_sequence_type":"",
"filtered":false,
"genome_urlpath":"/auth/output/tmap-f3/hg19/hg19.fasta",
"hotspot_filepath":"",
"nucleotide_type":"DNA",
"read_count":231321,
"reference":"hg19",
"reference_fullpath":"/results/referenceLibrary/tmap-f3/hg19/hg19.fasta",
"sample":"Second Sample Name",
"sample_id":"",
"target_region_filepath":""
},
"IonXpress_034":{
"aligned":true,
"bam_file":"IonXpress_034_rawlib.bam",
"bam_filepath":"/results/analysis/output/Local/with_many_samples_017/IonXpress_
→034_rawlib.bam",
"barcode_adapter":"GAT",
"barcode_annotation":"",
"barcode_description":"",
"barcode_index":34,
"barcode_name":"IonXpress_034",
"barcode_sequence":"TCGCATCGTTC",
"barcode_type":"",
"control_sequence_type":"",
"filtered":false,
"genome_urlpath":"/auth/output/tmap-f3/hg19/hg19.fasta",
"hotspot_filepath":"",
"nucleotide_type":"",
"read_count":267041,
"reference":"hg19",
"reference_fullpath":"/results/referenceLibrary/tmap-f3/hg19/hg19.fasta",
"sample":"",
"sample_id":"",
"target_region_filepath":""
}
}
```

## Usage Notes

1. For consistency, we recommend that you iterate and present barcodes in order of increasing barcode\_index value.
2. For default plugin configurations, barcodes with filtered == true are not output. (A plugin option to include these may become available soon.)
3. Barcodes with a sample name provided (i.e. not "") are represented with filtered == false, regardless of read\_count value.
4. The bam\_filepath value is set to the expected location of the bam\_file on the Torrent Server. Barcodes with read\_count == 0 may not have a bam\_file saved, so you can expect a failure to find the bam\_file at bam\_filepath. If read\_count > 0 then a missing bam\_file should be treated as an unexpected error. (This would most likely be a result of automated deletion of old files to make space on the server.)

5. Although control\_sequence\_type and nucleotide\_type appear to be general attributes, at 5.0.3 these are only defined for barcodes that were specified (associated with samples) in the plan. For nonbarcoded elements or barcodes with no sample data that had sufficient reads. these attributes have the value “”.

## startplugin.json

This is the primary file to get all of the information regarding the file.

```
{
    chefSummary <dictionary> : This optional section will convey information regarding the chef parameters used.
    }
    datamanagement <dictionary>: Holds information regarding the data management state of the run.
        {
            Basecalling Input <bool>: This will indicate if the basecalling information is available for use.
            Intermediate Files <bool>: This will indicate if the intermediate files are available for use.
            Output Files <bool>: This will indicate if the output files are available for use.
            Signal Processing Input <bool>: This will indicate if the signal processing information is available for use.
        }
    expmeta <dictionary>: This is an aggregate of data contained in the expMeta.dat file and the ion_params_00.json file.
        analysis_date <date>: Gets the time of results analysis based on the last modified time stamp on the ion_params_00.json file.
        barcodeId <string>: The barcode kit name from the experiment analysis settings.
        chipBarcode <string>: The barcode of the chip derived from the ion_params_00.
        json->exp_json->chipBarcode... mostly.
        chiptype <string>: This is the chip which was used to do the run.
        flowOrder <string>: The flow order used to sequence the run.
        instrument <string>: The name (not type) of the instrument which was used to do the sequencing.
        notes <string>: Any notes which may have been included in the experiment.
        project <string>: A list of all of the projects which this result may belong to.
        results_name <string>: The name of the results that will be processed.
        run_date <datetime>: The date/time stamp of the experiment.
        run_flows <int>: The number of flows used in the run.
        run_name <string>: The name of the run as opposed to the name of the result.
        runid <string>: A short identifies for each id.
        sample <string>: This is the name of the first sample which is associated with this run.
        output_file_name_stem <string>: This is a merger of the experiment name and the results name.
    }
    globalconfig <dictionary>: This section is for the global environment of the result.
        {
            MEM_MAX <string>: Hardcoded to always read "15G".
            debug <int>: Hardcoded to always read 0.
        }
    plan <dictionary>: This section is where all of the elements of the experiment plan are stored.
        {
            barcodeId <string>: The barcode kit name from the experiment analysis settings.
        }
}
```

```
        barcodedSamples <dictionary>: This is a dictionary of all of the samples
        ↵information and the barcodes they are associated with. {
            -Sample Name- <dictionary>: The name of the sample {
                barcodeSampleInfo <dictionary>: Contains the information for the
                ↵barcodes. {
                    -Barcode ID- <dictionary>: {
                        controlSequenceType <string>: The name of the kit used for
                        ↵the controls for specific per Sample applications.
                        controlType <string>: The experimental control used for this
                        ↵sample. eg (No Template Control)
                        description <string>: Free form description field.
                        externalId <string>: Free form id from any external sources
                        hotSpotRegionBedFile <string>: The name of the hotspot data
                        ↵used for this sample.
                        nucleotideType <string>: This will be the nucleotideType used
                        ↵for this barcode (DNA/RNA/Fusions).
                        reference <string>: The name of the reference
                        sseBedFile <string>: The SSE Bed file reference.
                        targetRegionBedFile <string>: The name of the target region
                        ↵data used for this sample.
                    }
                }
                barcodes <list>: A list of strings which should only have one entry
                ↵equal to the single dictionary key for barcodeSampleInfo.
            }
        }
        bedfile <string>: The name of a bed file used in this plan.
        controlSequencekitname <string, nullable>: The name of the kit used for the
        ↵controls.
        librarykitname <string>: The name of the library kit used in the plan.
        planName <string>: The name of the plan used in the run.
        regionfile <string>: The file to define regions for this plan.
        reverse_primer <string>: The reverse primer used in the plan.
        runMode <string>: The run mode value of 'SingleRead', 'PairedEnd' or
        ↵'Undefined'.
        runType <string>: The type of sequencing for this plan, for example "GENS"
        runTypeDescription <string> : A plain english description of the run type,
        ↵for example "Generic Sequencing".
        sampleGrouping <dictionary>: A representation of the sample group.
        samplePrepKitName <string>: The name of the sample prep kit.
        sampleSet_name <string>: The name of the sample set.
        sampleSet_planIndex <int>: deprecated
        sampleSet_planTotal <int>: deprecated
        sampleSet_uid <string>: deprecated
        sampleTubeLabel <string>: The barcode sample prep label on the sample tube.
        sequencekitname <string>: The name of the kit used for sequencing.
        templatingKitName <string>: The name of the kit used for templating.
        threePrimeAdapter <string>: The sequence of the three prime adapter being
        ↵used.
        username <string>: The name of the user who created the plan.
    }
    runinfo <dictionary>: Information regarding the sequencing run. {
        alignment_dir <string>: The path of the directory with the alignment data.
        analysis_dir <string>: The path of the directory using the Analysis data.
        api_key <string>: The api key which can be used to access the
        api_url <string>: The base directory url for *most* of the rest api calls.
        barcodeId <string>: The identifier for the barcoding kit.
        basecaller_dir <string>: The path to the directory with the basecaller
        ↵information.
```

```

chipDescription <string>: The description of the chip used for sequencing.
chipType <string>: The type of the chip used for sequencing.
library <string>: The reference library used.
library_key <string>: The key sequence to the library.
net_location <string>: The url to the master node used for the run.
pk <int>: The primary key for this run in the database.
platform <string>: The type of sequencer being used.
plugin <dictionary>: This section describes the run parameters for this
↪plugin in this run.
    depends <list>: The list of dependency plugins for this run.
    features <list>: The list of features for this plugin.
    hold_jid <list>: A list of SGE job id's which this process was asked to
↪hold on.
        id <int>: The database pk for the id of the plugin.
        name <string>: The name of this plugin.
        path <string>: The path to the plugin executable directory.
        pluginconfig <dictionary>: This is a freeform dictionary which contains
↪the global configuration used for this plugin run.
        pluginresult <int>: The database primary key for the plugin results
↪entry.
        results_dir <string>: The directory path to the plugin result output.
        runlevel <list>: The list of run levels this plugin has been asked to run
↪at.
        runtype <list>: This list of run types that this plugin can be run on.
        userInput <dictionary>: This is a freeform dictionary which contains the
↪run configuration used for this plugin run.
        version <string>: The version of the plugin running.
    }
    plugin_dir <string>: The path to the plugin executable directory.
    plugin_name <string>: The name of this plugin.
    pluginresult <int>: The database primary key for the plugin results entry.
    raw_data_dir <string>: The path to the directory which contains the raw
↪observational data.
        report_root_dir <string>: The path to the directory of the report.
        results_dir <string>: The path to the directory of the plugin results.
        sigproc_dir <string>: The path to the directory of the signal processing data.
        systemType <string>: The type of sequencer being used.
        testfrag_key <string>: The sequence key to the test fragments.
        tmap_version <string>: The version of the tmap program being used.
        url_root <string>: The file path to the directory of the results data. (not a
↪url)
        username <string>: The user who is performing the run.
    {
        runplugin <dictionary>: The exact parameters used for this plugin run. {
            blockId <string>: The id for the block currently being processed. Blank if
↪not a block process.
            block_dirs <list>: A list of all of the directories of all of the block data.
            numBlocks <int>: The total number of blocks processed.
            run_mode <string>: The run mode that this is being processed in, either
↪'pipeline' or 'manual'.
            run_type <string>: The type of the run. Thumbnail, wholechip or composite.
            runlevel <string>: The current run level being run.
        }
        sampleinfo <dictionary>: A dictionary of information used to convey information
↪regarding the samples. {
            SampleName <dictionary>: The name of the sample. {
                attributes <dictionary>: Any attributes {
            }
        }
    }

```

```
        description <????>: A free form description of the sample.  
        displayName <string>: The name of the sample.  
        externalId <string>: Any remote identifier used for the sample.  
        name <string>: The name of the sample without whitespace.  
    }  
    pluginconfig <dictionary>: This is a freeform dictionary which contains the run_  
↳ configuration used for this plugin run. {  
}  
}
```

**Example**

```
{  
    "datamanagement": {  
        "Basecalling Input": true,  
        "Intermediate Files": true,  
        "Output Files": true,  
        "Signal Processing Input": true  
    },  
    "expmeta": {  
        "analysis_date": "2015-09-02",  
        "barcodeId": "",  
        "chipBarcode": "AA0026665",  
        "chiptype": "\\"314R\\\"",  
        "flowOrder": "TACGTACGTCTGAGCATCGATCGATGTACAGC",  
        "instrument": "PGM_test",  
        "notes": "",  
        "project": "SampleData",  
        "results_name": "Auto_user_CB1-42-r9723-314wfa-tl_36",  
        "run_date": "2011-04-07T12:44:38Z",  
        "run_flows": 260,  
        "run_name": "R_2011_04_07_12_44_38_user_CB1-42-r9723-314wfa-tl",  
        "runid": "ZN2MB",  
        "sample": "e5272-wfa-1165"  
    },  
    "globalconfig": {  
        "MEM_MAX": "15G",  
        "debug": 0  
    },  
    "plan": {  
        "barcodeId": "",  
        "barcodedSamples": {},  
        "bedfile": "",  
        "controlSequencekitname": null,  
        "librarykitname": "Ion Xpress Plus Fragment Library Kit",  
        "planName": "CopyOfSystemDefault_R_2011_04_07_12_44_38_user_CB1-42-r9723-  
↳ 314wfa-tl",  
        "regionfile": "",  
        "reverse_primer": null,  
        "runMode": "single",  
        "runType": "GENS",  
        "runTypeDescription": "",  
        "sampleGrouping": null,  
        "samplePrepKitName": null,  
        "sampleSet_name": null,  
        "sampleSet_planIndex": 0,  
        "sampleSet_planTotal": 0,  
        "sampleSet_uid": null,  
        "sampleTubeLabel": null,  
    }  
}
```

```

    "sequencekitname": "IonPGM200Kit-v2",
    "templatingKitName": "Ion PGM Template OT2 200 Kit",
    "threePrimeAdapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
    "username": string
},
"pluginconfig": {},
"runinfo": {
    "alignment_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001",
    "analysis_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001",
    "api_key": "9516e00c170496012b6df5810431aca7ac558163",
    "api_url": "http://ion-ts-vm/rundb/api",
    "barcodeId": "",
    "basecaller_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001/basecaller_results",
    "chipDescription": "",
    "chipType": "\"314R\"",
    "library": "e_coli_dh10b",
    "library_key": "TCAG",
    "net_location": "http://ion-ts-vm",
    "pk": 1,
    "platform": "pgm",
    "plugin": {
        "depends": [],
        "features": [],
        "hold_jid": [],
        "id": 11,
        "name": "FilterDuplicates",
        "path": "/results/plugins/FilterDuplicates",
        "pluginconfig": {},
        "pluginresult": 5,
        "results_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001/plugin_out/FilterDuplicates_out.5",
        "runlevel": [],
        "runtype": [
            "composite",
            "wholechip",
            "thumbnail"
        ],
        "userInput": "",
        "version": "5.0.0.0"
    },
    "plugin_dir": "/results/plugins/FilterDuplicates",
    "plugin_name": "FilterDuplicates",
    "pluginresult": 5,
    "raw_data_dir": "/results/PGM_test/cropped_CB1-42",
    "report_root_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001",
    "results_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001/plugin_out/FilterDuplicates_out.5",
    "sigproc_dir": "/results/analysis/output/Disabled/Auto_user_CB1-42-r9723-
→314wfa-tl_36_001/sigproc_results",
    "systemType": "pgm",
    "testfrag_key": "ATCG",
    "tmap_version": "tmap-f3",
    "url_root": "/output/Disabled/Auto_user_CB1-42-r9723-314wfa-tl_36_001",
    "username": "ionadmin"
}

```

```
},
"runplugin": {
    "blockId": "",
    "block_dirs": [
        "."
    ],
    "numBlocks": 1,
    "run_mode": "manual",
    "run_type": "wholechip",
    "runlevel": "default"
},
"sampleinfo": {
    "e5272-wfa-1165": {
        "attributes": {},
        "description": null,
        "displayedName": "e5272-wfa-1165",
        "externalId": "",
        "name": "e5272-wfa-1165"
    }
}
}
```

## Seq Files (BAMs)

The actual sequence information is a critical portion of all of the plugins running information. When you attempt to access them, refer to the barcodes.json file for references to their path in the “bam\_filepath” key.

### 1.2.6 Output Files

The primary output of all of the plugins is the report HTML file, which is produced by the plugin. Name this file \*\_block.html or \*\_block.php. There can be any number of them, and they are all displayed in separate iFrames. If plugin output doesn’t contain a \_block.html or \_block.php file then all HTML/PHP files in the plugin result folder will be shown as links in the plugin section.

Additionally, the SGE produces a log file for recording the standard output of the plugin execution, which is called drmaa\_stdout.txt. This contains all the information printed from the controlling script, including the standard output of the plugin itself, and is a primary source of information for debugging.

See [Rendering Templates](#) for an example using HTML templates. This usually results in cleaner code than assembling large strings or multiple-file writes.

### File Permissions

The SGE executes all of the plugins as the user ‘ionian’ to perform the execution. All files produced have both the owner and group of ionian and full read/write access to the plugin result directory. This also includes the ability to create new directories. The plugins have only read access to all other files, most notably the file in the run results directory.

### 1.2.7 Upgrades

When upgrading the plugins, after all of the changes have been made to the logic of plugin, all you need to do is to increment the version of the plugin and repackage the plugin for deployment.

## 1.3 Plugin Examples

This section has a very basic example plugin and its code.

### 1.3.1 Basic Plugin

This plugin goes through the explog and presents a few entries in the plugin output. It produces an HTML output but does not take any parameters.

```
#!/usr/bin/python
# Copyright (C) 2018 Thermo Fisher Scientific, Inc. All Rights Reserved

#
# Samples: LogParser
# plugin demonstrating simple log parsing ability
#


import json
import os
from django.utils.functional import cached_property
from ion.plugin import *


class LogParser(IonPlugin):
    # The version number for this plugin
    version = "5.4.0.0"

    # this plugin can run on fullchip runs, thumbnail runs, and composite (merged via project page) runs
    # when this plugin is manually launched, only the 'launch' method is called
    runtypes = [RunType.FULLCHIP, RunType.THUMB, RunType.COMPOSITE]

    # specify when the plugin is called. For log parsing, stay simple and just get called when the run completes.
    # the plugin can also be called before the run starts, at the block level, or after all other default plugins run
    runlevels = [RunLevel.DEFAULT]

    # a simple cached version of the start plugin property
    @cached_property
    def startplugin_json(self):
        return self.startplugin

    def read_explog(self):
        """This method reads and outputs an array of colon-delimited key/value pairs from the explog_final.txt"""

        path = os.path.join(self.startplugin_json['runinfo']['raw_data_dir'], "explog_final.txt")
        if not os.path.exists(path):
            raise Exception("explog_final.txt missing")

        # parse the log file for all of the values in a colon-delimited parameter
        data = dict()
        for line in open(path):
            # accommodates formatting issues in explog
```

```
datum = line.split(":", 1)
if len(datum) == 2:
    key, value = datum
    data[key.strip()] = value.strip()

return data

def launch(self, data=None):
    """This is the primary launch method for the plugin."""

    na = '<strong>NA</strong>'
    # creates a results object that is written out later. This holds data that
    # can be scrapped by a LIMS system,
    and will be part of the |TS| database
    exp_log_data = self.read_explog()
    results_json = {
        'Project': exp_log_data.get('Project', None) or na,
        'Sample': exp_log_data.get('Sample', None) or na,
        'Library': exp_log_data.get('Library', None) or na,
    }

    # open up an HTML file to dump interesting log file findings to
    with open(self.startplugin_json['runinfo']['results_dir'] + '/LogParser_block.
    ↪html', 'w') as html_handle:
        html_handle.write('<html><body>')
        html_handle.write("Project is: %s<br \>" % results_json['Project'])
        html_handle.write("Sample is: %s<br \>" % results_json['Sample'])
        html_handle.write("Library is: %s<br \>" % results_json['Library'])
        html_handle.write('</body></html>')

    # write out our results json object
    with open(self.startplugin_json['runinfo']['results_dir'] + '/results.json',
    ↪'w') as results_handle:
        json.dump(results_json, results_handle, indent=4)

    return True

# Devel use - running directly
if __name__ == "__main__":
    PluginCLI()
```

## Plugin which uses a subprocess

```
#!/usr/bin/python
# Copyright (C) 2018 Thermo Fisher Scientific, Inc. All Rights Reserved

#
# Samples: LogParser
# plugin demonstrating simple log parsing ability
#

import json
import os
from django.utils.functional import cached_property
from ion.plugin import *
from subprocess import check_output
```

```

class CallSubprocessExample(IonPlugin):
    # The version number for this plugin
    version = "5.4.0.0"

        # this plugin can run on fullchip runs, thumbnail runs, and composite (merged via_
        ↪project page) runs
        # note that when the plugin is manually launched, only the 'launch' method will_
        ↪be called
    runtypes = [RunType.FULLCHIP, RunType.THUMB, RunType.COMPOSITE]

        # specify when the plugin is called. For log parsing, stay simple and just get_
        ↪called when the run completes.
        # but can also be called before the run starts, at the block level, or after all_
        ↪other default plugins run
    runlevels = [RunLevel.DEFAULT]

        # a simple cached version of the start plugin property
    @cached_property
    def startplugin_json(self):
        return self.startplugin

    def launch(self, data=None):
        """This is the primary launch method for the plugin."""

        path_to_executable = "MyExecutable"
        arg1 = 'First Argument'
        arg2 = 'Second Argument'
        results = check_output([path_to_executable, arg1, arg2], cwd=self.startplugin_
        ↪json['runinfo']['plugin']['path'])

        return True

    # Devel use - running directly
if __name__ == "__main__":
    PluginCLI()

```

### 1.3.2 Accessing Barcode Data

```

#!/usr/bin/python
# Copyright (C) 2018 Thermo Fisher Scientific, Inc. All Rights Reserved

#
# Samples: LogParser
# plugin demonstrating simple log parsing ability
#

import json
import os
from django.utils.functional import cached_property
from ion.plugin import *
from subprocess import check_output

class BarcodesExample(IonPlugin):

```

```
# The version number for this plugin
version = "5.4.0.0"

# this plugin can run on fullchip runs, thumbnail runs, and composite (merged via_
# project page) runs
# note that when the plugin is manually launched, only the 'launch' method will_
# be called
runtypes = [RunType.FULLCHIP, RunType.THUMB, RunType.COMPOSITE]

# specify when the plugin is called. For log parsing, stay simple and just get_
# called when the run completes.
# but can also be called before the run starts, at the block level, or after all_
# other default plugins run
runlevels = [RunLevel.DEFAULT]

# a simple cached version of the start plugin property
@cached_property
def startplugin_json(self):
    return self.startplugin

@cached_property
def barcodes_json:
    with open('barcodes.json', 'r') as barcodes_handle:
        return json.load(barcodes_handle)

def launch(self, data=None):
    """This is the primary launch method for the plugin."""

    for barcode_name, barcode_values in self.barcodes_json.iteritems():
        # do you work per barcode here!
        print("Barcode Name: " + barcode_name)
        print("Bam File: " + barcode_values['bam_file'])

    return True

# Devel use - running directly
if __name__ == "__main__":
    PluginCLI()
```

### 1.3.3 Using the REST API

```
import json
import requests
api_response = requests.get('http://HOSTNAME/APPNAME/api/v1/APIENDPOINT/?ARG1=VAL1&
    pluginresult=self.startplugin['runinfo']['pluginresult']&api_key=' + self.
    startplugin['runinfo']['api_key'])
api_response.raise_for_status()
api_json_response = json.loads(api_response.content)
```

Note: api-key is tied to the specific plugin run so the system must also get which “pluginresult” is sending the API request.

Example 1: How to get the installed annotation files during the plugin execution?

```
#!/usr/bin/env python
# -*- coding: utf-8 -*-
```

```
# Copyright (C) 2018 Thermo Fisher Scientific, Inc. All Rights Reserved

import os
import sys
import requests
import json

from ion.plugin import RunType, PluginCLI, IonPlugin

API_VER = '/v1'

class PluginApiTest(IonPlugin):
    """
        This will make REST api call to get the installed annotation files
        with 'api_key' corresponding to the specific plugin run
    """

    version = "1.0"
    runtypes = [RunType.THUMB, RunType.FULLCHIP]

    def launch(self):
        sp_json_fpath = os.path.join(
            os.environ.get('RESULTS_DIR', ''),
            'startplugin.json'
        )

        with open(sp_json_fpath, 'r') as sp_fh:
            sp_json = json.load(sp_fh)

            endpoint = '/content'
            auth_params = {
                'api_key': sp_json['runinfo']['api_key'],
                'pluginresult': sp_json['runinfo']['pluginresult'],
            }
            query_params = {
                'type': 'Annotation'
            }
            request_params = {}
            request_params.update(auth_params)
            request_params.update(query_params)

            url = sp_json['runinfo']['api_url'] + API_VER + endpoint
            resp = requests.get(url, params=request_params)
            if resp:
                print(resp.url)
                print(resp.json())
                sys.exit(0)
            else:
                print(resp.status_code)
                sys.exit(1)

    if __name__ == "__main__":
        PluginCLI()
```

Example 2: Use the below query\_params to list all the files of mm10 auxiliary references for RNASeqAnalysis. Please note the type of camelcase, AuxiliaryReference.

```
...
query_params = {
    'application_tags__icontains' : 'RNA',
    'extra':'mm10',
    'type' : 'AuxiliaryReference'
}
...
```

### 1.3.4 Displaying Progress

When displaying progress, this needs to be manually updated by re-writing the \*\_block.html file intermittently during the process. Here is a simple example of how to construct a method to do this.

```
...
def update_progress(self, current_progress, max_progress):
    with open(self.startplugin['runinfo']['results_dir'] + '/progress_block.html', 'w') as html_handle:
        html_handle.write('<html><body>')
        html_handle.write("The current progress is %d of %d" %(current_progress, max_progress))
        html_handle.write('</body></html>')
...

```

### 1.3.5 Rendering Templates

When outputting HTML files, using templates can be cleaner than assembling long strings. Below is an example of using [Django templates](#). This example uses an HTML template named *progress\_block\_template.html* inside a *templates* directory inside the plugins root directory.

```
from django.conf import settings
from django.template.loader import render_to_string

settings.configure(TEMPLATE_DIR=self.startplugin["runinfo"]["plugin"]["path"] + '/templates')

with open(self.startplugin['runinfo']['results_dir'] + '/progress_block.html', 'w') as html_handle:
    html_handle.write(render_to_string("progress_block_template.html", {"current_progress": 54}))
```

# CHAPTER 2

---

## Torrent Suite™ Software REST API

---

This section describes all of the REST API end points that Torrent Suite™ Software makes available and the ways in which you access them.

### 2.1 Getting Started with the API

#### 2.1.1 API Overview

Our API is RESTful and HTTP based. All resources use HTTP standard verbs return JSON data.

The main API endpoint for Torrent Suite™ Software is `/rundb/api/v1/`. This endpoint returns a JSON object containing information for each resource available from the API. To see each resource's list endpoint, go to `/rundb/api/v1/resource-name/`. To see each resource's schema, go to `/rundb/api/v1/resource-name/schema/`.

#### 2.1.2 Authentication

To use the API you need to authenticate as an existing Torrent Suite™ Software user. To see API keys for each Torrent Suite™ Software user, go to `/admin/tastypie/apikey/`. You must include an API key with every API request. There are two methods:

As a header. Format is `Authorization: ApiKey <username>:<api_key>` `Authorization: ApiKey daniel:204db7bcfafb2deb7506b89eb3b9b715b09905c8`

As GET params `http://127.0.0.1:8000/api/v1/entries/?username=daniel&api_key=204db7bcfafb2deb7506b89eb3b9b715b09905c8`

#### 2.1.3 Pagination

The meta section of the list endpoint's response contains pagination details. Use the following GET params to control pagination.

`limit` The maximum number of resources the objects list will contain.  
`next` A URL pointing to the next page of results.  
`offset` The object number the current list of objects starts at.  
`previous` A URL pointing to the previous page of results.  
`total_count` The total number of objects remaining after filtering.

Modify `limit` and `offset` with URL parameters.

## 2.1.4 Sorting

Use the `order_by` GET param to specify a field to sort returned objects. Add a `-` character in front of the field name to switch the sort direction from ascending order (the default) to descending order. You can use most fields of an object to sort.

## 2.1.5 Filtering

Perform basic filtering by using a GET param with the same name as an object field. Using `name=alexander` only returns objects with a name field of “alexander”.

Use more advanced filters by appending the correct suffix to the GET param. The suffix consists of `__` plus one of the filters that follow. Using `name__startswith=alex` only returns objects with a name field starting with “alex”.

Filter	Description
<code>exact</code>	Exact match.
<code>iexact</code>	Case-insensitive exact match.
<code>contains</code>	Case-sensitive containment test.
<code>icontains</code>	Case-insensitive containment test.
<code>in</code>	In a given list. Comma delimited.
<code>gt</code>	Greater than.
<code>gte</code>	Greater than or equal to.
<code>lt</code>	Less than.
<code>lte</code>	Less than or equal to.
<code>startswith</code>	Case-sensitive starts-with.
<code>istartswith</code>	Case-insensitive starts-with.
<code>endswith</code>	Case-sensitive ends-with.
<code>iendswith</code>	Case-insensitive ends-with.
<code>range</code>	Range test (inclusive).
<code>year</code>	Exact year match (date fields).
<code>month</code>	Exact month number match (date fields).
<code>day</code>	Exact day number match (date fields).
<code>week_day</code>	Exact week day number match. 1-7. Sunday=1 (date fields).
<code>hour</code>	Exact hour match. 0-23. (date fields).
<code>minute</code>	Exact minute match. 0-59. (date fields).
<code>second</code>	Exact second match. 0-59. (date fields).
<code>isnull</code>	Null check. True or False.
<code>regex</code>	Case-sensitive regular expression match.
<code>iregex</code>	Case-insensitive regular expression match.

## 2.2 API Reference

This section has automatically generated reference pages for each endpoint the REST API provides.

### 2.2.1 Active Ion Chef Library Prep Kit Info Resource

Resource URL

`http://mytorrentserver/rundb/api/v1/activeioncheflibraryprepkitinfo/`

Schema URL

`http://mytorrentserver/rundb/api/v1/activeioncheflibraryprepkitinfo/schema/`

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/activeioncheflibraryprepkitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 2
  },
  "objects": [
    {
      "id": 2673,
      "name": "Hello World"
    }
  ]
}
```

```
{
    "applicationType": "AMPS",
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
    "cartridgeExpirationDayLimit": null,
    "categories": "filter_s5HidKit",
    "chipTypes": "",
    "defaultCartridgeUsageCount": null,
    "description": "Precision ID Chef DL8",
    "flowCount": 0,
    "id": 20105,
    "instrumentType": "",
    "isActive": true,
    "kitType": "LibraryPrepKit",
    "libraryReadLength": 0,
    "name": "Ion Chef HID Library V2",
    "nucleotideType": "",
    "parts": [
        {
            "barcode": "A32926C",
            "id": 20245,
            "kit": "/rundb/api/v1/kitinfo/20105/",
            "resource_uri": "/rundb/api/v1/kitpart/20245/"
        },
        {
            "barcode": "A33212",
            "id": 20261,
            "kit": "/rundb/api/v1/kitinfo/20105/",
            "resource_uri": "/rundb/api/v1/kitpart/20261/"
        }
    ],
    "resource_uri": "/rundb/api/v1/activeioncheflibraryprepkitinfo/20105/",
    "runMode": "",
    "samplePrep_instrumentType": "IC",
    "uid": "LREP0003"
}
]
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT

- DELETE
- PATCH

## 2.2.2 Active Ion Chef Prep Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activeionchefprepkitinfo/>  
Schema URL <http://mytorrentserver/rundb/api/v1/activeionchefprepkitinfo/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>samplePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/activeionchefprepkitinfo/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 9
    },
    "objects": [
        {
            "applicationType": "",
            "cartridgeBetweenUsageAbsoluteMaxDayLimit": 30,
            "cartridgeExpirationDayLimit": 8,
            "categories": "s5v1Kit;",
            "chipTypes": "550;560;GX7v1",
            "defaultCartridgeUsageCount": 2,
            "description": "Ion 550 Kit-Chef",
            "flowCount": 500,
            "id": 20113,
            "instrumentType": "S5",
            "isActive": true,
            "kitType": "IonChefPrepKit",
            "libraryReadLength": 200,
            "name": "Ion Chef S550 V1",
            "nucleotideType": "",
            "parts": [
                {
                    "barcode": "A34540",
                    "id": 20264,
                    "kit": "/rundb/api/v1/kitinfo/20113/",
                    "resource_uri": "/rundb/api/v1/kitpart/20264/"
                },
                {
                    "barcode": "A34540C",
                    "id": 20265,
                    "kit": "/rundb/api/v1/kitinfo/20113/",
                    "resource_uri": "/rundb/api/v1/kitpart/20265/"
                }
            ],
            "resource_uri": "/rundb/api/v1/activeionchefprepkitinfo/20113/",
            "runMode": "",
            "samplePrep_instrumentType": "IC",
            "uid": "ICPREP0014"
        }
    ]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT

- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.3 Active Library Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activelibrarykitinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/activelibrarykitinfo/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/activelibrarykitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 24
  },
  "objects": [
  ]}
```

```
        "applicationType": "AMPS",
        "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
        "cartridgeExpirationDayLimit": null,
        "categories": "carrierSeq",
        "chipTypes": "550",
        "defaultCartridgeUsageCount": null,
        "description": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
        "flowCount": 0,
        "id": 20118,
        "instrumentType": "",
        "isActive": true,
        "kitType": "LibraryKit",
        "libraryReadLength": 0,
        "name": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
        "nucleotideType": "",
        "parts": [
            {
                "barcode": "A43587",
                "id": 20269,
                "kit": "/rundb/api/v1/kitinfo/20118/",
                "resource_uri": "/rundb/api/v1/kitpart/20269/"
            }
        ],
        "resource_uri": "/rundb/api/v1/activelibrarykitinfo/20118/",
        "runMode": "",
        "samplePrep_instrumentType": "",
        "uid": "LIB0030"
    }
]
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.4 Active Pgm Library Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activepgmlibrarykitinfo/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/activepgmlibrarykitinfo/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam- plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

### Example Response

```
{
  "meta": {
```

```
        "limit": 1,
        "next": "/rundb/api/v1/activepgmlibrarykitinfo/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 21
    },
    "objects": [
        {
            "applicationType": "AMPS",
            "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
            "cartridgeExpirationDayLimit": null,
            "categories": "carrierSeq",
            "chipTypes": "550",
            "defaultCartridgeUsageCount": null,
            "description": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
            "flowCount": 0,
            "id": 20118,
            "instrumentType": "",
            "isActive": true,
            "kitType": "LibraryKit",
            "libraryReadLength": 0,
            "name": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
            "nucleotideType": "",
            "parts": [
                {
                    "barcode": "A43587",
                    "id": 20269,
                    "kit": "/rundb/api/v1/kitinfo/20118/",
                    "resource_uri": "/rundb/api/v1/kitpart/20269/"
                }
            ],
            "resource_uri": "/rundb/api/v1/activepgmlibrarykitinfo/20118/",
            "runMode": "",
            "samplePrep_instrumentType": "",
            "uid": "LIB0030"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT

- DELETE
- PATCH

## 2.2.5 Active Pgm Sequencing Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activepgmsequencingkitinfo/>

Schema URL

<http://mytorrentserver/rundb/api/v1/activepgmsequencingkitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>defaultFlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam- plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/activepgmsequencingkitinfo/?offset=1&limit=1&
→format=json",
    "offset": 0,
    "previous": null,
    "total_count": 4
  }
}
```

```

},
"objects": [
{
    "applicationType": "",
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
    "cartridgeExpirationDayLimit": null,
    "categories": "flowOverridable;readLengthDerivableFromFlows;",
    "chipTypes": "",
    "defaultCartridgeUsageCount": null,
    "defaultFlowOrder": null,
    "description": "Ion PGM Hi-Q View Sequencing Kit",
    "flowCount": 500,
    "id": 20090,
    "instrumentType": "pgm",
    "isActive": true,
    "kitType": "SequencingKit",
    "libraryReadLength": 0,
    "name": "IonPGMHiQView",
    "nucleotideType": "",
    "parts": [
        {
            "barcode": "A30044",
            "id": 20203,
            "kit": "/rundb/api/v1/kitinfo/20090/",
            "resource_uri": "/rundb/api/v1/kitpart/20203/"
        },
        {
            "barcode": "A30043",
            "id": 20204,
            "kit": "/rundb/api/v1/kitinfo/20090/",
            "resource_uri": "/rundb/api/v1/kitpart/20204/"
        },
        {
            "barcode": "A30275",
            "id": 20205,
            "kit": "/rundb/api/v1/kitinfo/20090/",
            "resource_uri": "/rundb/api/v1/kitpart/20205/"
        },
        {
            "barcode": "A25590",
            "id": 20206,
            "kit": "/rundb/api/v1/kitinfo/20090/",
            "resource_uri": "/rundb/api/v1/kitpart/20206/"
        }
    ],
    "resource_uri": "/rundb/api/v1/activepgmsequencingkitinfo/20090/",
    "runMode": "",
    "samplePrep_instrumentType": "OT_IC_IA",
    "uid": "SEQ0024"
}
]
}
}

```

## Allowed list HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

**Allowed detail HTTP methods**

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.6 Active Proton Library Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activeprotonlibrarykitinfo/>

Schema URL

<http://mytorrentserver/rundb/api/v1/activeprotonlibrarykitinfo/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/activeprotonlibrarykitinfo/?offset=1&limit=1&
        ↪format=json",
        "offset": 0,
        "previous": null,
        "total_count": 22
    },
    "objects": [
}
```

```
{  
    "applicationType": "AMPS",  
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,  
    "cartridgeExpirationDayLimit": null,  
    "categories": "carrierSeq",  
    "chipTypes": "550",  
    "defaultCartridgeUsageCount": null,  
    "description": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",  
    "flowCount": 0,  
    "id": 20118,  
    "instrumentType": "",  
    "isActive": true,  
    "kitType": "LibraryKit",  
    "libraryReadLength": 0,  
    "name": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",  
    "nucleotideType": "",  
    "parts": [  
        {  
            "barcode": "A43587",  
            "id": 20269,  
            "kit": "/rundb/api/v1/kitinfo/20118/",  
            "resource_uri": "/rundb/api/v1/kitpart/20269/"  
        }  
    ],  
    "resource_uri": "/rundb/api/v1/activeprotonlibrarykitinfo/20118/",  
    "runMode": "",  
    "samplePrep_instrumentType": "",  
    "uid": "LIB0030"  
}  
]  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.7 Active Proton Sequencing Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activeprotonsequencingkitinfo/>

Schema URL

<http://mytorrentserver/rundb/api/v1/activeprotonsequencingkitinfo/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>defaultFlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam- plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/activeprotonsequencingkitinfo/?offset=1&limit=1&  
        ↪format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 5  
    },  
    "objects": [  
        {  
            "applicationType": "",  
            "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,  
            "cartridgeExpirationDayLimit": null,  
            "categories": "readLengthDerivableFromFlows;",  
            "chipTypes": "900;P1.0.19;P1.0.20;P1.1.17;P1.1.541;P1.2.18;P2.0.1;P2.1.1;  
            ↪P2.1.2;P2.3.1",  
            "defaultCartridgeUsageCount": null,  
            "defaultFlowOrder": null,  
            "description": "Ion PI Hi-Q Sequencing 200 Kit",  
            "flowCount": 520,  
            "id": 20071,  
            "instrumentType": "proton",  
            "isActive": true,  
            "kitType": "SequencingKit",  
            "libraryReadLength": 0,  
            "name": "IonProtonIHiQ",  
            "nucleotideType": "",  
            "parts": [  
                {  
                    "barcode": "A26433",  
                    "id": 20154,  
                    "kit": "/rundb/api/v1/kitinfo/20071/",  
                    "resource_uri": "/rundb/api/v1/kitpart/20154/"  
                },  
                {  
                    "barcode": "A26430",  
                    "id": 20155,  
                    "kit": "/rundb/api/v1/kitinfo/20071/",  
                    "resource_uri": "/rundb/api/v1/kitpart/20155/"  
                },  
                {  
                    "barcode": "A26431",  
                    "id": 20156,  
                    "kit": "/rundb/api/v1/kitinfo/20071/",  
                    "resource_uri": "/rundb/api/v1/kitpart/20156/"  
                },  
                {  
                    "barcode": "A26432",  
                    "id": 20157,  
                    "kit": "/rundb/api/v1/kitinfo/20071/",  
                    "resource_uri": "/rundb/api/v1/kitpart/20157/"  
                }  
            ],  
            "resource_uri": "/rundb/api/v1/activeprotonsequencingkitinfo/20071/",  
            "runMode": ""  
        }  
    ]  
}
```

```
        "samplePrep_instrumentType": "OT_IC_IA",
        "uid": "SEQ0020"
    }
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.8 Active Sequencing Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/activesequencingkitinfo/>  
Schema URL <http://mytorrentserver/rundb/api/v1/activesequencingkitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>defaultFlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-pilePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/activesequencingkitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 13
  },
}
```

```

"objects": [
    {
        "applicationType": "AMPS",
        "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
        "cartridgeExpirationDayLimit": null,
        "categories": "filter_s5HidKit",
        "chipTypes": "",
        "defaultCartridgeUsageCount": null,
        "defaultFlowOrder": null,
        "description": "Precision ID S5 Sequencing Kit",
        "flowCount": 650,
        "id": 20111,
        "instrumentType": "S5",
        "isActive": true,
        "kitType": "SequencingKit",
        "libraryReadLength": 0,
        "name": "precisionIDS5Kit",
        "nucleotideType": "",
        "parts": [
            {
                "barcode": "100041073B",
                "id": 20236,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20236/"
            },
            {
                "barcode": "100041074B",
                "id": 20237,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20237/"
            },
            {
                "barcode": "A33208",
                "id": 20260,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20260/"
            },
            {
                "barcode": "100049484",
                "id": 20263,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20263/"
            }
        ],
        "resource_uri": "/rundb/api/v1/activesequencingkitinfo/20111/",
        "runMode": "",
        "samplePrep_instrumentType": "",
        "uid": "SEQ0028"
    }
]
}

```

### Allowed list HTTP methods

- GET
- POST

- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.9 Analysis Args Resource

Resource URL <http://mytorrentserver/rundb/api/v1/analysisargs/>  
Schema URL <http://mytorrentserver/rundb/api/v1/analysisargs/schema/>

#### Resource Fields

field	help text	default	nullable
<b>active</b>	Boolean data. Ex: True	true	false
<b>alignmentargs</b>	Unicode string data. Ex: “Hello World”		false
<b>analysisargs</b>	Unicode string data. Ex: “Hello World”		false
<b>applCategory</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>applGroup</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>applType</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>basecallerargs</b>	Unicode string data. Ex: “Hello World”		false
<b>beadfindargs</b>	Unicode string data. Ex: “Hello World”		false
<b>calibrateargs</b>	Unicode string data. Ex: “Hello World”		false
<b>chipType</b>	Unicode string data. Ex: “Hello World”		false
<b>chip_default</b>	Boolean data. Ex: True	false	false
<b>creationDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	true
<b>creator</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>description</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>id</b>	Integer data. Ex: 2673		false
<b>ionstatsargs</b>	Unicode string data. Ex: “Hello World”		false
<b>isSystem</b>	Boolean data. Ex: True	false	false
<b>lastModifiedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	true
<b>lastModifiedUser</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>libraryKitName</b>	Unicode string data. Ex: “Hello World”		false
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>prebasecallerargs</b>	Unicode string data. Ex: “Hello World”		false
<b>prethumbnailbasecallerargs</b>	Unicode string data. Ex: “Hello World”		false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false

Table 2.1 – continued from previous page

field	help text	default	nullable
<code>samplePrepKitName</code>	Unicode string data. Ex: “Hello World”		false
<code>sequenceKitName</code>	Unicode string data. Ex: “Hello World”		false
<code>templateKitName</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnailalignmentargs</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnailanalysisargs</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnailbasecallerargs</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnailbeadfindargs</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnailcalibrateargs</code>	Unicode string data. Ex: “Hello World”		false
<code>thumbnaillionstatsargs</code>	Unicode string data. Ex: “Hello World”		false

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/analysisargs/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 106
  },
  "objects": [
    {
      "active": false,
      "alignmentargs": "",
      "analysisargs": "",
      "applCategory": null,
      "applGroup": null,
      "applType": null,
      "basecallerargs": "",
      "beadfindargs": "",
      "calibrateargs": "",
      "chipType": "",
      "chip_default": false,
      "creationDate": "2019-11-08T21:40:55.000156+00:00",
      "creator": null,
      "description": "All System args will use lower pks",
      "id": 10000,
      "ionstatsargs": "",
      "isSystem": false,
      "lastModifiedDate": "2019-11-08T21:40:55.000156+00:00",
      "lastModifiedUser": null,
      "libraryKitName": "",
      "name": "system_placeholder",
      "prebasecallerargs": "",
      "prethumbnailbasecallerargs": "",
      "resource_uri": "/rundb/api/v1/analysisargs/10000/",
      "samplePrepKitName": "",
      "sequenceKitName": "",
      "templateKitName": "",
      "thumbnailalignmentargs": "",
      "thumbnailanalysisargs": "",
      "thumbnailbasecallerargs": "",
      "thumbnailbeadfindargs": "",
      "thumbnailcalibrateargs": ""
    }
  ]
}
```

```
        "thumbnailionstatsargs": ""  
    }  
]  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.10 Analysis Metrics Resource

Resource URL <http://mytorrentserver/rundb/api/v1/analysismetrics/>

Schema URL <http://mytorrentserver/rundb/api/v1/analysismetrics/schema/>

### Resource Fields

field	help text	default	nullable	read
<b>adjusted_addressable</b>	Integer data. Ex: 2673	0	false	false
<b>amb</b>	Integer data. Ex: 2673	n/a	false	false
<b>bead</b>	Integer data. Ex: 2673	n/a	false	false
<b>dud</b>	Integer data. Ex: 2673	n/a	false	false
<b>empty</b>	Integer data. Ex: 2673	n/a	false	false
<b>excluded</b>	Integer data. Ex: 2673	n/a	false	false
<b>id</b>	Integer data. Ex: 2673		false	false
<b>ignored</b>	Integer data. Ex: 2673	n/a	false	false
<b>keypass_all_beads</b>	Integer data. Ex: 2673	n/a	false	false
<b>lib</b>	Integer data. Ex: 2673	n/a	false	false
<b>libFinal</b>	Integer data. Ex: 2673	n/a	false	false
<b>libKp</b>	Integer data. Ex: 2673	n/a	false	false
<b>libLive</b>	Integer data. Ex: 2673	n/a	false	false

Table 2.2 – continued from previous page

field	help text	default	nullable	read
<b>libMix</b>	Integer data. Ex: 2673	n/a	false	false
<b>lib_pass_basecaller</b>	Integer data. Ex: 2673	n/a	false	false
<b>lib_pass_cafie</b>	Integer data. Ex: 2673	n/a	false	false
<b>live</b>	Integer data. Ex: 2673	n/a	false	false
<b>loading</b>	Floating point numeric data. Ex: 26.73	0	false	false
<b>pinned</b>	Integer data. Ex: 2673	n/a	false	false
<b>report</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true
<b>sysCF</b>	Floating point numeric data. Ex: 26.73	n/a	false	false
<b>sysDR</b>	Floating point numeric data. Ex: 26.73	n/a	false	false
<b>sysIE</b>	Floating point numeric data. Ex: 26.73	n/a	false	false
<b>tf</b>	Integer data. Ex: 2673	n/a	false	false
<b>tfFinal</b>	Integer data. Ex: 2673	n/a	false	false
<b>tfKp</b>	Integer data. Ex: 2673	n/a	false	false
<b>tfLive</b>	Integer data. Ex: 2673	n/a	false	false
<b>tfMix</b>	Integer data. Ex: 2673	n/a	false	false
<b>total</b>	Integer data. Ex: 2673	0	false	false
<b>washout</b>	Integer data. Ex: 2673	n/a	false	false
<b>washout_ambiguous</b>	Integer data. Ex: 2673	n/a	false	false
<b>washout_dud</b>	Integer data. Ex: 2673	n/a	false	false
<b>washout_library</b>	Integer data. Ex: 2673	n/a	false	false
<b>washout_live</b>	Integer data. Ex: 2673	n/a	false	false
<b>washout_test_fragment</b>	Integer data. Ex: 2673	n/a	false	false

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/analysismetrics/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 6
    },
    "objects": [
        {
            "adjusted_addressable": 2709,
            "amb": 0,
            "bead": 2195,
            "dud": 0,
            "empty": 499,
            "excluded": 7291,
            "id": 6,
            "ignored": 9,
            "keypass_all_beads": 0,
            "lib": 2170,
            "libFinal": 1526,
            "libKp": 0,
            "libLive": 0,
            "libMix": 0,
            "lib_pass_basecaller": 0,
            "lib_pass_cafie": 0
        }
    ]
}
```

```
        "live": 2195,
        "loading": 81.0262089331857,
        "pinned": 6,
        "report": "/rundb/api/v1/results/6/",
        "resource_uri": "/rundb/api/v1/analysismetrics/6/",
        "sysCF": 0.902389362454414,
        "sysDR": 0.0903240870684385,
        "sysIE": 1.01652704179287,
        "tf": 25,
        "tfFinal": 25,
        "tfKp": 0,
        "tfLive": 0,
        "tfMix": 0,
        "total": 10000,
        "washout": 0,
        "washout_ambiguous": 0,
        "washout_dud": 0,
        "washout_library": 0,
        "washout_live": 0,
        "washout_test_fragment": 0
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.11 Application Group Resource

Resource URL <http://mytorrentserver/rundb/api/v1/applicationgroup/>

Schema URL <http://mytorrentserver/rundb/api/v1/applicationgroup/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>appli-cations</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	false	false	re-lated
<b>de-scrip-tion</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	inte-ger
<b>isAc-tive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/applicationgroup/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 12
    },
    "objects": [
        {
            "applications": [
                {
                    "alternate_name": "AmpliSeq HD - Fusions",
                    "applicationGroups": [
                        "/rundb/api/v1/applicationgroup/12/"
                    ],
                    "barcode": "",
                    "description": "AmpliSeq HD - Fusions",
                    "id": 13,
                    "isActive": true,
                    "meta": {},
                    "nucleotideType": "rna",
                    "resource_uri": "/rundb/api/v1/runtype/13/",
                    "runType": "AMPS_HD_RNA"
                }
            ],
            "description": "Fusions",
            "id": 12,
            "isActive": true,
            "name": "Fusions",
            "resource_uri": "/rundb/api/v1/applicationgroup/12/",
            "uid": "APPLGROUP_0012"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.12 Appl Product Resource

Resource URL <http://mytorrentserver/rundb/api/v1/applproduct/>

Schema URL <http://mytorrentserver/rundb/api/v1/applproduct/schema/>

### Resource Fields

field	help text
<b>appl</b>	A single related resource. Can be either a URI or set of nested resources.
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resources.
<b>barcodeKitSelectableType</b>	Unicode string data. Ex: "Hello World"
<b>categories</b>	Unicode string data. Ex: "Hello World"
<b>defaultBarcodeKitName</b>	Unicode string data. Ex: "Hello World"
<b>defaultChipType</b>	Unicode string data. Ex: "Hello World"
<b>defaultControlSeqKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultFlowCount</b>	Integer data. Ex: 2673
<b>defaultGenomeRefName</b>	Unicode string data. Ex: "Hello World"
<b>defaultHotSpotRegionBedFileName</b>	Unicode string data. Ex: "Hello World"
<b>defaultIonChefPrepKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultIonChefSequencingKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultLibKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultSamplePrepKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultSeqKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>defaultTargetRegionBedFileName</b>	Unicode string data. Ex: "Hello World"
<b>defaultTemplateKit</b>	A single related resource. Can be either a URI or set of nested resources.
<b>description</b>	Unicode string data. Ex: "Hello World"
<b>dualBarcodingRule</b>	Unicode string data. Ex: "Hello World"

Table 2.3 – continued from previous page

field	help text
<b>id</b>	Integer data. Ex: 2673
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”
<b>isActive</b>	Boolean data. Ex: True
<b>isBarcodeKitSelectionRequired</b>	Boolean data. Ex: True
<b>isControlSeqTypeBySampleSupported</b>	Boolean data. Ex: True
<b>isDefault</b>	Boolean data. Ex: True
<b>isDefaultBarcoded</b>	Boolean data. Ex: True
<b>isDefaultForInstrumentType</b>	Boolean data. Ex: True
<b>isDualBarcodingBySampleSupported</b>	Boolean data. Ex: True
<b>isDualNucleotideTypeBySampleSupported</b>	Boolean data. Ex: True
<b>isHotSpotBEDFileBySampleSupported</b>	Boolean data. Ex: True
<b>isHotspotRegionBEDFileSuppported</b>	Boolean data. Ex: True
<b>isReferenceBySampleSupported</b>	Boolean data. Ex: True
<b>isReferenceSelectionSupported</b>	Boolean data. Ex: True
<b>isSamplePrepKitSupported</b>	Boolean data. Ex: True
<b>isTargetRegionBEDFileBySampleSupported</b>	Boolean data. Ex: True
<b>isTargetRegionBEDFileSelectionRequiredForRefSelection</b>	Boolean data. Ex: True
<b>isTargetRegionBEDFileSupported</b>	Boolean data. Ex: True
<b>isTargetTechniqueSelectionSupported</b>	Boolean data. Ex: True
<b>isVisible</b>	Boolean data. Ex: True
<b>productCode</b>	Unicode string data. Ex: “Hello World”
<b>productName</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/applproduct/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 59
    },
    "objects": [
        {
            "appl": {
                "alternate_name": "AmpliSeq HD - DNA and Fusions (Single Library)",
                "applicationGroups": [
                    "/rundb/api/v1/applicationgroup/11/"
                ],
                "barcode": "",
                "description": "AmpliSeq HD - DNA and Fusions (Single Library)",
                "id": 15,
                "isActive": true,
                "meta": {},
                "nucleotideType": "dna",
                "resource_uri": "/rundb/api/v1/runtype/15/",
                "runType": "AMPS_HD_DNA_RNA_1"
            },
            "applicationGroup": {
                "applications": [

```

```
{  
    "alternate_name": "AmpliSeq HD - DNA and Fusions (Single Library)",  
    "applicationGroups": [  
        "/rundb/api/v1/applicationgroup/11/"  
    ],  
    "barcode": "",  
    "description": "AmpliSeq HD - DNA and Fusions (Single Library)",  
    "id": 15,  
    "isActive": true,  
    "meta": {},  
    "nucleotideType": "dna",  
    "resource_uri": "/rundb/api/v1/runtype/15/",  
    "runType": "AMPS_HD_DNA_RNA_1"  
},  
,  
    "description": "DNA and Fusions (Single Library)",  
    "id": 11,  
    "isActive": true,  
    "name": "DNA + RNA 1",  
    "resource_uri": "/rundb/api/v1/applicationgroup/11/",  
    "uid": "APPLGROUP_0011"  
},  
    "barcodeKitSelectableType": "all",  
    "categories": "",  
    "defaultBarcodeKitName": null,  
    "defaultChipType": "540",  
    "defaultControlSeqKit": null,  
    "defaultFlowCount": 500,  
    "defaultGenomeRefName": "hg19",  
    "defaultHotSpotRegionBedFileName": "",  
    "defaultIonChefPrepKit": "/rundb/api/v1/kitinfo/20083/",  
    "defaultIonChefSequencingKit": null,  
    "defaultLibKit": {  
        "applicationType": "AMPS_HD_DNA;AMPS_HD_RNA;AMPS_HD_DNA_RNA;AMPS_HD_DNA_RNA_1",  
        "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,  
        "cartridgeExpirationDayLimit": null,  
        "categories": "",  
        "chipTypes": "",  
        "defaultCartridgeUsageCount": null,  
        "defaultFlowOrder": null,  
        "description": "Ion AmpliSeq HD Library Kit",  
        "flowCount": 0,  
        "id": 20114,  
        "instrumentType": "",  
        "isActive": true,  
        "kitType": "LibraryKit",  
        "libraryReadLength": 0,  
        "name": "Ion AmpliSeq HD Library Kit",  
        "nucleotideType": "",  
        "parts": [],  
        "resource_uri": "/rundb/api/v1/kitinfo/20114/",  
        "runMode": "",  
        "samplePrep_instrumentType": "",  
        "uid": "LIB0027"  
},  
}
```

```

"defaultSamplePrepKit": null,
"defaultSeqKit": {
    "applicationType": "",
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
    "cartridgeExpirationDayLimit": null,
    "categories": "s5v1Kit;flowOverridable;",
    "chipTypes": "",
    "defaultCartridgeUsageCount": null,
    "defaultFlowOrder": null,
    "description": "Ion S5 Sequencing Kit",
    "flowCount": 500,
    "id": 20088,
    "instrumentType": "S5",
    "isActive": true,
    "kitType": "SequencingKit",
    "libraryReadLength": 0,
    "name": "Ion S5 Sequencing Kit",
    "nucleotideType": "",
    "parts": [
        {
            "barcode": "100031412",
            "id": 20173,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20173/"
        },
        {
            "barcode": "100031090",
            "id": 20174,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20174/"
        },
        {
            "barcode": "100031096",
            "id": 20175,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20175/"
        },
        {
            "barcode": "A27767",
            "id": 20195,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20195/"
        },
        {
            "barcode": "A27768",
            "id": 20196,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20196/"
        },
        {
            "barcode": "100033230",
            "id": 20202,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20202/"
        },
        {
            "barcode": "100031091B",
            "id": 20238,
            "kit": "/rundb/api/v1/kitinfo/20088/",
            "resource_uri": "/rundb/api/v1/kitpart/20238/"
        }
    ]
}

```

```
        "kit": "/rundb/api/v1/kitinfo/20088/",
        "resource_uri": "/rundb/api/v1/kitpart/20238/"
    },
    {
        "barcode": "INS1012841B",
        "id": 20239,
        "kit": "/rundb/api/v1/kitinfo/20088/",
        "resource_uri": "/rundb/api/v1/kitpart/20239/"
    }
],
"resource_uri": "/rundb/api/v1/kitinfo/20088/",
"runMode": "",
"samplePrep_instrumentType": "",
"uid": "SEQ0023"
},
"defaultTargetRegionBedFileName": "",
"defaultTemplateKit": null,
"description": "",
"dualBarcodingRule": "",
"id": 20059,
"instrumentType": "s5",
"isActive": true,
"isBarcodeKitSelectionRequired": false,
"isControlSeqTypeBySampleSupported": false,
"isDefault": true,
"isDefaultBarcoded": false,
"isDefaultForInstrumentType": false,
"isDualBarcodingBySampleSupported": false,
"isDualNucleotideTypeBySampleSupported": false,
"isHotSpotBEDFileBySampleSupported": true,
"isHotspotRegionBEDFileSupported": true,
"isReferenceBySampleSupported": true,
"isReferenceSelectionSupported": true,
"isSamplePrepKitSupported": true,
"isTargetRegionBEDFileBySampleSupported": true,
"isTargetRegionBEDfileSelectionRequiredForRefSelection": true,
"isTargetRegionBEDfileSupported": true,
"isTargetTechniqueSelectionSupported": true,
"isVisible": true,
"productCode": "AMPS_HD_DNA_RNA_1",
"productName": "AMPS_HD_DNA_RNA_1_default",
"resource_uri": "/rundb/api/v1/applproduct/20059/"
}
]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.13 Available Ion Chef Planned Experiment Resource

#### Resource URL

`http://mytorrentserver/rundb/api/v1/availableionchefplannedexperiment/`

#### Schema URL

`http://mytorrentserver/rundb/api/v1/availableionchefplannedexperiment/schema/`

#### Resource Fields

field	help text	default	null allowed
<b>adapter</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>autoName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>categories</b>	Unicode string data. Ex: “Hello World”		true
<b>chipType</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>cycles</b>	Integer data. Ex: 2673	n/a	true
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true
<b>expName</b>	Unicode string data. Ex: “Hello World”		false
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>id</b>	Integer data. Ex: 2673		false
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”		false
<b>isCustom_kitSettings</b>	Boolean data. Ex: True	false	false
<b>isFavorite</b>	Boolean data. Ex: True	false	false
<b>isPlanGroup</b>	Boolean data. Ex: True	false	false
<b>isReusable</b>	Boolean data. Ex: True	false	false
<b>isReverseRun</b>	Boolean data. Ex: True	false	false
<b>isSystem</b>	Boolean data. Ex: True	false	false
<b>isSystemDefault</b>	Boolean data. Ex: True	false	false
<b>libkit</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{}	false
<b>origin</b>	Unicode string data. Ex: “Hello World”		true
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planExecuted</b>	Boolean data. Ex: True	false	false
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true
<b>planGUID</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planName</b>	Unicode string data. Ex: “Hello World”	n/a	true

Table 2.4 – continued from previous page

field	help text	default	nullat
<b>planPGM</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planStatus</b>	Unicode string data. Ex: “Hello World”		false
<b>preAnalysis</b>	Boolean data. Ex: True	true	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false
<b>runType</b>	Unicode string data. Ex: “Hello World”	GENS	false
<b>runname</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”		true
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>storageHost</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>storage_options</b>	Unicode string data. Ex: “Hello World”	A	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false
<b>username</b>	Unicode string data. Ex: “Hello World”	n/a	true

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/availableionchefplannedexperiment/?offset=1&limit=1&
format=json",
        "offset": 0,
        "previous": null,
        "total_count": 2
    },
    "objects": [
        {
            "chipType": "540",
            "date": "2018-04-13T22:17:13.000108+00:00",
            "experiment": "/rundb/api/v1/experiment/136/",
            "id": 143,
            "isPlanGroup": false,
            "isReverseRun": false,
            "planName": "Ion_AmpliSeq_HD_for_Tumor_-_DNA",
            "planShortID": "SP1XE",
            "planStatus": "pending",
            "samplePrepProtocol": "",
            "samplePrepProtocolName": "",
            "sampleTubeLabel": "",
            "templatingKitName": "Ion Chef S540 V1",
            "username": "ionadmin"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.14 Available Ion Chef Planned Experiment Summary Resource

### Resource URL

`http://mytorrentserver/rundb/api/v1/availableionchefplannedexperimentsummary/`

Schema URL `http://mytorrentserver/rundb/api/v1/availableionchefplannedexperimentsummary/schema/`

### Resource Fields

field	help text	default	nullal
<b>adapter</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>autoName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>categories</b>	Unicode string data. Ex: “Hello World”		true
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>cycles</b>	Integer data. Ex: 2673	n/a	true
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true
<b>expName</b>	Unicode string data. Ex: “Hello World”		false
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>id</b>	Integer data. Ex: 2673		false
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”		false
<b>isCustom_kitSettings</b>	Boolean data. Ex: True	false	false
<b>isFavorite</b>	Boolean data. Ex: True	false	false
<b>isPlanGroup</b>	Boolean data. Ex: True	false	false
<b>isReusable</b>	Boolean data. Ex: True	false	false
<b>isReverseRun</b>	Boolean data. Ex: True	false	false
<b>isSystem</b>	Boolean data. Ex: True	false	false
<b>isSystemDefault</b>	Boolean data. Ex: True	false	false
<b>libkit</b>	Unicode string data. Ex: “Hello World”	n/a	true

Table 2.5 – continued from previous page

field	help text	default	nullat
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{}	false
<b>origin</b>	Unicode string data. Ex: “Hello World”		true
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planExecuted</b>	Boolean data. Ex: True	false	false
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true
<b>planGUID</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planPGM</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>planStatus</b>	Unicode string data. Ex: “Hello World”		false
<b>preAnalysis</b>	Boolean data. Ex: True	true	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false
<b>runType</b>	Unicode string data. Ex: “Hello World”	GENS	false
<b>runname</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”		true
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>storageHost</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>storage_options</b>	Unicode string data. Ex: “Hello World”	A	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false
<b>username</b>	Unicode string data. Ex: “Hello World”	n/a	true

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/availableionchefplannedexperimentsummary/?offset=1&
        ↪limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 2
    },
    "objects": [
        {
            "date": "2018-04-13T22:17:13.000108+00:00",
            "experiment": "/rundb/api/v1/experiment/136/",
            "id": 143,
            "isPlanGroup": false,
            "isReverseRun": false,
            "planName": "Ion_AmpliSeq_HD_for_Tumor_-_DNA",
            "planShortID": "SP1XE",
            "planStatus": "pending",
            "runmode": "Standard"
        }
    ]
}
```

```

        "samplePrepProtocol": "",
        "sampleTubeLabel": "",
        "templatingKitName": "Ion Chef S540 V1",
        "username": "ionadmin"
    }
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.15 Available Onetouch Planned Experiment Resource

### Resource URL

<http://mytorrentserver/rundb/api/v1/availableonetouchplannedexperiment/>

### Schema URL

<http://mytorrentserver/rundb/api/v1/availableonetouchplannedexperiment/schema/>

### Resource Fields

field	help text
<b>adapter</b>	Unicode string data. Ex: “Hello World”
<b>applicationCategoryDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>applicationGroupDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>autoAnalyze</b>	Boolean data. Ex: True
<b>autoName</b>	Unicode string data. Ex: “Hello World”
<b>barcodeId</b>	Unicode string data. Ex: “Hello World”
<b>barcodedSamples</b>	Unicode string data. Ex: “Hello World”
<b>base_recalibration_mode</b>	Unicode string data. Ex: “Hello World”

Table 2.6 – continued from previous page

field	help text
<b>bedfile</b>	Unicode string data. Ex: “Hello World”
<b>categories</b>	Unicode string data. Ex: “Hello World”
<b>chefInfo</b>	A dictionary of data. Ex: { ‘price’: 26.73, ‘name’: ‘Daniel’ }
<b>childPlans</b>	A list of data. Ex: [‘abc’, 26.73, 8]
<b>chipBarcode</b>	Unicode string data. Ex: “Hello World”
<b>chipType</b>	Unicode string data. Ex: “Hello World”
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>cycles</b>	Integer data. Ex: 2673
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>earlyDatFileDeletion</b>	Boolean data. Ex: True
<b>endBarcodeKitName</b>	Unicode string data. Ex: “Hello World”
<b>expName</b>	Unicode string data. Ex: “Hello World”
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>flows</b>	Integer data. Ex: 2673
<b>flowsInOrder</b>	Unicode string data. Ex: “Hello World”
<b>forward3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>id</b>	Integer data. Ex: 2673
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isDuplicateReads</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>library</b>	Unicode string data. Ex: “Hello World”
<b>libraryKey</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepType</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepTypeDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>librarykitname</b>	Unicode string data. Ex: “Hello World”
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>notes</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”

Table 2.6 – continued from previous page

field	help text
<b>platform</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>realign</b>	Boolean data. Ex: True
<b>regionfile</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>reverselibrarykey</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sample</b>	Unicode string data. Ex: “Hello World”
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>sampleGroupName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSetDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>selectedPlugins</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>sequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>sseBedFile</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”
<b>tfKey</b>	Unicode string data. Ex: “Hello World”
<b>usePostBeadfind</b>	Boolean data. Ex: True
<b>usePreBeadfind</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: “Hello World”
<b>variantfrequency</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/availableonetouchplannedexperiment/?offset=1&limit=1&
→format=json",
    "offset": 0,
    "previous": null,
    "total_count": 2
  },
  "objects": [
    {
      "id": "5a3f3e00-4a2d-4a2d-8a2d-3f3e005a3f3e",
      "label": "Available on Touch Planned Experiment"
    }
  ]
}
```

```
"adapter": null,
"alignmentargs": "tmap mapall ... stage1 map4",
"analysisargs": "Analysis --args-json /opt/ion/config/args_P1.1.17_"
↳analysis.json",
"applicationCategoryDisplayedName": "",
"applicationGroup": "/rundb/api/v1/applicationgroup/2/",
"applicationGroupDisplayedName": "RNA",
"autoAnalyze": true,
"autoName": null,
"barcodeId": "IonXpress",
"barcodedSamples": {
    "Sample 1": {
        "barcodeSampleInfo": {
            "IonXpress_001": {
                "controlSequenceType": "",
                "controlType": "",
                "description": "",
                "endBarcode": "",
                "externalId": "",
                "hotSpotRegionBedFile": "",
                "nucleotideType": "RNA",
                "reference": "AmpliSeq_Mouse_Transcriptome_v1",
                "sseBedFile": "",
                "targetRegionBedFile": ""
            }
        },
        "barcodes": [
            "IonXpress_001"
        ],
        "dualBarcodes": []
    }
},
"base_recalibration_mode": "standard_recal",
"basecallerargs": "BaseCaller --barcode-filter-minreads 10 --phasing-"
↳residual-filter=2.0 --max-phasing-levels 2 --num-unfiltered 1000 --barcode-filter-"
↳postpone 1",
"beadfindargs": "justBeadFind --args-json /opt/ion/config/args_P1.1.17_"
↳beadfind.json",
"bedfile": "",
"calibrateargs": "Calibration",
"categories": "",
"chefInfo": {},
"childPlans": [],
"chipBarcode": "",
"chipType": "P1.1.17",
"controlSequencekitname": null,
"custom_args": false,
"cycles": null,
"date": "2018-08-02T18:54:44.000297+00:00",
"earlyDatFileDeletion": false,
"endBarcodeKitName": "",
"expName": "",
"experiment": "/rundb/api/v1/experiment/137/",
"flows": 500,
"flowsInOrder": "",
"forward3primeadapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
"id": 144,
"ionstatsargs": "ionstats alignment",
```

```

    "irworkflow": "",
    "isCustom_kitSettings": false,
    "isDuplicateReads": false,
    "isFavorite": false,
    "isPlanGroup": false,
    "isReusable": false,
    "isReverseRun": false,
    "isSystem": false,
    "isSystemDefault": false,
    "libkit": null,
    "library": "AmpliSeq_Mouse_Transcriptome_v1",
    "libraryKey": "TCAG",
    "libraryPrepType": "",
    "libraryPrepTypeDisplayedName": "",
    "libraryReadLength": 0,
    "librarykitname": "Ion AmpliSeq Library Kit Plus",
    "metaData": {
        "fromTemplate": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression_"
        ↪Panel_OT2-Proton",
        "fromTemplateSource": "ION"
    },
    "mixedTypeRNA_hotSpotRegionBedFile": "",
    "mixedTypeRNA_reference": "",
    "mixedTypeRNA_targetRegionBedFile": "",
    "notes": "",
    "origin": "gui|5.10.0",
    "pairedEndLibraryAdapterName": "",
    "parentPlan": null,
    "planDisplayedName": "Ion AmpliSeq Transcriptome Mouse Gene Expression",
    "planExecuted": false,
    "planExecutedDate": null,
    "planGUID": "685ac1ca-9a42-4d9c-af2f-29a97706cb8e",
    "planName": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression",
    "planPGM": null,
    "planShortID": "YEN8M",
    "planStatus": "planned",
    "platform": "",
    "preAnalysis": true,
    "prebasecallerargs": "BaseCaller --barcode-filter-minreads 10 --phasing-"
    ↪residual-filter=2.0 --max-phasing-levels 2",
    "preThumbnailbasecallerargs": "BaseCaller --barcode-filter-minreads 10 --"
    ↪phasing-residual-filter=2.0",
    "project": "",
    "projects": [],
    "qcValues": [
        {
            "id": 409,
            "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",
            "qcType": {
                "defaultThreshold": 30,
                "description": "",
                "id": 1,
                "maxThreshold": 100,
                "minThreshold": 0,
                "qcName": "Bead Loading (%)",
                "resource_uri": "/rundb/api/v1/qctype/1/"
            },
            "resource_uri": "/rundb/api/v1/plannedexperimentqc/409",
        }
    ]
}

```

```
        "threshold": 30
    },
    {
        "id": 410,
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",
        "qcType": {
            "defaultThreshold": 30,
            "description": "",
            "id": 2,
            "maxThreshold": 100,
            "minThreshold": 1,
            "qcName": "Key Signal (1-100)",
            "resource_uri": "/rundb/api/v1/qctype/2/"
        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/410/",
        "threshold": 30
    },
    {
        "id": 411,
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",
        "qcType": {
            "defaultThreshold": 30,
            "description": "",
            "id": 3,
            "maxThreshold": 100,
            "minThreshold": 0,
            "qcName": "Usable Sequence (%)",
            "resource_uri": "/rundb/api/v1/qctype/3/"
        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/411/",
        "threshold": 30
    }
],
"realign": false,
"regionfile": "",
"resource_uri": "/rundb/api/v1/availableonetouchplannedexperiment/144/",
"reverse3primeadapter": "",
"reverse_primer": null,
"reverselibrarykey": "",
"runMode": "single",
"runType": "AMPS_RNA",
"runname": null,
"sample": "",
"sampleDisplayedName": "",
"sampleGrouping": "/rundb/api/v1/samplegroupertype_cv/2/",
"sampleGroupName": "Self",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSetDisplayedName": "",
"sampleSets": [],
"sampleTubeLabel": "",
"selectedPlugins": {
    "ampliSeqRNA": {
        "features": [],
        "id": 48,
        "name": "ampliSeqRNA",
        "userInput": {},
        "version": "5.10.0.1"
    }
}
```

```

        }
    },
    "seqKitBarcode": null,
    "sequencekitname": "ProtonI200Kit-v3",
    "sseBedFile": "",
    "storageHost": null,
    "storage_options": "A",
    "templatingKitBarcode": null,
    "templatingKitName": "Ion PI Template OT2 200 Kit v3",
    "tfKey": "ATCG",
    "thumbnailalignmentargs": "tmap mapall ... stage1 map4",
    "thumbnailanalysisargs": "Analysis --args-json /opt/ion/config/args_P1.1.
→17_analysis.json --thumbnail true",
    "thumbnailbasecallerargs": "BaseCaller --barcode-filter-minreads 10 --
→phasing-residual-filter=2.0",
    "thumbnailbeadfindargs": "justBeadFind --args-json /opt/ion/config/args_
→P1.1.17_beadfind.json --thumbnail true",
    "thumbnailcalibrateargs": "Calibration",
    "thumbnailionstatsargs": "ionstats alignment",
    "usePostBeadfind": false,
    "usePreBeadfind": true,
    "username": "ionadmin",
    "variantfrequency": ""
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.16 Available Onetouch Planned Experiment Summary Resource

### Resource URL

<http://mytorrentserver/rundb/api/v1/availableonetouchplannedexperimentsummary/>

Schema URL <http://mytorrentserver/rundb/api/v1/availableonetouchplannedexperimentsummary/schema/>

## Resource Fields

field	help text	default	nullable	readonly	bla
<b>adapter</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>autoName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>categories</b>	Unicode string data. Ex: "Hello World"		true	false	false
<b>controlSequencekitname</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>cycles</b>	Integer data. Ex: 2673	n/a	true	false	false
<b>date</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	n/a	true	false	false
<b>expName</b>	Unicode string data. Ex: "Hello World"		false	false	true
<b>id</b>	Integer data. Ex: 2673		false	false	true
<b>irworkflow</b>	Unicode string data. Ex: "Hello World"		false	false	true
<b>isCustom_kitSettings</b>	Boolean data. Ex: True		false	false	true
<b>isFavorite</b>	Boolean data. Ex: True		false	false	true
<b>isPlanGroup</b>	Boolean data. Ex: True		false	false	true
<b>isReusable</b>	Boolean data. Ex: True		false	false	true
<b>isReverseRun</b>	Boolean data. Ex: True		false	false	true
<b>isSystem</b>	Boolean data. Ex: True		false	false	true
<b>isSystemDefault</b>	Boolean data. Ex: True		false	false	true
<b>libkit</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false
<b>metaData</b>	Unicode string data. Ex: "Hello World"	{ }	false	false	true
<b>origin</b>	Unicode string data. Ex: "Hello World"		true	false	false
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planDisplayedName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planExecuted</b>	Boolean data. Ex: True		false	false	true
<b>planExecutedDate</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	n/a	true	false	false
<b>planGUID</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planPGM</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planShortID</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>planStatus</b>	Unicode string data. Ex: "Hello World"		false	false	true
<b>preAnalysis</b>	Boolean data. Ex: True	true	false	false	true
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false
<b>reverse_primer</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>runMode</b>	Unicode string data. Ex: "Hello World"		false	false	true
<b>runType</b>	Unicode string data. Ex: "Hello World"	GENS	false	false	false
<b>runname</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>samplePrepKitName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>samplePrepProtocol</b>	Unicode string data. Ex: "Hello World"		true	false	false
<b>sampleTubeLabel</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>seqKitBarcode</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>storageHost</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>storage_options</b>	Unicode string data. Ex: "Hello World"	A	false	false	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>templatingKitName</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false	false	true

Table 2.7 – continued from previous page

field	help text	default	nullable	readonly	bla
<b>username</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/availableonetouchplannedexperimentsummary/?offset=1&←limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 2
    },
    "objects": [
        {
            "adapter": null,
            "autoName": null,
            "categories": "",
            "controlSequencekitname": null,
            "cycles": null,
            "date": "2018-08-02T18:54:44.000297+00:00",
            "expName": "",
            "id": 144,
            "irworkflow": "",
            "isCustom_kitSettings": false,
            "isFavorite": false,
            "isPlanGroup": false,
            "isReusable": false,
            "isReverseRun": false,
            "isSystem": false,
            "isSystemDefault": false,
            "libkit": null,
            "libraryReadLength": 0,
            "metaData": {
                "fromTemplate": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression_←Panel_OT2-Proton",
                "fromTemplateSource": "ION"
            },
            "origin": "gui|5.10.0",
            "pairedEndLibraryAdapterName": "",
            "planDisplayedName": "Ion AmpliSeq Transcriptome Mouse Gene Expression",
            "planExecuted": false,
            "planExecutedDate": null,
            "planGUID": "685ac1ca-9a42-4d9c-af2f-29a97706cb8e",
            "planName": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression",
            "planPGM": null,
            "planShortID": "YEN8M",
            "planStatus": "planned",
            "preAnalysis": true,
            "resource_uri": "/rundb/api/v1/availableonetouchplannedexperimentsummary/←144/",
            "reverse_primer": null,
            "runMode": "single",
            "runType": "AMPS_RNA",
            "runname": null,
        }
    ]
}
```

```
        "samplePrepKitName": null,
        "samplePrepProtocol": "",
        "sampleTubeLabel": "",
        "seqKitBarcode": null,
        "storageHost": null,
        "storage_options": "A",
        "templatingKitBarcode": null,
        "templatingKitName": "Ion PI Template OT2 200 Kit v3",
        "usePostBeadfind": false,
        "usePreBeadfind": true,
        "username": "ionadmin"
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.17 Available Planned Experiment Summary Resource

Resource URL

<http://mytorrentserver/rundb/api/v1/availableplannedexperimentsummary/>

Schema URL

<http://mytorrentserver/rundb/api/v1/availableplannedexperimentsummary/schema/>

#### Resource Fields

field	help text
adapter	Unicode string data. Ex: “Hello World”
applicationCategoryDisplayedName	Unicode string data. Ex: “Hello World”

Table 2.8 – continued from previous page

field	help text
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>applicationGroupDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>autoAnalyze</b>	Boolean data. Ex: True
<b>autoName</b>	Unicode string data. Ex: “Hello World”
<b>barcodeId</b>	Unicode string data. Ex: “Hello World”
<b>barcodedSamples</b>	Unicode string data. Ex: “Hello World”
<b>base_recalibration_mode</b>	Unicode string data. Ex: “Hello World”
<b>bedfile</b>	Unicode string data. Ex: “Hello World”
<b>categories</b>	Unicode string data. Ex: “Hello World”
<b>chefInfo</b>	A dictionary of data. Ex: {‘price’: 26.73, ‘name’: ‘Daniel’}
<b>childPlans</b>	A list of data. Ex: [‘abc’, 26.73, 8]
<b>chipBarcode</b>	Unicode string data. Ex: “Hello World”
<b>chipType</b>	Unicode string data. Ex: “Hello World”
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>cycles</b>	Integer data. Ex: 2673
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>earlyDatFileDeletion</b>	Boolean data. Ex: True
<b>endBarcodeKitName</b>	Unicode string data. Ex: “Hello World”
<b>expName</b>	Unicode string data. Ex: “Hello World”
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>flows</b>	Integer data. Ex: 2673
<b>flowsInOrder</b>	Unicode string data. Ex: “Hello World”
<b>forward3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>id</b>	Integer data. Ex: 2673
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isDuplicateReads</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>library</b>	Unicode string data. Ex: “Hello World”
<b>libraryKey</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepType</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepTypeDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>librarykitname</b>	Unicode string data. Ex: “Hello World”
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>notes</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”

Table 2.8 – continued from previous page

field	help text
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>platform</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>realign</b>	Boolean data. Ex: True
<b>regionfile</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>reverselibrarykey</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sample</b>	Unicode string data. Ex: “Hello World”
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>sampleGroupName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSetDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>selectedPlugins</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>sequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>sseBedFile</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”
<b>tfKey</b>	Unicode string data. Ex: “Hello World”
<b>usePostBeadfind</b>	Boolean data. Ex: True
<b>usePreBeadfind</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: “Hello World”
<b>variantfrequency</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
  "meta": {
    "limit": 1,
```

```

    "next": "/rundb/api/v1/availableplannedexperimentsummary/?offset=1&limit=1&
↳format=json",
    "offset": 0,
    "previous": null,
    "total_count": 2
},
"objects": [
{
    "adapter": null,
    "alignmentargs": "tmap mapall ... stage1 map4",
    "analysisargs": "Analysis --args-json /opt/ion/config/args_P1.1.17_",
↳analysis.json",
    "applicationCategoryDisplayedName": "",
    "applicationGroup": "/rundb/api/v1/applicationgroup/2/",
    "applicationGroupDisplayedName": "RNA",
    "autoAnalyze": true,
    "autoName": null,
    "barcodeId": "IonXpress",
    "barcodedSamples": {
        "Sample 1": {
            "barcodeSampleInfo": {
                "IonXpress_001": {
                    "controlSequenceType": "",
                    "controlType": "",
                    "description": "",
                    "endBarcode": "",
                    "externalId": "",
                    "hotSpotRegionBedFile": "",
                    "nucleotideType": "RNA",
                    "reference": "AmpliSeq_Mouse_Transcriptome_v1",
                    "sseBedFile": "",
                    "targetRegionBedFile": ""
                }
            },
            "barcodes": [
                "IonXpress_001"
            ],
            "dualBarcodes": []
        }
    },
    "base_recalibration_mode": "standard_recal",
    "basecallerargs": "BaseCaller --barcode-filter-minreads 10 --phasing-
↳residual-filter=2.0 --max-phasing-levels 2 --num-unfiltered 1000 --barcode-filter-
↳postpone 1",
    "beadfindargs": "justBeadFind --args-json /opt/ion/config/args_P1.1.17_",
↳beadfind.json",
    "bedfile": "",
    "calibrateargs": "Calibration",
    "categories": "",
    "chefInfo": {},
    "childPlans": [],
    "chipBarcode": "",
    "chipType": "P1.1.17",
    "controlSequencekitname": null,
    "custom_args": false,
    "cycles": null,
    "date": "2018-08-02T18:54:44.000297+00:00",
    "earlyDatFileDeletion": false,
    "label": "IonXpress_001"
}
]
}

```

```
"endBarcodeKitName": "",  
"expName": "",  
"experiment": "/rundb/api/v1/experiment/137/",  
"flows": 500,  
"flowsInOrder": "",  
"forward3primeadapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",  
"id": 144,  
"ionstatsargs": "ionstats alignment",  
"irworkflow": "",  
"isCustom_kitSettings": false,  
"isDuplicateReads": false,  
"isFavorite": false,  
"isPlanGroup": false,  
"isReusable": false,  
"isReverseRun": false,  
"isSystem": false,  
"isSystemDefault": false,  
"libkit": null,  
"library": "AmpliSeq_Mouse_Transcriptome_v1",  
"libraryKey": "TCAG",  
"libraryPrepType": "",  
"libraryPrepTypeDisplayedName": "",  
"libraryReadLength": 0,  
"librarykitname": "Ion AmpliSeq Library Kit Plus",  
"metaData": {  
    "fromTemplate": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression_"  
    ↪Panel_OT2-Proton",  
    "fromTemplateSource": "ION"  
},  
"mixedTypeRNA_hotSpotRegionBedFile": "",  
"mixedTypeRNA_reference": "",  
"mixedTypeRNA_targetRegionBedFile": "",  
"notes": "",  
"origin": "gui|5.10.0",  
"pairedEndLibraryAdapterName": "",  
"parentPlan": null,  
"planDisplayedName": "Ion AmpliSeq Transcriptome Mouse Gene Expression ",  
"planExecuted": false,  
"planExecutedDate": null,  
"planGUID": "685ac1ca-9a42-4d9c-af2f-29a97706cb8e",  
"planName": "Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression",  
"planPGM": null,  
"planShortID": "YEN8M",  
"planStatus": "planned",  
"platform": "",  
"preAnalysis": true,  
"prebasecallerargs": "BaseCaller --barcode-filter-minreads 10 --phasing-"  
    ↪residual-filter=2.0 --max-phasing-levels 2",  
    "prethumbnailbasecallerargs": "BaseCaller --barcode-filter-minreads 10 --"  
    ↪phasing-residual-filter=2.0",  
    "project": "",  
    "projects": [],  
    "qcValues": [  
        {  
            "id": 409,  
            "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",  
            "qcType": {  
                "defaultThreshold": 30,
```

```

        "description": "",
        "id": 1,
        "maxThreshold": 100,
        "minThreshold": 0,
        "qcName": "Bead Loading (%)",
        "resource_uri": "/rundb/api/v1/qctype/1/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/409/",
    "threshold": 30
},
{
    "id": 410,
    "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",
    "qcType": {
        "defaultThreshold": 30,
        "description": "",
        "id": 2,
        "maxThreshold": 100,
        "minThreshold": 1,
        "qcName": "Key Signal (1-100)",
        "resource_uri": "/rundb/api/v1/qctype/2/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/410/",
    "threshold": 30
},
{
    "id": 411,
    "plannedExperiment": "/rundb/api/v1/plannedexperiment/144/",
    "qcType": {
        "defaultThreshold": 30,
        "description": "",
        "id": 3,
        "maxThreshold": 100,
        "minThreshold": 0,
        "qcName": "Usable Sequence (%)",
        "resource_uri": "/rundb/api/v1/qctype/3/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/411/",
    "threshold": 30
}
],
"realign": false,
"regionfile": "",
"resource_uri": "/rundb/api/v1/availableplannedexperimentsummary/144/",
"reverse3primeadapter": "",
"reverse_primer": null,
"reverselibrarykey": "",
"runMode": "single",
"runType": "AMPS_RNA",
"runname": null,
"sample": "",
"sampleDisplayedName": "",
"sampleGrouping": "/rundb/api/v1/samplegroupertype_cv/2/",
"sampleGroupName": "Self",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSetDisplayedName": "",
"sampleSets": []

```

```
        "sampleTubeLabel": "",  
        "selectedPlugins": {  
            "ampliSeqRNA": {  
                "features": [],  
                "id": 48,  
                "name": "ampliSeqRNA",  
                "userInput": {},  
                "version": "5.10.0.1"  
            }  
        },  
        "seqKitBarcode": null,  
        "sequencekitname": "ProtonI200Kit-v3",  
        "sseBedFile": "",  
        "storageHost": null,  
        "storage_options": "A",  
        "templatingKitBarcode": null,  
        "templatingKitName": "Ion PI Template OT2 200 Kit v3",  
        "tfKey": "ATCG",  
        "thumbnailalignmentargs": "tmap mapall ... stage1 map4",  
        "thumbnailanalysisargs": "Analysis --args-json /opt/ion/config/args_P1.1.  
→17_analysis.json --thumbnail true",  
        "thumbnailbasecallerargs": "BaseCaller --barcode-filter-minreads 10 --  
→phasing-residual-filter=2.0",  
        "thumbnailbeadfindargs": "justBeadFind --args-json /opt/ion/config/args_  
→P1.1.17_beadfind.json --thumbnail true",  
        "thumbnailcalibrateargs": "Calibration",  
        "thumbnailionstatsargs": "ionstats alignment",  
        "usePostBeadfind": false,  
        "usePreBeadfind": true,  
        "username": "ionadmin",  
        "variantfrequency": ""  
    }  
}  
]
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.18 Chip Resource

Resource URL <http://mytorrentserver/rundb/api/v1/chip/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/chip/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<b>earlyDatFileDeletion</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>slots</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/chip/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 15
  },
  "objects": [
    {
      "alignmentargs": "tmap mapall ... stage1 map4",
      "analysisargs": "Analysis --args-json /opt/ion/config/args_520_analysis.json",
      "basecallerargs": "BaseCaller --trim-qual-cutoff 15 --barcode-filter-minreads 10 --phasing-residual-filter=2.0 --num-unfiltered 1000 --barcode-filter-postpone 1 --qual-filter true --qual-filter-slope 0.040 --qual-filter-offset 1.0 --wells-normalization on",
      "beadfindargs": "justBeadFind --args-json /opt/ion/config/args_520_beafind.json",
      "calibrateargs": "Calibration --num-calibration-regions 1,1",
      "description": "510",
      "earlyDatFileDeletion": "",
      "id": 28,
      "instrumentType": "S5",
      "ionstatsargs": "ionstats alignment",
      "label": "510"
    }
  ]
}
```

```
        "isActive": true,
        "name": "510",
        "prebasecallerargs": "BaseCaller --trim-qual-cutoff 15 --barcode-filter-
→minreads 10 --phasing-residual-filter=2.0 --wells-normalization on",
        "prethumbnailbasecallerargs": "BaseCaller --trim-qual-cutoff 15 --barcode-
→filter-minreads 10 --phasing-residual-filter=2.0 --wells-normalization on",
        "resource_uri": "/rundb/api/v1/chip/28/",
        "slots": 1,
        "thumbnailalignementargs": "tmap mapall ... stagel map4",
        "thumbnailanalysisargs": "Analysis --args-json /opt/ion/config/args_520_
→analysis.json --thumbnail true",
        "thumbnailbasecallerargs": "BaseCaller --trim-qual-cutoff 15 --barcode-
→filter-minreads 10 --phasing-residual-filter=2.0 --qual-filter true --qual-filter-
→slope 0.040 --qual-filter-offset 1.0 --wells-normalization on",
        "thumbnailbeadfindargs": "justBeadFind --args-json /opt/ion/config/args_
→520_beadfind.json --thumbnail true",
        "thumbnailcalibrateargs": "Calibration",
        "thumbnailionstatsargs": "ionstats alignment"
    }
]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.19 Cluster Info History Resource

Resource URL <http://mytorrentserver/rundb/api/v1/clusterinfohistory/>

Schema URL <http://mytorrentserver/rundb/api/v1/clusterinfohistory/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>created</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>object_pk</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>text</b>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<b>username</b>	Unicode string data. Ex: “Hello World”	ION	false	false	true	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 0
    },
    "objects": []
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.20 Common Cv Resource

Resource URL [http://mytorrentserver/rundb/api/v1/common\\_cv/](http://mytorrentserver/rundb/api/v1/common_cv/)

Schema URL [http://mytorrentserver/rundb/api/v1/common\\_cv/schema/](http://mytorrentserver/rundb/api/v1/common_cv/schema/)

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>categories</b>	Unicode string data. Ex: "Hello World"		true	false	false	false	string
<b>cv_type</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>description</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false	false	string
<b>displayedValue</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isDefault</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isVisible</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>sam- plePrep_instrumentType</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>sequenc- ing_instrumentType</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string
<b>value</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/common_cv/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 16
  },
  "objects": [
    {
      "categories": "AMPS;AMPS_RNA;AMPS_DNA_RNA;AMPS_HD_DNA;AMPS_HD_RNA;AMPS_HD_",
      "cv_type": "applicationCategory",
      "description": "Oncomine Tumor Specific Panels",
      "displayedValue": "P40",
      "id": 16,
      "resource_uri": "/rundb/api/v1/common_cv/16"
    }
  ]
}
```

```
        "isActive": true,
        "isDefault": false,
        "isVisible": false,
        "resource_uri": "/rundb/api/v1/common_cv/16/",
        "samplePrep_instrumentType": "",
        "sequencing_instrumentType": "",
        "uid": "APPCAT0011",
        "value": "p4o"
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.21 Composite Data Management Resource

Resource URL <http://mytorrentserver/rundb/api/v1/compositedatamanagement/>  
Schema URL <http://mytorrentserver/rundb/api/v1/compositedatamanagement/schema/>

## Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>base-call_keep</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>base-call_state</b>	Unicode string data. Ex: “Hello World”	Un-known	false	true	false	false	string
<b>diskusage</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>expDir</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>expName</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>in_process</b>	Boolean data. Ex: True	false	false	false	false	false	boolean
<b>misc_keep</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>misc_state</b>	Unicode string data. Ex: “Hello World”	Un-known	false	true	false	false	string
<b>out-put_keep</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>out-put_state</b>	Unicode string data. Ex: “Hello World”	Un-known	false	true	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>result-sName</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>sig-proc_keep</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>sig-proc_state</b>	Unicode string data. Ex: “Hello World”	Un-known	false	true	false	false	string
<b>timeS-tamp</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/compositedatamanagement/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 6
    },
    "objects": [
        {
            "basecall_diskspace": 5.99083232879639,
            "basecall_keep": false,
            "basecall_state": "Local",
            "diskusage": 393,
            "expDir": "/results/PGM_test/cropped_CB1-42",
            "expName": "R_2011_04_07_12_44_38_user_CB1-42-r9723-314wfa-t1",
            "id": 6,
            "in_process": false,
        }
    ]
}
```

```
        "misc_diskspace": 0,
        "misc_keep": null,
        "misc_state": "Deleted",
        "output_diskspace": 4.13351440429688,
        "output_keep": false,
        "output_state": "Error",
        "resource_uri": "/rundb/api/v1/compositedatamanagement/6/",
        "resultsName": "Auto_user_CB1-42-r9723-314wfa-t1_94",
        "sigproc_diskspace": 384.02961730957,
        "sigproc_keep": false,
        "sigproc_state": "Local",
        "timeStamp": "2017-08-23T21:46:24.000391+00:00"
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.22 Composite Experiment Resource

Resource URL <http://mytorrentserver/rundb/api/mesh/v1/compositeexperiment/>  
Schema URL <http://mytorrentserver/rundb/api/mesh/v1/compositeexperiment/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<code>_host</code>	Host this resource is located on.	n/a	false	true	false	false	string
<code>chef-ReagentsSerialNum</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>chefSolution-ssSerialNum</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>chefStart-Time</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<code>chipType</code>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<code>date</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	false	false	false	false	date-time
<code>displayName</code>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<code>expName</code>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<code>flows</code>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<code>ftpStatus</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>id</code>	Integer data. Ex: 2673		false	false	true	true	integer
<code>notes</code>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<code>pgmName</code>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<code>plan</code>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<code>platform</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>repResult</code>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<code>resource_uri</code>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<code>resultDate</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	true	false	false	false	date-time
<code>results</code>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	re-related
<code>runMode</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>star</code>	Boolean data. Ex: True	false	false	false	true	false	boolean
<code>status</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>storage_options</code>	Unicode string data. Ex: “Hello World”	A	false	false	false	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/mesh/v1/compositeexperiment/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 146
    },
    "objects": [
}
```

```
{
    "_host": "hawk.itw",
    "applicationCategoryDisplayedName": "AmpliSeq DNA and Fusions",
    "barcodeId": "IonCode Barcodes 1-32",
    "barcodedSamples": {},
    "chefReagentsSerialNum": "",
    "chefSolutionsSerialNum": "",
    "chefStartTime": null,
    "chipDescription": "540",
    "chipInstrumentType": "S5",
    "chipType": "540",
    "date": "2019-10-03T22:24:50+00:00",
    "displayName": "user_S16-754-R153458-540_DNA33-RNA18_OCAv3_AO-1002",
    "expName": "R_2019_10_03_15_23_03_user_S16-754-R153458-540_DNA33-RNA18_
    ↵OCAv3_AO-1002",
    "flows": 400,
    "ftpStatus": "Complete",
    "id": 1800,
    "keep": false,
    "library": "hg19",
    "notes": "",
    "pgmName": "S16",
    "plan": {
        "id": 1808,
        "resource_uri": "",
        "runType": "AMPS_DNA_RNA",
        "sampleTubeLabel": null
    },
    "platform": "S5",
    "references": "hg19",
    "repResult": "/rundb/api/v1/compositeresult/1921/",
    "resource_uri": "/rundb/api/mesh/v1/compositeexperiment/1800/",
    "resultDate": "2019-10-04T02:55:43.000359+00:00",
    "results": [
        {
            "analysis_metrics": {
                "bead": 144205030,
                "empty": 5365643,
                "excluded": 13159848,
                "id": 1785,
                "ignored": 1554120,
                "lib": 143117241,
                "libFinal": 72109222,
                "live": 144191568,
                "pinned": 414495,
                "resource_uri": "",
                "total_wells": 164699136
            },
            "analysismetrics": {
                "bead": 144205030,
                "empty": 5365643,
                "excluded": 13159848,
                "id": 1785,
                "ignored": 1554120,
                "lib": 143117241,
                "libFinal": 72109222,
                "live": 144191568,
                "pinned": 414495,
                "resource_uri": ""
            }
        }
    ]
}
```

```
        "resource_uri": "",  
        "total_wells": 164699136  
    },  
    "autoExempt": false,  
    "eas": {  
        "barcodeKitName": "IonCode Barcodes 1-32",  
        "chipType": "540",  
        "isPQ": false,  
        "reference": "hg19",  
        "references": "hg19",  
        "resource_uri": ""  
    },  
    "i18nstatus": {  
        "i18n": "Completed",  
        "state": "Completed"  
    },  
    "id": 1920,  
    "isShowAllMetrics": true,  
    "libmetrics": {  
        "aveKeyCounts": 100,  
        "i100Q20_reads": 32512585,  
        "id": 1632,  
        "q20_mean_alignment_length": 98,  
        "resource_uri": ""  
    },  
    "processedflows": 0,  
    "projects": [  
        {  
            "id": 179,  
            "modified": "2019-10-04T22:30:21.000322+00:00",  
            "name": "Valkyrie",  
            "resource_uri": ""  
        }  
    ],  
    "quality_metrics": {  
        "id": 1633,  
        "q0_bases": "8055445299",  
        "q0_mean_read_length": 111.714116247485,  
        "q0_reads": 72107676,  
        "q20_bases": "7144330852",  
        "q20_mean_read_length": 111,  
        "q20_reads": 72107676,  
        "resource_uri": ""  
    },  
    "qualitymetrics": {  
        "id": 1633,  
        "q0_bases": "8055445299",  
        "q0_mean_read_length": 111.714116247485,  
        "q0_reads": 72107676,  
        "q20_bases": "7144330852",  
        "q20_mean_read_length": 111,  
        "q20_reads": 72107676,  
        "resource_uri": ""  
    },  
    "reportLink": "/output/Home/Auto_user_S16-754-R153458-540_DNA33-  
    ↵RNA18_OCAv3_AO-1002_1800_1920/",  
    "reportStatus": "Nothing",  
    "representative": false,
```

```

        "resource_uri": "/rundb/api/v1/compositeresult/1920/",
        "resultsName": "Auto_user_S16-754-R153458-540_DNA33-RNA18_OCAv3_
←AO-1002_1800",
        "status": "Completed",
        "status_display": "Completed",
        "timeStamp": "2019-10-04T02:55:43.000359+00:00"
    },
    {
        "analysis_metrics": {
            "bead": 882703,
            "empty": 30634,
            "excluded": 39760,
            "id": 1784,
            "ignored": 6104,
            "lib": 876208,
            "libFinal": 440446,
            "live": 882647,
            "pinned": 799,
            "resource_uri": "",
            "total_wells": 960000
        },
        "analysismetrics": {
            "bead": 882703,
            "empty": 30634,
            "excluded": 39760,
            "id": 1784,
            "ignored": 6104,
            "lib": 876208,
            "libFinal": 440446,
            "live": 882647,
            "pinned": 799,
            "resource_uri": "",
            "total_wells": 960000
        },
        "autoExempt": false,
        "eas": {
            "barcodeKitName": "IonCode Barcodes 1-32",
            "chipType": "540",
            "isPQ": false,
            "reference": "hg19",
            "references": "hg19",
            "resource_uri": ""
        },
        "i18nstatus": {
            "i18n": "Completed",
            "state": "Completed"
        },
        "id": 1921,
        "isShowAllMetrics": true,
        "libmetrics": {
            "aveKeyCounts": 104,
            "i100Q20_reads": 195606,
            "id": 1631,
            "q20_mean_alignment_length": 98,
            "resource_uri": ""
        },
        "processedflows": 400,
        "projects": [

```

```
{  
    "id": 179,  
    "modified": "2019-10-04T22:30:21.000322+00:00",  
    "name": "Valkyrie",  
    "resource_uri": ""  
},  
],  
"quality_metrics": {  
    "id": 1632,  
    "q0_bases": "49082942",  
    "q0_mean_read_length": 111.441965329731,  
    "q0_reads": 440435,  
    "q20_bases": "43452424",  
    "q20_mean_read_length": 111,  
    "q20_reads": 440435,  
    "resource_uri": ""  
},  
"qualitymetrics": {  
    "id": 1632,  
    "q0_bases": "49082942",  
    "q0_mean_read_length": 111.441965329731,  
    "q0_reads": 440435,  
    "q20_bases": "43452424",  
    "q20_mean_read_length": 111,  
    "q20_reads": 440435,  
    "resource_uri": ""  
},  
"reportLink": "/output/Home/Auto_user_S16-754-R153458-540_DNA33-  
→RNA18_OCAv3_AO-1002_1800_tn_1921/",  
    "reportStatus": "Nothing",  
    "representative": false,  
    "resource_uri": "/rundb/api/v1/compositeresult/1921/",  
    "resultsName": "Auto_user_S16-754-R153458-540_DNA33-RNA18_OCAv3_-  
→AO-1002_1800_tn",  
        "status": "Completed",  
        "status_display": "Completed",  
        "timeStamp": "2019-10-04T00:39:45.000429+00:00"  
    },  
],  
"runMode": "single",  
"sample": "",  
"sampleDisplayedName": "",  
"sampleSetName": "",  
"star": false,  
"status": "run",  
"storage_options": "A"  
}  
],  
"warnings": [  
    "The Torrent Server(s) phuket.itw,hawk.itw have too many results to display.  
→Only experiments newer than 2018-10-26 are displayed. Try searching or adding  
→additional filters.",  
    "Could not fetch runs from Torrent Server(s) tsautotest17.itw!"  
]  
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.23 Composite Result Resource

Resource URL <http://mytorrentserver/rundb/api/v1/compositeresult/>

Schema URL <http://mytorrentserver/rundb/api/v1/compositeresult/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>analysis-metrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>autoExempt</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>eas</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>i18nstatus</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>libmetrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>pro-cessed-flows</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	re-related
<b>quality-metrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>re-portLink</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>report-Status</b>	Unicode string data. Ex: "Hello World"	Nothing	true	false	false	false	string
<b>representative</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>result-sName</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>status</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>timeS-tamp</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/compositeresult/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 7
  },
  "objects": [
    {
      "analysis_metrics": null,
      "analysismetrics": null,
      "autoExempt": false,
      "eas": {
        "barcodeKitName": "IonXpress",
        "barcodeKitType": "IonXpress"
      }
    }
  ]
}
```

```

        "chipType": "",
        "isPQ": false,
        "reference": "hg19",
        "references": "hg19",
        "resource_uri": ""

    },
    "i18nstatus": {
        "i18n": "Pending",
        "state": "Other"
    },
    "id": 7,
    "isShowAllMetrics": true,
    "libmetrics": null,
    "processedflows": 0,
    "projects": [
        {
            "id": 1,
            "modified": "2018-02-28T17:32:01.000703+00:00",
            "name": "demo",
            "resource_uri": ""
        }
    ],
    "quality_metrics": null,
    "qualitymetrics": null,
    "reportLink": "/output/Home/CA_Combined_demo_001_007/",
    "reportStatus": "Nothing",
    "representative": false,
    "resource_uri": "/rundb/api/v1/compositeresult/7/",
    "resultsName": "CA_Combined_demo_001",
    "status": "Pending",
    "timeStamp": "2018-02-28T17:32:01.000577+00:00"
}
]
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.24 Content Resource

Resource URL <http://mytorrentserver/rundb/api/v1/content/>

Schema URL <http://mytorrentserver/rundb/api/v1/content/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>application_tags</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>contentupload</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>enabled</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>extra</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>file</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>meta</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true	false	string
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>notes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>path</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>publisher</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	related
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>type</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>up-load_date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	false	true	false	false	date-time
<b>upload_id</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/content/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 35
    },
    "objects": [
        {
            "application_tags": "",
            "contentupload": "/rundb/api/v1/contentupload/22/",
            "description": "",
            "enabled": true,
            "extra": "AmpliSeq_Mouse_Transcriptome_v1",
            "file": "/results/uploads/BED/22/AmpliSeq_Mouse_Transcriptome_v1/merged/
            ↵detail/AmpliSeq_Mouse_Transcriptome_V1_Designated.bed",
            "id": 2673
        }
    ]
}
```

```

        "id": 36,
        "meta": {
            "description": "",
            "enabled": true,
            "hotspot": false,
            "is_ampliseq": false,
            "notes": "",
            "num_bases": 2201026,
            "num_genes": 23930,
            "num_targets": 23930,
            "pre_process_files": [
                "/results/uploads/BED/22/AmpliSeq_Mouse_Transcriptome_V1_Designed.
        ↪bed"
            ],
            "reference": "AmpliSeq_Mouse_Transcriptome_v1",
            "upload_date": "2018-08-02T21:43:45",
            "username": "ionadmin"
        },
        "name": "AmpliSeq_Mouse_Transcriptome_V1_Designed.bed",
        "notes": "",
        "path": "/AmpliSeq_Mouse_Transcriptome_v1/merged/detail/AmpliSeq_Mouse_
        ↪Transcriptome_V1_Designed.bed",
        "publisher": "/rundb/api/v1/publisher/BED/",
        "resource_uri": "/rundb/api/v1/content/36/",
        "type": "target",
        "upload_date": "2018-08-02T21:43:45.000649+00:00",
        "upload_id": "22"
    }
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.25 Content Upload Resource

Resource URL <http://mytorrentserver/rundb/api/v1/contentupload/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/contentupload/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>file_path</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>meta</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>pub</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>source</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>up-load_date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	true	false	false	false	date-time
<b>up-load_type</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>username</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/contentupload/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 21
  },
  "objects": [
    {
      "file_path": "/results/uploads/BED/22/AmpliSeq_Mouse_Transcriptome_V1_Designated.bed",
      "id": 22,
      "meta": {
        "description": "",
        "enabled": true,
        "hotspot": false,
        "is_ampliseq": false,
        "notes": "",
        "num_bases": 2201026,
        "num_genes": 23930,
        "num_targets": 23930,
        "pre_process_files": [
          "/results/uploads/BED/22/AmpliSeq_Mouse_Transcriptome_V1_Designated.bed"
        ]
      }
    }
  ]
}
```

```
        ],
        "reference": "AmpliSeq_Mouse_Transcriptome_v1",
        "upload_date": "2018-08-02T21:43:45",
        "username": "ionadmin"
    },
    "name": "AmpliSeq_Mouse_Transcriptome_V1_Designed.bed",
    "pub": "BED",
    "resource_uri": "/rundb/api/v1/contentupload/22/",
    "source": "",
    "status": "Successfully Completed",
    "upload_date": "2018-08-02T21:43:45.000649+00:00",
    "upload_type": "target",
    "username": "ionadmin"
}
]
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.26 Data Management History Resource

Resource URL <http://mytorrentserver/rundb/api/v1/datamanagementhistory/>

Schema URL <http://mytorrentserver/rundb/api/v1/datamanagementhistory/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>created</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>object_pk</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>result-sName</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	false	false	string
<b>text</b>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<b>username</b>	Unicode string data. Ex: “Hello World”	ION	false	false	true	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/datamanagementhistory/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 36
    },
    "objects": [
        {
            "created": "2018-05-29T17:32:06.000459+00:00",
            "id": 59,
            "object_pk": 7,
            "resource_uri": "/rundb/api/v1/datamanagementhistory/59/",
            "resultsName": "CA_Combined_demo_001",
            "text": "Src Dir not found: /results/analysis/output/Home/CA_Combined_"
        → demo_001_007. Setting action_state to Deleted",
            "username": "dm_agent"
        }
    ]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### 2.2.27 Dna Barcode Resource

Resource URL <http://mytorrentserver/rundb/api/v1/dnabarcod/>

Schema URL <http://mytorrentserver/rundb/api/v1/dnabarcod/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>active</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>adapter</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>annotation</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>end_adapter</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>end_sequence</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>id_str</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>index</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>is_end_barcode</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>length</b>	Integer data. Ex: 2673	0	false	false	true	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>score_cutoff</b>	Floating point numeric data. Ex: 26.73	0	false	false	false	false	float
<b>score_mode</b>	Integer data. Ex: 2673	0	false	false	true	false	integer
<b>sequence</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>system</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>type</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/dnabbarcode/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 2090  
    },  
    "objects": [  
        {  
            "active": true,  
            "adapter": "GGTGAT",  
            "annotation": "IonCode_0196--IonOmega_444A",  
            "end_adapter": "CTGAG",  
            "end_sequence": "TATTACAGCGC",  
            "id": 4043,  
            "id_str": "IonDual_H12_0196",  
            "index": 96,  
            "is_end_barcode": false,  
            "length": 12,  
            "name": "Ion Dual Barcode Kit 1-96",  
            "resource_uri": "/rundb/api/v1/dnabbarcode/4043/",  
            "score_cutoff": 0,  
            "score_mode": 0,  
            "sequence": "CTAACAAATTCA",  
            "system": true,  
            "type": ""  
        }  
    ]  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.28 Email Address Resource

Resource URL <http://mytorrentserver/rundb/api/v1/emailaddress/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/emailaddress/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>email</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>selected</b>	Boolean data. Ex: True		false	false	true	false	boolean

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 0
    },
    "objects": []
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.29 Event Log Resource

Resource URL <http://mytorrentserver/rundb/api/v1/eventlog/>

Schema URL <http://mytorrentserver/rundb/api/v1/eventlog/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>created</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>object_pk</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>text</b>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<b>username</b>	Unicode string data. Ex: “Hello World”	ION	false	false	true	false	string

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/eventlog/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 57
    },
    "objects": [
        {
            "created": "2018-08-02T18:54:44.000330+00:00",
            "id": 60,
            "object_pk": 144,
            "resource_uri": "/rundb/api/v1/eventlog/60/",
            "text": "Created Planned Run: Ion_AmpliSeq_Transcriptome_Mouse_Gene_Expression (144)",
            "username": "ionadmin"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE

- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### 2.2.30 Experiment Resource

Resource URL <http://mytorrentserver/rundb/api/v1/experiment/>

Schema URL <http://mytorrentserver/rundb/api/v1/experiment/schema/>

#### Resource Fields

field	help text	de
<b>autoAnalyze</b>	Boolean data. Ex: True	true
<b>baselineRun</b>	Boolean data. Ex: True	false
<b>chefChipExpiration1</b>	Unicode string data. Ex: “Hello World”	
<b>chefChipExpiration2</b>	Unicode string data. Ex: “Hello World”	
<b>chefChipType1</b>	Unicode string data. Ex: “Hello World”	
<b>chefChipType2</b>	Unicode string data. Ex: “Hello World”	
<b>chefEndTime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a
<b>chefExtraInfo_1</b>	Unicode string data. Ex: “Hello World”	
<b>chefExtraInfo_2</b>	Unicode string data. Ex: “Hello World”	
<b>chefFlexibleWorkflow</b>	Unicode string data. Ex: “Hello World”	
<b>chefInstrumentName</b>	Unicode string data. Ex: “Hello World”	
<b>chefKitType</b>	Unicode string data. Ex: “Hello World”	
<b>chefLastUpdate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a
<b>chefLogPath</b>	Unicode string data. Ex: “Hello World”	n/a
<b>chefLotNumber</b>	Unicode string data. Ex: “Hello World”	
<b>chefManufactureDate</b>	Unicode string data. Ex: “Hello World”	
<b>chefMessage</b>	Unicode string data. Ex: “Hello World”	
<b>chefOperationMode</b>	Unicode string data. Ex: “Hello World”	
<b>chefPackageVer</b>	Unicode string data. Ex: “Hello World”	
<b>chefProgress</b>	Floating point numeric data. Ex: 26.73	0
<b>chefProtocolDeviationName</b>	Unicode string data. Ex: “Hello World”	n/a
<b>chefReagentID</b>	Unicode string data. Ex: “Hello World”	
<b>chefReagentsExpiration</b>	Unicode string data. Ex: “Hello World”	
<b>chefReagentsLot</b>	Unicode string data. Ex: “Hello World”	
<b>chefReagentsPart</b>	Unicode string data. Ex: “Hello World”	
<b>chefReagentsSerialNum</b>	Unicode string data. Ex: “Hello World”	
<b>chefRemainingSeconds</b>	Integer data. Ex: 2673	n/a

Table 2.9 – continued from previous page

field	help text	de
<code>chefSamplePos</code>	Unicode string data. Ex: “Hello World”	
<code>chefScriptVersion</code>	Unicode string data. Ex: “Hello World”	
<code>chefSolutionsExpiration</code>	Unicode string data. Ex: “Hello World”	
<code>chefSolutionsLot</code>	Unicode string data. Ex: “Hello World”	
<code>chefSolutionsPart</code>	Unicode string data. Ex: “Hello World”	
<code>chefSolutionsSerialNum</code>	Unicode string data. Ex: “Hello World”	
<code>chefStartTime</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a
<code>chefStatus</code>	Unicode string data. Ex: “Hello World”	
<code>chefTipRackBarcode</code>	Unicode string data. Ex: “Hello World”	
<code>chipBarcode</code>	Unicode string data. Ex: “Hello World”	
<code>chipType</code>	Unicode string data. Ex: “Hello World”	n/a
<code>cycles</code>	Integer data. Ex: 2673	n/a
<code>date</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a
<code>diskusage</code>	Integer data. Ex: 2673	n/a
<code>displayName</code>	Unicode string data. Ex: “Hello World”	
<code>eas_set</code>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a
<code>expCompInfo</code>	Unicode string data. Ex: “Hello World”	
<code>expDir</code>	Unicode string data. Ex: “Hello World”	n/a
<code>expName</code>	Unicode string data. Ex: “Hello World”	n/a
<code>flows</code>	Integer data. Ex: 2673	n/a
<code>flowsInOrder</code>	Unicode string data. Ex: “Hello World”	
<code>ftpStatus</code>	Unicode string data. Ex: “Hello World”	
<code>id</code>	Integer data. Ex: 2673	
<code>isProton</code>	Unicode string data. Ex: “Hello World”	n/a
<code>isReverseRun</code>	Boolean data. Ex: True	false
<code>log</code>	Unicode string data. Ex: “Hello World”	{}
<code>metaData</code>	Unicode string data. Ex: “Hello World”	{}
<code>notes</code>	Unicode string data. Ex: “Hello World”	n/a
<code>pgmName</code>	Unicode string data. Ex: “Hello World”	n/a
<code>pinnedRepResult</code>	Boolean data. Ex: True	false
<code>plan</code>	A single related resource. Can be either a URI or set of nested resource data.	n/a
<code>platform</code>	Unicode string data. Ex: “Hello World”	
<code>rawdatastyle</code>	Unicode string data. Ex: “Hello World”	sim
<code>reagentBarcode</code>	Unicode string data. Ex: “Hello World”	
<code>resource_uri</code>	Unicode string data. Ex: “Hello World”	n/a
<code>resultDate</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true
<code>results</code>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a
<code>reverse_primer</code>	Unicode string data. Ex: “Hello World”	n/a
<code>runMode</code>	Unicode string data. Ex: “Hello World”	
<code>runttype</code>	Unicode string data. Ex: “Hello World”	n/a
<code>sample</code>	Unicode string data. Ex: “Hello World”	n/a
<code>samples</code>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a
<code>seqKitBarcode</code>	Unicode string data. Ex: “Hello World”	
<code>sequencekitbarcode</code>	Unicode string data. Ex: “Hello World”	n/a
<code>sequencekitname</code>	Unicode string data. Ex: “Hello World”	n/a
<code>star</code>	Boolean data. Ex: True	false
<code>status</code>	Unicode string data. Ex: “Hello World”	
<code>storageHost</code>	Unicode string data. Ex: “Hello World”	n/a
<code>storage_options</code>	Unicode string data. Ex: “Hello World”	A

Table 2.9 – continued from previous page

field	help text	de
<b>unique</b>	Unicode string data. Ex: “Hello World”	n/a
<b>usePreBeadfind</b>	Boolean data. Ex: True	true
<b>user_ack</b>	Unicode string data. Ex: “Hello World”	U

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/experiment/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 136
  },
  "objects": [
    {
      "autoAnalyze": true,
      "baselineRun": false,
      "chefChipExpiration1": "",
      "chefChipExpiration2": "",
      "chefChipType1": "",
      "chefChipType2": "",
      "chefEndTime": null,
      "chefExtraInfo_1": "",
      "chefExtraInfo_2": "",
      "chefFlexibleWorkflow": "",
      "chefInstrumentName": "",
      "chefKitType": "",
      "chefLastUpdate": null,
      "chefLogPath": null,
      "chefLotNumber": "",
      "chefManufactureDate": "",
      "chefMessage": "",
      "chefOperationMode": "",
      "chefPackageVer": "",
      "chefProgress": 0,
      "chefProtocolDeviationName": null,
      "chefReagentID": "",
      "chefReagentsExpiration": "",
      "chefReagentsLot": "",
      "chefReagentsPart": "",
      "chefReagentsSerialNum": "",
      "chefRemainingSeconds": null,
      "chefSamplePos": "",
      "chefScriptVersion": "",
      "chefSolutionsExpiration": "",
      "chefSolutionsLot": "",
      "chefSolutionsPart": "",
      "chefSolutionsSerialNum": "",
      "chefStartTime": null,
      "chefStatus": "",
      "chefTipRackBarcode": "",
      "chipBarcode": "",
      "chipType": "530",
      "cycles": 0
    }
  ]
}
```

```
"date": "2019-10-03T20:53:08.000599+00:00",
"diskusage": 0,
"displayName": "aa9309c5-5922-49f3-b901-987383b03e57",
"eas_set": [
    {
        "alignmentargs": "",
        "analysisargs": "",
        "barcodeKitName": "Ion Dual Barcode Kit 1-96",
        "barcodedSamples": {},
        "base_recalibration_mode": "standard_recal",
        "basecallerargs": "",
        "beadfindargs": "",
        "calibrateargs": "",
        "custom_args": false,
        "date": "2019-10-03T20:53:08.000599+00:00",
        "endBarcodeKitName": "",
        "experiment": "/rundb/api/v1/experiment/163/",
        "hotSpotRegionBedFile": "",
        "id": 162,
        "ionstatsargs": "",
        "isDuplicateReads": false,
        "isEditable": true,
        "isOneTimeOverride": false,
        "libraryKey": "TCAG",
        "libraryKitBarcode": null,
        "libraryKitName": "Ion AmpliSeq Library Kit Plus",
        "mixedTypeRNA_hotSpotRegionBedFile": null,
        "mixedTypeRNA_reference": null,
        "mixedTypeRNA_targetRegionBedFile": null,
        "prebasecallerargs": "",
        "preThumbnailbasecallerargs": "",
        "realign": false,
        "reference": "",
        "resource_uri": "/rundb/api/v1/experimentanalysissettings/162/",
        "results": [],
        "selectedPlugins": {},
        "sseBedFile": "",
        "status": "inactive",
        "targetRegionBedFile": "",
        "tfKey": "ATCG",
        "threePrimeAdapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
        "thumbnailalignmentargs": "",
        "thumbnailanalysisargs": "",
        "thumbnailbasecallerargs": "",
        "thumbnailbeadfindargs": "",
        "thumbnailcalibrateargs": "",
        "thumbnailionstatsargs": ""
    }
],
"expCompInfo": "",
"expDir": "",
"expName": "aa9309c5-5922-49f3-b901-987383b03e57",
"flows": 500,
"flowsInOrder": "",
"ftpStatus": "",
"id": 163,
"isProton": "False",
"isReverseRun": false,
```

```

    "log": {},
    "metaData": {},
    "notes": "",
    "pgmName": "",
    "pinnedRepResult": false,
    "plan": "/rundb/api/v1/plannedexperiment/170/",
    "platform": "S5",
    "rawdatastyle": "single",
    "reagentBarcode": "",
    "resource_uri": "/rundb/api/v1/experiment/163/",
    "resultDate": "2019-10-03T20:53:08.000620+00:00",
    "results": [],
    "reverse_primer": null,
    "runMode": "single",
    "runtype": "GENS",
    "sample": "",
    "samples": [],
    "seqKitBarcode": "",
    "sequencekitbarcode": "",
    "sequencekitname": "Ion S5 Sequencing Kit",
    "star": false,
    "status": "inactive",
    "storageHost": "",
    "storage_options": "A",
    "unique": "aa9309c5-5922-49f3-b901-987383b03e57",
    "usePreBeadfind": true,
    "user_ack": "U"
  }
]
}

```

### Allowed list HTTP methods

- GET
- PATCH
- PUT
- DELETE

### Allowed detail HTTP methods

- GET
- PATCH
- PUT
- DELETE

## 2.2.31 Experiment Analysis Settings Resource

Resource URL <http://mytorrentserver/rundb/api/v1/experimentanalysissettings/>

Schema URL

<http://mytorrentserver/rundb/api/v1/experimentanalysissettings/schema/>

## Resource Fields

field	help text
<b>alignmentargs</b>	Unicode string data. Ex: "Hello World"
<b>analysisargs</b>	Unicode string data. Ex: "Hello World"
<b>barcodeKitName</b>	Unicode string data. Ex: "Hello World"
<b>barcodedSamples</b>	Unicode string data. Ex: "Hello World"
<b>base_recalibration_mode</b>	Unicode string data. Ex: "Hello World"
<b>basecallerargs</b>	Unicode string data. Ex: "Hello World"
<b>beadfindargs</b>	Unicode string data. Ex: "Hello World"
<b>calibrateargs</b>	Unicode string data. Ex: "Hello World"
<b>custom_args</b>	Boolean data. Ex: True
<b>date</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"
<b>endBarcodeKitName</b>	Unicode string data. Ex: "Hello World"
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>hotSpotRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>id</b>	Integer data. Ex: 2673
<b>ionstatsargs</b>	Unicode string data. Ex: "Hello World"
<b>isDuplicateReads</b>	Boolean data. Ex: True
<b>isEditable</b>	Boolean data. Ex: True
<b>isOneTimeOverride</b>	Boolean data. Ex: True
<b>libraryKey</b>	Unicode string data. Ex: "Hello World"
<b>libraryKitBarcode</b>	Unicode string data. Ex: "Hello World"
<b>libraryKitName</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>prebasecallerargs</b>	Unicode string data. Ex: "Hello World"
<b>preThumbnailbasecallerargs</b>	Unicode string data. Ex: "Hello World"
<b>realign</b>	Boolean data. Ex: True
<b>reference</b>	Unicode string data. Ex: "Hello World"
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"
<b>results</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>selectedPlugins</b>	Unicode string data. Ex: "Hello World"
<b>sseBedFile</b>	Unicode string data. Ex: "Hello World"
<b>status</b>	Unicode string data. Ex: "Hello World"
<b>targetRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>tfKey</b>	Unicode string data. Ex: "Hello World"
<b>threePrimeAdapter</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailalignmentargs</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailanalysisargs</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailbasecallerargs</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailbeadfindargs</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailcalibrateargs</b>	Unicode string data. Ex: "Hello World"
<b>thumbnailionstatsargs</b>	Unicode string data. Ex: "Hello World"

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/experimentanalysissettings/?offset=1&limit=1&
˓→format=json",
        "offset": 0,
        "previous": null,
        "total_count": 136
    },
    "objects": [
        {
            "alignmentargs": "",
            "analysisargs": "",
            "barcodeKitName": "Ion Dual Barcode Kit 1-96",
            "barcodedSamples": {},
            "base_recalibration_mode": "standard_recal",
            "basecallerargs": "",
            "beadfindargs": "",
            "calibrateargs": "",
            "custom_args": false,
            "date": "2019-10-03T20:53:08.000599+00:00",
            "endBarcodeKitName": "",
            "experiment": "/rundb/api/v1/experiment/163/",
            "hotSpotRegionBedFile": "",
            "id": 162,
            "ionstatsargs": "",
            "isDuplicateReads": false,
            "isEditable": true,
            "isOneTimeOverride": false,
            "libraryKey": "TCAG",
            "libraryKitBarcode": null,
            "libraryKitName": "Ion AmpliSeq Library Kit Plus",
            "mixedTypeRNA_hotSpotRegionBedFile": null,
            "mixedTypeRNA_reference": null,
            "mixedTypeRNA_targetRegionBedFile": null,
            "prebasecallerargs": "",
            "preThumbnailbasecallerargs": "",
            "realign": false,
            "reference": "",
            "resource_uri": "/rundb/api/v1/experimentanalysissettings/162/",
            "results": [],
            "selectedPlugins": {},
            "sseBedFile": "",
            "status": "inactive",
            "targetRegionBedFile": "",
            "tfKey": "ATCG",
            "threePrimeAdapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
            "thumbnailalignmentargs": "",
            "thumbnailanalysisargs": "",
            "thumbnailbasecallerargs": "",
            "thumbnailbeadfindargs": "",
            "thumbnailcalibrateargs": "",
            "thumbnailionstatsargs": ""
        }
    ]
}
}
```

---

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.32 File Monitor Resource

Resource URL <http://mytorrentserver/rundb/api/v1/filemonitor/>

Schema URL <http://mytorrentserver/rundb/api/v1/filemonitor/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>cel- ery_task_id</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>created</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>local_dir</b>	Unicode string data. Ex: "Hello World"		false	false	false	false	string
<b>md5sum</b>	Unicode string data. Ex: "Hello World"	None	true	false	false	false	string
<b>name</b>	Unicode string data. Ex: "Hello World"		false	false	false	false	string
<b>progress</b>	Unicode string data. Ex: "Hello World"	0	false	false	false	false	string
<b>re- source_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>size</b>	Unicode string data. Ex: "Hello World"	None	true	false	false	false	string
<b>status</b>	Unicode string data. Ex: "Hello World"		false	false	false	false	string
<b>tags</b>	Unicode string data. Ex: "Hello World"		false	false	false	false	string
<b>updated</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>url</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/filemonitor/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 9
    },
    "objects": [
        {
            "celery_task_id": "9791ab17-8fb1-409e-ab9f-1f02d8f0a256",
            "created": "2018-08-02T23:10:55.000145+00:00",
            "id": 11,
            "local_dir": "/results/referenceLibrary/temp/tmpBar9cj",
            "md5sum": null,
            "name": "mm10.zip",
            "progress": "4080979909",
            "resource_uri": "/rundb/api/v1/filemonitor/11/",
            "size": "4080979909",
            "status": "Complete",
            "tags": "reference",
            "updated": "2018-08-02T23:12:07.000540+00:00",
            "url": "http://updates.itw/internal_reference_downloads/mm10.zip"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.33 File Server Resource

Resource URL <http://mytorrentserver/rundb/api/v1/fileserver/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/fileserver/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>comments</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>filesPrefix</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>percentfull</b>	Floating point numeric data. Ex: 26.73	0	true	false	false	false	float
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 1
    },
    "objects": [
        {
            "comments": "",
            "filesPrefix": "/results/",
            "id": 1,
            "name": "Home",
            "percentfull": 40.1362957221239,
            "resource_uri": "/rundb/api/v1/fileserver/1/"
        }
    ]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.34 Flow Order Resource

Resource URL <http://mytorrentserver/rundb/api/v1/floworder/>

Schema URL <http://mytorrentserver/rundb/api/v1/floworder/schema/>

#### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowOrder</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isDefault</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>isSystem</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

#### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/floworder/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 7
    },
    "objects": [
        {
            "description": "Ion samba.c.2step.pgs flow order",
            "flowOrder": "TACGTACGTCTGAGCATCGGATCGCGATGTACAGCTACGTACGGAGTCTAGCTGACGTACGTACGTCATGTGCATCGATCAGCTAGCTGACGTAGCTAGCA",
            "id": 7,
            "isActive": true,
            "isDefault": false,
            "isSystem": false,
            "name": "Ion samba.c.2step.pgs flow order"
        }
    ]
}
```

```
        "isDefault": false,
        "isSystem": true,
        "name": "Ion samba.c.2step.pgs",
        "resource_uri": "/rundb/api/v1/floworder/7/"
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.35 Get Chef Cartridgeusage Resource

Resource URL <http://mytorrentserver/rundb/api/v1/getchefcartridgeusage/>

Schema URL <http://mytorrentserver/rundb/api/v1/getchefcartridgeusage/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>hoursSinceSolutionFirstUse</b>	Integer number of hours between (oldest associated experiment using Solution) and (chefCurrentTime). Rounded down to the nearest hour is OK. Ex: 24	n/a	true	true	true	false	Integer
<b>numberSolutionSerialUsage</b>	Integer number. No of Solution cartridge Usage Ex: 2	n/a	true	true	true	false	Integer
<b>errorCodes</b>	A lists of data. Ex: [”E200”] or [”W100”, “W200”]	n/a	true	true	true	false	List Object
<b>allowRunToContinue</b>	Boolean string data. Ex: “true or false”	n/a	true	true	true	false	boolean
<b>detailMessages</b>	A dictionary of data. Ex: {‘E300’: ‘No. of reagent and solution usage do not match’}	n/a	true	true	true	false	dict
<b>numberReagentSerialUsage</b>	Integer number. No of Reagent cartridge Usage Ex: 2	n/a	true	true	true	false	Integer
<b>hoursSinceReagentFirstUse</b>	Integer number of hours between (oldest associated experiment using Reagent) and (chefCurrentTime). Rounded down to the nearest hour is OK. Ex: 48	n/a	true	true	true	false	Integer

## Example Response

```
{
    "allowRunToContinue": false,
    "detailMessages": {
        "E305": "Missing chef inputs filter option ['chefReagentsSerialNum',
        ↪ 'chefSolutionsSerialNum', 'kitName']"
    },
    "errorCodes": [
        "E305"
    ],
    "hoursSinceReagentFirstUse": "",
    "hoursSinceSolutionFirstUse": "",
    "numberReagentSerialUsage": 0,
    "numberSolutionSerialUsage": 0
}
```

## Allowed list HTTP methods

- GET

## Allowed detail HTTP methods

None

## 2.2.36 Get Chef Script Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/getchefscriptinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/getchefscriptinfo/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>avail-ablever-sion</b>	A dictionary of data. Ex: {'Compatible_Chef_release': ['IC.5.4.0'], 'IS_scripts': '00515'}	n/a	true	true	true	false	dict

### Example Response

```
{  
    "object": {  
        "availableversion": {  
            "Compatible_Chef_release": [  
                "IC.5.12.1.RC.1"  
            ],  
            "IS_scripts": "000905"  
        }  
    }  
}
```

### Allowed list HTTP methods

- GET

### Allowed detail HTTP methods

None

## 2.2.37 Global Config Resource

Resource URL <http://mytorrentserver/rundb/api/v1/globalconfig/>

Schema URL <http://mytorrentserver/rundb/api/v1/globalconfig/schema/>

## Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>auto_archive_ack</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>auto_archive_enable</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>base_recalibration_mode</b>	Unicode string data. Ex: “Hello World”	stan-dard_recal	false	false	false	false	string
<b>check_news_posts</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>clus-ter_auto_disable</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>default_flow_order</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>default_library_key</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>de-fault_storage_options</b>	Unicode string data. Ex: “Hello World”	D	false	false	true	false	string
<b>de-fault_test_fragment_key</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>enable_auto_pkg_dl</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>en-able_auto_security</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>en-able_compendia_OCP</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>en-able_nightly_email</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>en-able_support_upload</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>enable_version_lock</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>mark_duplicates</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>plu-gin_output_folder</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>realign</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>records_to_display</b>	Integer data. Ex: 2673	20	false	false	true	false	integer
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sec_update_status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>selected</b>	Boolean data. Ex: True		false	false	true	false	boolean
<b>site_name</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>telemetry_enabled</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>ts_update_status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>web_root</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": null,  
        "offset": 0,  
        "previous": null,  
        "total_count": 1  
    },  
    "objects": [  
        {  
            "auto_archive_ack": true,  
            "auto_archive_enable": true,  
            "base_recalibration_mode": "standard_recal",  
            "check_news_posts": true,  
            "cluster_auto_disable": true,  
            "default_flow_order": "TACG",  
            "default_library_key": "TCAG",  
            "default_storage_options": "A",  
            "default_test_fragment_key": "ATCG",  
            "enable_auto_pkg_dl": true,  
            "enable_auto_security": true,  
            "enable_compendia_OCP": true,  
            "enable_nightly_email": true,  
            "enable_support_upload": false,  
            "enable_version_lock": false,  
            "id": 1,  
            "mark_duplicates": false,  
            "name": "Config",  
            "plugin_output_folder": "plugin_out",  
            "realign": false,  
            "records_to_display": 20,  
            "resource_uri": "/rundb/api/v1/globalconfig/1/",  
            "sec_update_status": "",  
            "selected": false,  
            "site_name": "Torrent Server",  
            "telemetry_enabled": true,  
            "ts_update_status": "No updates",  
            "web_root": ""  
        }  
    ]  
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.38 Ion Chef Plan Template Resource

Resource URL <http://mytorrentserver/rundb/api/v1/ionchefplantemplate/>

Schema URL <http://mytorrentserver/rundb/api/v1/ionchefplantemplate/schema>

## Resource Fields

field	help text
<code>adapter</code>	Unicode string data. Ex: “Hello World”
<code>applicationCategoryDisplayedName</code>	Unicode string data. Ex: “Hello World”
<code>applicationGroup</code>	A single related resource. Can be either a URI or set of nested resource data.
<code>applicationGroupDisplayedName</code>	Unicode string data. Ex: “Hello World”
<code>autoAnalyze</code>	Boolean data. Ex: True
<code>autoName</code>	Unicode string data. Ex: “Hello World”
<code>barcodeId</code>	Unicode string data. Ex: “Hello World”
<code>barcodedSamples</code>	Unicode string data. Ex: “Hello World”
<code>base_recalibration_mode</code>	Unicode string data. Ex: “Hello World”
<code>bedfile</code>	Unicode string data. Ex: “Hello World”
<code>categories</code>	Unicode string data. Ex: “Hello World”
<code>chefInfo</code>	A dictionary of data. Ex: {‘price’: 26.73, ‘name’: ‘Daniel’}
<code>childPlans</code>	A list of data. Ex: [‘abc’, 26.73, 8]
<code>chipBarcode</code>	Unicode string data. Ex: “Hello World”
<code>chipType</code>	Unicode string data. Ex: “Hello World”
<code>controlSequencekitname</code>	Unicode string data. Ex: “Hello World”
<code>cycles</code>	Integer data. Ex: 2673
<code>date</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<code>earlyDatFileDeletion</code>	Boolean data. Ex: True
<code>endBarcodeKitName</code>	Unicode string data. Ex: “Hello World”
<code>expName</code>	Unicode string data. Ex: “Hello World”
<code>experiment</code>	A single related resource. Can be either a URI or set of nested resource data.
<code>flows</code>	Integer data. Ex: 2673
<code>flowsInOrder</code>	Unicode string data. Ex: “Hello World”
<code>forward3primeadapter</code>	Unicode string data. Ex: “Hello World”
<code>id</code>	Integer data. Ex: 2673
<code>irworkflow</code>	Unicode string data. Ex: “Hello World”
<code>isCustom_kitSettings</code>	Boolean data. Ex: True
<code>isDuplicateReads</code>	Boolean data. Ex: True
<code>isFavorite</code>	Boolean data. Ex: True

Table 2.11 – continued from previous page

field	help text
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>library</b>	Unicode string data. Ex: “Hello World”
<b>libraryKey</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepType</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepTypeDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>librarykitname</b>	Unicode string data. Ex: “Hello World”
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>notes</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>platform</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>realign</b>	Boolean data. Ex: True
<b>regionfile</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>reverselibrarykey</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sample</b>	Unicode string data. Ex: “Hello World”
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>sampleGroupingName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSetDisplayedName</b>	Unicode string data. Ex: “Hello World”

Table 2.11 – continued from previous page

field	help text
<code>sampleSets</code>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<code>sampleTubeLabel</code>	Unicode string data. Ex: "Hello World"
<code>selectedPlugins</code>	Unicode string data. Ex: "Hello World"
<code>seqKitBarcode</code>	Unicode string data. Ex: "Hello World"
<code>sequencekitname</code>	Unicode string data. Ex: "Hello World"
<code>sseBedFile</code>	Unicode string data. Ex: "Hello World"
<code>storageHost</code>	Unicode string data. Ex: "Hello World"
<code>storage_options</code>	Unicode string data. Ex: "Hello World"
<code>templatingKitBarcode</code>	Unicode string data. Ex: "Hello World"
<code>templatingKitName</code>	Unicode string data. Ex: "Hello World"
<code>tfKey</code>	Unicode string data. Ex: "Hello World"
<code>usePostBeadfind</code>	Boolean data. Ex: True
<code>usePreBeadfind</code>	Boolean data. Ex: True
<code>username</code>	Unicode string data. Ex: "Hello World"
<code>variantfrequency</code>	Unicode string data. Ex: "Hello World"

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/ionchefplantemplate/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 89
    },
    "objects": [
        {
            "adapter": null,
            "alignmentargs": "",
            "analysisargs": "",
            "applicationCategoryDisplayedName": "Oncology - Solid Tumor",
            "applicationGroup": "/rundb/api/v1/applicationgroup/5/",
            "applicationGroupDisplayedName": "DNA and Fusions (Separate Libraries)",
            "autoAnalyze": true,
            "autoName": null,
            "barcodeId": "Ion Dual Barcode Kit 1-96",
            "barcodedSamples": {},
            "base_recalibration_mode": "standard_recal",
            "basecallerargs": "",
            "beadfindargs": "",
            "bedfile": "",
            "calibrateargs": "",
            "categories": "Oncomine;onco_solidTumor;barcodes_8;p4o",
            "chefInfo": {},
            "childPlans": [],
            "chipBarcode": "",
            "chipType": "530",
            "controlSequencekitname": null,
            "custom_args": false,
            "cycles": null,
            "date": "2019-10-03T20:53:08.000623+00:00",
            "earlyDatFileDeletion": false,
            "ionChefPlanTemplate": {
                "id": "1",
                "name": "Ion Dual Barcode Kit 1-96"
            }
        }
    ]
}
```

```
"endBarcodeKitName": "",  
"expName": "",  
"experiment": "/rundb/api/v1/experiment/163/",  
"flows": 500,  
"flowsInOrder": "",  
"forward3primeadapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",  
"id": 170,  
"ionstatsargs": "",  
"irworkflow": "",  
"isCustom_kitSettings": false,  
"isDuplicateReads": false,  
"isFavorite": false,  
"isPlanGroup": false,  
"isReusable": true,  
"isReverseRun": false,  
"isSystem": true,  
"isSystemDefault": false,  
"libkit": null,  
"library": "",  
"libraryKey": "TCAG",  
"libraryPrepType": "",  
"libraryPrepTypeDisplayedName": "",  
"libraryReadLength": 200,  
"librarykitname": "Ion AmpliSeq Library Kit Plus",  
"metaData": {},  
"mixedTypeRNA_hotSpotRegionBedFile": null,  
"mixedTypeRNA_reference": null,  
"mixedTypeRNA_targetRegionBedFile": null,  
"notes": "",  
"origin": "|5.12.1",  
"pairedEndLibraryAdapterName": null,  
"parentPlan": null,  
"planDisplayedName": "Oncomine Tumor Specific Fusions",  
"planExecuted": false,  
"planExecutedDate": null,  
"planGUID": "aa9309c5-5922-49f3-b901-987383b03e57",  
"planName": "Oncomine_Tumor_Specific_Fusions",  
"planPGM": "",  
"planShortID": "OZT4F",  
"planStatus": "inactive",  
"platform": "S5",  
"preAnalysis": true,  
"prebasecallerargs": "",  
"prethumbnailbasecallerargs": "",  
"project": "",  
"projects": [],  
"qcValues": [  
    {  
        "id": 487,  
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",  
        "qcType": {  
            "defaultThreshold": 30,  
            "description": "",  
            "id": 1,  
            "maxThreshold": 100,  
            "minThreshold": 0,  
            "qcName": "Bead Loading (%)",  
            "resource_uri": "/rundb/api/v1/qctype/1/"  
        }  
    }  
]
```

```

        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/487/",
        "threshold": 30
    },
    {
        "id": 488,
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
        "qcType": {
            "defaultThreshold": 30,
            "description": "",
            "id": 2,
            "maxThreshold": 100,
            "minThreshold": 1,
            "qcName": "Key Signal (1-100)",
            "resource_uri": "/rundb/api/v1/qctype/2/"
        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/488/",
        "threshold": 30
    },
    {
        "id": 489,
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
        "qcType": {
            "defaultThreshold": 30,
            "description": "",
            "id": 3,
            "maxThreshold": 100,
            "minThreshold": 0,
            "qcName": "Usable Sequence (%)",
            "resource_uri": "/rundb/api/v1/qctype/3/"
        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/489/",
        "threshold": 30
    }
],
"realign": false,
"regionfile": "",
"resource_uri": "/rundb/api/v1/ionchefplantemplate/170/",
"reverse3primeadapter": "",
"reverse_primer": null,
"reverselibrarykey": "",
"runMode": "single",
"runType": "AMPS_RNA",
"runname": null,
"sample": "",
"sampleDisplayedName": "",
"sampleGrouping": "/rundb/api/v1/samplegroupertype_cv/7/",
"sampleGroupingName": "Single Fusions",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSetDisplayedName": "",
"sampleSets": [],
"sampleTubeLabel": null,
"selectedPlugins": {},
"seqKitBarcode": null,
"sequencekitname": "Ion S5 Sequencing Kit",
"sseBedFile": "",
"storageHost": null,

```

```
        "storage_options": "A",
        "templatingKitBarcode": null,
        "templatingKitName": "Ion Chef S530 V2",
        "tfKey": "ATCG",
        "thumbnailalignmentargs": "",
        "thumbnailanalysisargs": "",
        "thumbnailbasecallerargs": "",
        "thumbnailbeadfindargs": "",
        "thumbnailcalibrateargs": "",
        "thumbnaillionstatsargs": "",
        "usePostBeadfind": false,
        "usePreBeadfind": true,
        "username": null,
        "variantfrequency": ""
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.39 Ion Chef Plan Template Summary Resource

Resource URL <http://mytorrentserver/rundb/api/v1/ionchefplantemplatesummary/>

Schema URL

<http://mytorrentserver/rundb/api/v1/ionchefplantemplatesummary/schema/>

#### Resource Fields

field	help text	default	nullable	readonly	bl
adapter	Unicode string data. Ex: “Hello World”	n/a	true	false	C

Table 2.12 – continued from previous page

field	help text	default	nullable	readonly	bla
<b>autoName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>cycles</b>	Integer data. Ex: 2673	n/a	true	false	false
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false
<b>expName</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>id</b>	Integer data. Ex: 2673		false	false	true
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>isCustom_kitSettings</b>	Boolean data. Ex: True	false	false	false	true
<b>isFavorite</b>	Boolean data. Ex: True	false	false	false	true
<b>isPlanGroup</b>	Boolean data. Ex: True	false	false	false	true
<b>isReusable</b>	Boolean data. Ex: True	false	false	false	true
<b>isReverseRun</b>	Boolean data. Ex: True	false	false	false	true
<b>isSystem</b>	Boolean data. Ex: True	false	false	false	true
<b>isSystemDefault</b>	Boolean data. Ex: True	false	false	false	true
<b>libkit</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true
<b>origin</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planExecuted</b>	Boolean data. Ex: True	false	false	false	true
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false
<b>planGUID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planPGM</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planStatus</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>preAnalysis</b>	Boolean data. Ex: True	true	false	false	true
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>runType</b>	Unicode string data. Ex: “Hello World”	GENS	false	false	false
<b>runname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>storageHost</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>storage_options</b>	Unicode string data. Ex: “Hello World”	A	false	false	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>username</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/ionchefplantemplatesummary/?offset=1&limit=1&  
↳format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 89  
    },  
    "objects": [  
        {  
            "adapter": null,  
            "autoName": null,  
            "categories": "Oncomine;onco_solidTumor;barcodes_8;p4o",  
            "controlSequencekitname": null,  
            "cycles": null,  
            "date": "2019-10-03T20:53:08.000623+00:00",  
            "expName": "",  
            "id": 170,  
            "irworkflow": "",  
            "isCustom_kitSettings": false,  
            "isFavorite": false,  
            "isPlanGroup": false,  
            "isReusable": true,  
            "isReverseRun": false,  
            "isSystem": true,  
            "isSystemDefault": false,  
            "libkit": null,  
            "libraryReadLength": 200,  
            "metaData": {},  
            "origin": "|5.12.1",  
            "pairedEndLibraryAdapterName": null,  
            "planDisplayedName": "Oncomine Tumor Specific Fusions",  
            "planExecuted": false,  
            "planExecutedDate": null,  
            "planGUID": "aa9309c5-5922-49f3-b901-987383b03e57",  
            "planName": "Oncomine_Tumor_Specific_Fusions",  
            "planPGM": "",  
            "planShortID": "OZT4F",  
            "planStatus": "inactive",  
            "preAnalysis": true,  
            "resource_uri": "/rundb/api/v1/ionchefplantemplatesummary/170/",  
            "reverse_primer": null,  
            "runMode": "single",  
            "runType": "AMPS_RNA",  
            "runname": null,  
            "samplePrepKitName": null,  
            "samplePrepProtocol": "",  
            "sampleTubeLabel": null,  
            "seqKitBarcode": null,  
            "storageHost": null,  
            "storage_options": "A",  
            "templatingKitBarcode": null,  
            "templatingKitName": "Ion Chef S530 V2",  
            "usePostBeadfind": false,  
            "usePreBeadfind": true,  
        }  
    ]  
}
```

```
        "username": null
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.40 Ion Chef Prep Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/ionchefprepkitinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/ionchefprepkitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/ionchefprepkitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 13
  },
  "objects": [
  ]}
```

```

    "applicationType": "",
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": 30,
    "cartridgeExpirationDayLimit": 8,
    "categories": "s5v1Kit;",
    "chipTypes": "550;560;GX7v1",
    "defaultCartridgeUsageCount": 2,
    "description": "Ion 550 Kit-Chef",
    "flowCount": 500,
    "id": 20113,
    "instrumentType": "S5",
    "isActive": true,
    "kitType": "IonChefPrepKit",
    "libraryReadLength": 200,
    "name": "Ion Chef S550 V1",
    "nucleotideType": "",
    "parts": [
        {
            "barcode": "A34540",
            "id": 20264,
            "kit": "/rundb/api/v1/kitinfo/20113/",
            "resource_uri": "/rundb/api/v1/kitpart/20264/"
        },
        {
            "barcode": "A34540C",
            "id": 20265,
            "kit": "/rundb/api/v1/kitinfo/20113/",
            "resource_uri": "/rundb/api/v1/kitpart/20265/"
        }
    ],
    "resource_uri": "/rundb/api/v1/ionchefprepkitinfo/20113/",
    "runMode": "",
    "samplePrep_instrumentType": "IC",
    "uid": "ICPREP0014"
]
}
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE

- PATCH

## 2.2.41 Ion Mesh Node Resource

Resource URL <http://mytorrentserver/rundb/api/v1/ionmeshnode/>  
Schema URL <http://mytorrentserver/rundb/api/v1/ionmeshnode/schema>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>active</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>apikey_local</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>apikey_remote</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>hostname</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	true	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>system_id</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/ionmeshnode/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 4  
    },  
    "objects": [  
        {  
            "active": true,  
            "apikey_local": "cc85a45c95e2079ecdec862bbd92a2ec904ee129",  
            "apikey_remote": "e448e2cecc9b7e9e0d6a54aeae9ad3ac588cd75e",  
            "hostname": "hawk.itw",  
            "id": 10,  
            "name": "hawk.itw",  
            "resource_uri": "/rundb/api/v1/ionmeshnode/10/",  
            "system_id": "4C4C4544-0033-4610-8043-B6C04F383432"  
        }  
    ]  
}
```

#### Allowed list HTTP methods

- PATCH
- GET
- DELETE

#### Allowed detail HTTP methods

- PATCH
- GET
- DELETE

### 2.2.42 Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/kitinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/kitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>defaultFlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam- plePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/kitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 113
  },
}
```

```

"objects": [
    {
        "applicationType": "AMPS",
        "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
        "cartridgeExpirationDayLimit": null,
        "categories": "carrierSeq",
        "chipTypes": "550",
        "defaultCartridgeUsageCount": null,
        "defaultFlowOrder": null,
        "description": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
        "flowCount": 0,
        "id": 20118,
        "instrumentType": "",
        "isActive": true,
        "kitType": "LibraryKit",
        "libraryReadLength": 0,
        "name": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
        "nucleotideType": "",
        "parts": [
            {
                "barcode": "A43587",
                "id": 20269,
                "kit": "/rundb/api/v1/kitinfo/20118/",
                "resource_uri": "/rundb/api/v1/kitpart/20269/"
            }
        ],
        "resource_uri": "/rundb/api/v1/kitinfo/20118/",
        "runMode": "",
        "samplePrep_instrumentType": "",
        "uid": "LIB0030"
    }
]
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.43 Kit Part Resource

Resource URL <http://mytorrentserver/rundb/api/v1/kitpart/>

Schema URL <http://mytorrentserver/rundb/api/v1/kitpart/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>barcode</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>kit</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/kitpart/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 253
    },
    "objects": [
        {
            "barcode": "A43587",
            "id": 20269,
            "kit": "/rundb/api/v1/kitinfo/20118/",
            "resource_uri": "/rundb/api/v1/kitpart/20269/"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

## 2.2.44 Lib Metrics Resource

Resource URL <http://mytorrentserver/rundb/api/v1/libmetrics/>

Schema URL <http://mytorrentserver/rundb/api/v1/libmetrics/schema>

### Resource Fields

field	help text	default	nullable
<b>Genome_Version</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>Index_Version</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>align_sample</b>	Integer data. Ex: 2673	n/a	false
<b>aveKeyCounts</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>cf</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>dr</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>duplicate_reads</b>	Integer data. Ex: 2673	n/a	true
<b>genome</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>genomesize</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>i100Q10_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i100Q17_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i100Q20_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i100Q47_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i100Q7_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i150Q10_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i150Q17_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i150Q20_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i150Q47_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i150Q7_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i200Q10_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i200Q17_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i200Q20_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i200Q47_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i200Q7_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i250Q10_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i250Q17_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i250Q20_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i250Q47_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i250Q7_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i300Q10_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i300Q17_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i300Q20_reads</b>	Integer data. Ex: 2673	n/a	false
<b>i300Q47_reads</b>	Integer data. Ex: 2673	n/a	false

Table 2.13 – continued from previous page

field	help text	default	nullable
i300Q7_reads	Integer data. Ex: 2673	n/a	false
i350Q10_reads	Integer data. Ex: 2673	n/a	false
i350Q17_reads	Integer data. Ex: 2673	n/a	false
i350Q20_reads	Integer data. Ex: 2673	n/a	false
i350Q47_reads	Integer data. Ex: 2673	n/a	false
i350Q7_reads	Integer data. Ex: 2673	n/a	false
i400Q10_reads	Integer data. Ex: 2673	n/a	false
i400Q17_reads	Integer data. Ex: 2673	n/a	false
i400Q20_reads	Integer data. Ex: 2673	n/a	false
i400Q47_reads	Integer data. Ex: 2673	n/a	false
i400Q7_reads	Integer data. Ex: 2673	n/a	false
i450Q10_reads	Integer data. Ex: 2673	n/a	false
i450Q17_reads	Integer data. Ex: 2673	n/a	false
i450Q20_reads	Integer data. Ex: 2673	n/a	false
i450Q47_reads	Integer data. Ex: 2673	n/a	false
i450Q7_reads	Integer data. Ex: 2673	n/a	false
i500Q10_reads	Integer data. Ex: 2673	n/a	false
i500Q17_reads	Integer data. Ex: 2673	n/a	false
i500Q20_reads	Integer data. Ex: 2673	n/a	false
i500Q47_reads	Integer data. Ex: 2673	n/a	false
i500Q7_reads	Integer data. Ex: 2673	n/a	false
i50Q10_reads	Integer data. Ex: 2673	n/a	false
i50Q17_reads	Integer data. Ex: 2673	n/a	false
i50Q20_reads	Integer data. Ex: 2673	n/a	false
i50Q47_reads	Integer data. Ex: 2673	n/a	false
i50Q7_reads	Integer data. Ex: 2673	n/a	false
i550Q10_reads	Integer data. Ex: 2673	n/a	false
i550Q17_reads	Integer data. Ex: 2673	n/a	false
i550Q20_reads	Integer data. Ex: 2673	n/a	false
i550Q47_reads	Integer data. Ex: 2673	n/a	false
i550Q7_reads	Integer data. Ex: 2673	n/a	false
i600Q10_reads	Integer data. Ex: 2673	n/a	false
i600Q17_reads	Integer data. Ex: 2673	n/a	false
i600Q20_reads	Integer data. Ex: 2673	n/a	false
i600Q47_reads	Integer data. Ex: 2673	n/a	false
i600Q7_reads	Integer data. Ex: 2673	n/a	false
<b>id</b>	Integer data. Ex: 2673		false
<b>ie</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>q10_alignments</b>	Integer data. Ex: 2673	n/a	false
<b>q10_longest_alignment</b>	Integer data. Ex: 2673	n/a	false
<b>q10_mapped_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>q10_mean_alignment_length</b>	Integer data. Ex: 2673	n/a	false
<b>q17_alignments</b>	Integer data. Ex: 2673	n/a	false
<b>q17_longest_alignment</b>	Integer data. Ex: 2673	n/a	false
<b>q17_mapped_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>q17_mean_alignment_length</b>	Integer data. Ex: 2673	n/a	false
<b>q20_alignments</b>	Integer data. Ex: 2673	n/a	false
<b>q20_longest_alignment</b>	Integer data. Ex: 2673	n/a	false
<b>q20_mapped_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false

Table 2.13 – continued from previous page

field	help text	default	nullable
<b>q20_mean_alignment_length</b>	Integer data. Ex: 2673	n/a	false
<b>q47_alignments</b>	Integer data. Ex: 2673	n/a	false
<b>q47_longest_alignment</b>	Integer data. Ex: 2673	n/a	false
<b>q47_mapped_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>q47_mean_alignment_length</b>	Integer data. Ex: 2673	n/a	false
<b>q7_alignments</b>	Integer data. Ex: 2673	n/a	false
<b>q7_longest_alignment</b>	Integer data. Ex: 2673	n/a	false
<b>q7_mapped_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>q7_mean_alignment_length</b>	Integer data. Ex: 2673	n/a	false
<b>raw_accuracy</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>report</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>sysSNR</b>	Floating point numeric data. Ex: 26.73	n/a	false
<b>totalNumReads</b>	Integer data. Ex: 2673	n/a	false
<b>total_mapped_reads</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>total_mapped_target_bases</b>	Unicode string data. Ex: “Hello World”	n/a	false

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/libmetrics/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 6
    },
    "objects": [
        {
            "Genome_Version": "1",
            "Index_Version": "tmap-f3",
            "align_sample": 0,
            "aveKeyCounts": 80,
            "cf": 0.902389362454414,
            "dr": 0.0903240870684385,
            "duplicate_reads": null,
            "genome": "E. coli DH10B",
            "genomesize": "4686137",
            "i100Q10_reads": 1180,
            "i100Q17_reads": 1144,
            "i100Q20_reads": 1086,
            "i100Q47_reads": 882,
            "i100Q7_reads": 1181,
            "i150Q10_reads": 0,
            "i150Q17_reads": 0,
            "i150Q20_reads": 0,
            "i150Q47_reads": 0,
            "i150Q7_reads": 0,
            "i200Q10_reads": 0,
            "i200Q17_reads": 0,
            "i200Q20_reads": 0,
            "i200Q47_reads": 0,
            "i200Q7_reads": 0
        }
    ]
}
```

```
"i250Q10_reads": 0,  
"i250Q17_reads": 0,  
"i250Q20_reads": 0,  
"i250Q47_reads": 0,  
"i250Q7_reads": 0,  
"i300Q10_reads": 0,  
"i300Q17_reads": 0,  
"i300Q20_reads": 0,  
"i300Q47_reads": 0,  
"i300Q7_reads": 0,  
"i350Q10_reads": 0,  
"i350Q17_reads": 0,  
"i350Q20_reads": 0,  
"i350Q47_reads": 0,  
"i350Q7_reads": 0,  
"i400Q10_reads": 0,  
"i400Q17_reads": 0,  
"i400Q20_reads": 0,  
"i400Q47_reads": 0,  
"i400Q7_reads": 0,  
"i450Q10_reads": 0,  
"i450Q17_reads": 0,  
"i450Q20_reads": 0,  
"i450Q47_reads": 0,  
"i450Q7_reads": 0,  
"i500Q10_reads": 0,  
"i500Q17_reads": 0,  
"i500Q20_reads": 0,  
"i500Q47_reads": 0,  
"i500Q7_reads": 0,  
"i50Q10_reads": 1475,  
"i50Q17_reads": 1444,  
"i50Q20_reads": 1355,  
"i50Q47_reads": 1284,  
"i50Q7_reads": 1476,  
"i550Q10_reads": 0,  
"i550Q17_reads": 0,  
"i550Q20_reads": 0,  
"i550Q47_reads": 0,  
"i550Q7_reads": 0,  
"i600Q10_reads": 0,  
"i600Q17_reads": 0,  
"i600Q20_reads": 0,  
"i600Q47_reads": 0,  
"i600Q7_reads": 0,  
"id": 6,  
"ie": 1.01652704179287,  
"q10_alignments": 1515,  
"q10_longest_alignment": 149,  
"q10_mapped_bases": "157144",  
"q10_mean_alignment_length": 103,  
"q17_alignments": 1483,  
"q17_longest_alignment": 141,  
"q17_mapped_bases": "152775",  
"q17_mean_alignment_length": 103,  
"q20_alignments": 1450,  
"q20_longest_alignment": 141,  
"q20_mapped_bases": "145395",
```

```
"q20_mean_alignment_length": 100,  
"q47_alignments": 1409,  
"q47_longest_alignment": 141,  
"q47_mapped_bases": "134360",  
"q47_mean_alignment_length": 95,  
"q7_alignments": 1519,  
"q7_longest_alignment": 149,  
"q7_mapped_bases": "157362",  
"q7_mean_alignment_length": 103,  
"raw_accuracy": 99.5,  
"report": "/rundb/api/v1/results/6/",  
"resource_uri": "/rundb/api/v1/libmetrics/6/",  
"sysSNR": 23.2850075415905,  
"totalNumReads": 1526,  
"total_mapped_reads": "1521",  
"total_mapped_target_bases": "157392"  
}  
]  
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.45 Library Key Resource

Resource URL <http://mytorrentserver/rundb/api/v1/librarykey/>  
Schema URL <http://mytorrentserver/rundb/api/v1/librarykey/schema/>

## Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>direction</b>	Unicode string data. Ex: “Hello World”	For-ward	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isDefault</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”	single	false	false	true	false	string
<b>sequence</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/librarykey/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 3
    },
    "objects": [
        {
            "description": "Ion TCAGT",
            "direction": "Forward",
            "id": 3,
            "isDefault": false,
            "name": "Ion TCAGT",
            "resource_uri": "/rundb/api/v1/librarykey/3/",
            "runMode": "single",
            "sequence": "TCAGT"
        }
    ]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### 2.2.46 Library Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/librarykitinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/librarykitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>samplePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/librarykitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 29
  },
  "objects": [
  ]}
```

```

    "applicationType": "AMPS",
    "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
    "cartridgeExpirationDayLimit": null,
    "categories": "carrierSeq",
    "chipTypes": "550",
    "defaultCartridgeUsageCount": null,
    "description": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
    "flowCount": 0,
    "id": 20118,
    "instrumentType": "",
    "isActive": true,
    "kitType": "LibraryKit",
    "libraryReadLength": 0,
    "name": "Ion Torrent CarrierSeq ECS Kit with Ion 550 Chips",
    "nucleotideType": "",
    "parts": [
        {
            "barcode": "A43587",
            "id": 20269,
            "kit": "/rundb/api/v1/kitinfo/20118/",
            "resource_uri": "/rundb/api/v1/kitpart/20269/"
        }
    ],
    "resource_uri": "/rundb/api/v1/librarykitinfo/20118/",
    "runMode": "",
    "samplePrep_instrumentType": "",
    "uid": "LIB0030"
]
}
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.47 Library Kit Part Resource

Resource URL <http://mytorrentserver/rundb/api/v1/librarykitpart/>  
Schema URL <http://mytorrentserver/rundb/api/v1/librarykitpart/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>barcode</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>kit</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>re-resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/librarykitpart/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 37  
    },  
    "objects": [  
        {  
            "barcode": "A43587",  
            "id": 20269,  
            "kit": "/rundb/api/v1/kitinfo/20118/",  
            "resource_uri": "/rundb/api/v1/librarykitpart/20269/"  
        }  
    ]  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

## 2.2.48 Location Resource

Resource URL <http://mytorrentserver/rundb/api/v1/location/>

Schema URL <http://mytorrentserver/rundb/api/v1/location/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>comments</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultlocation</b>	Only one location can be the default	false	false	false	true	false	boolean
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/location/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 2
    },
    "objects": [
        {
            "comments": "A location which will not be assigned to any File Servers so that Rigs assigned to this location will not be treated as valid Rigs when Crawler attempts to find new raw data directories. This is so that we do not have to delete a Rig from the Rigs table but still want to prevent new Experiments from appearing associated with the Rig.",
            "defaultlocation": false,
            "id": 2,
            "name": "Disabled",
            "resource_uri": "/rundb/api/v1/location/2/"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.49 Log Resource

Resource URL <http://mytorrentserver/rundb/api/v1/log/>  
Schema URL <http://mytorrentserver/rundb/api/v1/log/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>text</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>timeStamp</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>upload</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related

### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": null,  
        "offset": 0,  
        "previous": null,  
        "total_count": 0  
    },  
}
```

```

    "objects": []
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.50 Message Resource

Resource URL <http://mytorrentserver/rundb/api/v1/message/>

Schema URL <http://mytorrentserver/rundb/api/v1/message/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>body</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>expires</b>	Unicode string data. Ex: “Hello World”	read	false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>level</b>	Integer data. Ex: 2673	20	false	false	false	false	integer
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>route</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>status</b>	Unicode string data. Ex: “Hello World”	un-read	false	false	true	false	string
<b>tags</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>time</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": null,  
        "offset": 0,  
        "previous": null,  
        "total_count": 0  
    },  
    "objects": []  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.51 Monitor Data Resource

Resource URL <http://mytorrentserver/rundb/api/v1/monitordata/>

Schema URL <http://mytorrentserver/rundb/api/v1/monitordata/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>treeDat</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 0
    },
    "objects": []
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.52 Monitor Result Resource

Resource URL <http://mytorrentserver/rundb/api/v1/monitorresult/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/monitorresult/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>analysis-metrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>autoExempt</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>bar-codeId</b>	Unicode string data. Ex: "Hello World"	n/a	true	true	false	false	string
<b>eas</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>i18nstatus</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>libmetrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>library</b>	Unicode string data. Ex: "Hello World"	n/a	true	true	false	false	string
<b>pro-cessed-flows</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	re-related
<b>quality-metrics</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>re-portLink</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>report-Status</b>	Unicode string data. Ex: "Hello World"	Nothing	true	false	false	false	string
<b>repre-sentative</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>result-sName</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>status</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>timeS-tamp</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": null,
    "offset": 0,
    "previous": null,
```

```

        "total_count": 0
    },
    "objects": []
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.53 Network Resource

Resource URL <http://mytorrentserver/rundb/api/v1/network/>

Schema URL <http://mytorrentserver/rundb/api/v1/network/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>eth_device</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	boolean
<b>extern-al_ip</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>intern-al_ip</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>route</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	boolean

### Example Response

```
{  
    "eth_device": true,  
    "external_ip": "12.27.71.34",  
    "internal_ip": "10.45.2.119",  
    "route": true  
}
```

### Allowed list HTTP methods

- GET

### Allowed detail HTTP methods

None

## 2.2.54 Onetouch Plan Template Resource

Resource URL <http://mytorrentserver/rundb/api/v1/onetouchplantemplate/>

Schema URL <http://mytorrentserver/rundb/api/v1/onetouchplantemplate/schema/>

### Resource Fields

field	help text
<b>adapter</b>	Unicode string data. Ex: “Hello World”
<b>applicationCategoryDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>applicationGroupDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>autoAnalyze</b>	Boolean data. Ex: True
<b>autoName</b>	Unicode string data. Ex: “Hello World”
<b>barcodeId</b>	Unicode string data. Ex: “Hello World”
<b>barcodedSamples</b>	Unicode string data. Ex: “Hello World”
<b>base_recalibration_mode</b>	Unicode string data. Ex: “Hello World”
<b>bedfile</b>	Unicode string data. Ex: “Hello World”
<b>categories</b>	Unicode string data. Ex: “Hello World”
<b>chefInfo</b>	A dictionary of data. Ex: {‘price’: 26.73, ‘name’: ‘Daniel’ }
<b>childPlans</b>	A list of data. Ex: [‘abc’, 26.73, 8]
<b>chipBarcode</b>	Unicode string data. Ex: “Hello World”
<b>chipType</b>	Unicode string data. Ex: “Hello World”
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>cycles</b>	Integer data. Ex: 2673
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>earlyDatFileDeletion</b>	Boolean data. Ex: True
<b>endBarcodeKitName</b>	Unicode string data. Ex: “Hello World”
<b>expName</b>	Unicode string data. Ex: “Hello World”
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>flows</b>	Integer data. Ex: 2673

Table 2.14 – continued from previous page

field	help text
<b>flowsInOrder</b>	Unicode string data. Ex: “Hello World”
<b>forward3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>id</b>	Integer data. Ex: 2673
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isDuplicateReads</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>library</b>	Unicode string data. Ex: “Hello World”
<b>libraryKey</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepType</b>	Unicode string data. Ex: “Hello World”
<b>libraryPrepTypeDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>librarykitname</b>	Unicode string data. Ex: “Hello World”
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: “Hello World”
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>notes</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>platform</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>realign</b>	Boolean data. Ex: True
<b>regionfile</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>reverselibrarykey</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”

Table 2.14 – continued from previous page

field	help text
<b>sample</b>	Unicode string data. Ex: “Hello World”
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>sampleGroupingName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSetDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>selectedPlugins</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>sequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>sseBedFile</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”
<b>tfKey</b>	Unicode string data. Ex: “Hello World”
<b>usePostBeadfind</b>	Boolean data. Ex: True
<b>usePreBeadfind</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: “Hello World”
<b>variantfrequency</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/onetouchplantemplate/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 36
    },
    "objects": [
        {
            "adapter": null,
            "alignmentargs": "",
            "analysisargs": "",
            "applicationCategoryDisplayedName": "",
            "applicationGroup": "/rundb/api/v1/applicationgroup/6/",
            "applicationGroupDisplayedName": "Pharmacogenomics",
            "autoAnalyze": true,
            "autoName": null,
            "barcodeId": "IonXpress",
            "barcodedSamples": {},
            "base_recalibration_mode": "standard_recal",
            "basecallerargs": "",
            "beadfindargs": "",
            "bedfile": "/results/uploads/BED/5/hg19/unmerged/detail/PGx.20150728.
            ↪designed.bed",
            "calibrateargs": "",
            "categories": ""
        }
    ]
}
```

```

"chefInfo": {},
"childPlans": [],
"chipBarcode": "",
"chipType": "",
"controlSequencekitname": "",
"custom_args": false,
"cycles": null,
"date": "2018-02-08T19:41:44.000698+00:00",
"earlyDatFileDeletion": false,
"endBarcodeKitName": "",
"expName": "",
"experiment": "/rundb/api/v1/experiment/122/",
"flows": 500,
"flowsInOrder": "",
"forward3primeadapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
"id": 130,
"ionstatsargs": "",
"irworkflow": "",
"isCustom_kitSettings": false,
"isDuplicateReads": false,
"isFavorite": false,
"isPlanGroup": false,
"isReusable": true,
"isReverseRun": false,
"isSystem": false,
"isSystemDefault": false,
"libkit": null,
"library": "hg19",
"libraryKey": "TCAG",
"libraryPrepType": "",
"libraryPrepTypeDisplayedName": "",
"libraryReadLength": 0,
"librarykitname": "Ion AmpliSeq 2.0 Library Kit",
"metaData": {},
"mixedTypeRNA_hotSpotRegionBedFile": null,
"mixedTypeRNA_reference": null,
"mixedTypeRNA_targetRegionBedFile": null,
"notes": "",
"origin": "ampliseq.com|5.8.0",
"pairedEndLibraryAdapterName": "",
"parentPlan": null,
"planDisplayedName": "PGx Research Panel",
"planExecuted": false,
"planExecutedDate": null,
"planGUID": "7489c32d-d3ed-4cc1-a7a2-e59b819ea395",
"planName": "PGx_Research_Panel",
"planPGM": null,
"planShortID": "009C5",
"planStatus": "planned",
"platform": "PGM",
"preAnalysis": true,
"prebasecallerargs": "",
"prethumbnailbasecallerargs": "",
"project": "",
"projects": [],
"qcValues": [],
"realign": false,
"regionfile": "/results/uploads/BED/15/hg19/unmerged/detail/PGx.20180131.
→hotspots.bed",

```

```
"resource_uri": "/rundb/api/v1/onetouchplantemplate/130/",
"reverse3primeadapter": "",
"reverse_primer": null,
"reverselibrarykey": "",
"runMode": "",
"runType": "AMPS",
"runname": null,
"sample": "",
"sampleDisplayedName": "",
"sampleGrouping": null,
"sampleGroupingName": "",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSetDisplayedName": "",
"sampleSets": [],
"sampleTubeLabel": null,
"selectedPlugins": {
    "variantCaller": {
        "ampliseqVariantCallerConfig": {
            "freebayes": {
                "allow_complex": 0,
                "allow_indels": 1,
                "allow_mnps": 1,
                "allow_snps": 1,
                "gen_min_alt_allele_freq": "0.15",
                "gen_min_coverage": 10,
                "gen_min_indel_alt_allele_freq": "0.15",
                "min_mapping_qv": 4,
                "read_max_mismatch_fraction": 1,
                "read_snp_limit": 10
            },
            "long_indel_assembler": {
                "kmer_len": 19,
                "max_hp_length": 8,
                "min_indel_size": 4,
                "min_var_count": 5,
                "min_var_freq": "0.15",
                "output_mnv": 0,
                "relative_strand_bias": "0.8",
                "short_suffix_match": 5
            }
        },
        "meta": {
            "built_in": true,
            "compatibility": {
                "panel": "/rundb/api/v1/contentupload/15/"
            },
            "configuration": "PGx_germline_low_stringency",
            "name": "PGx - Germ Line - Customized parameters",
            "repository_id": "",
            "tooltip": "Panel-optimized parameters from AmpliSeq.com",
            "ts_version": "5.0",
            "tvcargs": "tvc --use-input-allele-only",
            "user_selections": {
                "chip": "pgm",
                "frequency": "germline",
                "library": "ampliseq",
                "panel": "/rundb/api/v1/contentupload/15/"
            }
        }
    }
}
```

```

        },
        "torrent_variant_caller": {
            "data_quality_stringency": "6.5",
            "do_mnp_realignment": 1,
            "do_snp_realignment": 1,
            "downsample_to_coverage": 4000,
            "filter_deletion_predictions": "0.2",
            "filter_insertion_predictions": "0.4",
            "filter_unusual_predictions": "0.7",
            "heavy_tailed": 3,
            "hotspot_min_allele_freq": "0.1",
            "hotspot_min_cov_each_strand": 3,
            "hotspot_min_coverage": 6,
            "hotspot_min_variant_score": 4,
            "hotspot_strand_bias": "0.98",
            "hotspot_strand_bias_pval": "0.01",
            "hp_max_length": 10,
            "indel_as_hpindel": 0,
            "indel_min_allele_freq": "0.1",
            "indel_min_cov_each_strand": 5,
            "indel_min_coverage": 15,
            "indel_min_variant_score": 10,
            "indel_strand_bias": "0.85",
            "indel_strand_bias_pval": 1,
            "mnp_min_allele_freq": "0.1",
            "mnp_min_cov_each_strand": 0,
            "mnp_min_coverage": 6,
            "mnp_min_variant_score": 10,
            "mnp_strand_bias": "0.95",
            "mnp_strand_bias_pval": 1,
            "outlier_probability": "0.01",
            "position_bias": "0.75",
            "position_bias_pval": "0.05",
            "position_bias_ref_fraction": "0.05",
            "prediction_precision": 1,
            "process_input_positions_only": 1,
            "realignment_threshold": 1,
            "snp_min_allele_freq": "0.1",
            "snp_min_cov_each_strand": 0,
            "snp_min_coverage": 6,
            "snp_min_variant_score": 10,
            "snp_strand_bias": "0.95",
            "snp_strand_bias_pval": 1,
            "suppress_recalibration": 0,
            "use_position_bias": 0
        }
    },
    "features": [],
    "id": 36,
    "name": "variantCaller",
    "userInput": {
        "freebayes": {
            "allow_complex": 0,
            "allow_indels": 1,
            "allow_mnps": 1,
            "allow_snps": 1,
            "gen_min_alt_allele_freq": "0.15",
            "gen_min_coverage": 10,

```

```
        "gen_min_indel_alt_allele_freq": "0.15",
        "min_mapping_qv": 4,
        "read_max_mismatch_fraction": 1,
        "read_snp_limit": 10
    },
    "long_indel_assembler": {
        "kmer_len": 19,
        "max_hp_length": 8,
        "min_indel_size": 4,
        "min_var_count": 5,
        "min_var_freq": "0.15",
        "output_mnv": 0,
        "relative_strand_bias": "0.8",
        "short_suffix_match": 5
    },
    "meta": {
        "built_in": true,
        "compatibility": {
            "panel": "/rundb/api/v1/contentupload/15/"
        },
        "configuration": "PGx_germline_low_stringency",
        "name": "PGx - Germ Line - Customized parameters",
        "repository_id": "",
        "tooltip": "Panel-optimized parameters from AmpliSeq.com",
        "ts_version": "5.0",
        "tvcargs": "tvc --use-input-allele-only",
        "user_selections": {
            "chip": "pgm",
            "frequency": "germline",
            "library": "ampliseq",
            "panel": "/rundb/api/v1/contentupload/15/"
        }
    },
    "torrent_variant_caller": {
        "data_quality_stringency": "6.5",
        "do_mnp_realignment": 1,
        "do.snp_realignment": 1,
        "downsample_to_coverage": 4000,
        "filter_deletion_predictions": "0.2",
        "filter_insertion_predictions": "0.4",
        "filter_unusual_predictions": "0.7",
        "heavy_tailed": 3,
        "hotspot_min_allele_freq": "0.1",
        "hotspot_min_cov_each_strand": 3,
        "hotspot_min_coverage": 6,
        "hotspot_min_variant_score": 4,
        "hotspot_strand_bias": "0.98",
        "hotspot_strand_bias_pval": "0.01",
        "hp_max_length": 10,
        "indel_as_hpindel": 0,
        "indel_min_allele_freq": "0.1",
        "indel_min_cov_each_strand": 5,
        "indel_min_coverage": 15,
        "indel_min_variant_score": 10,
        "indel_strand_bias": "0.85",
        "indel_strand_bias_pval": 1,
        "mnp_min_allele_freq": "0.1",
        "mnp_min_cov_each_strand": 0,
```

```

        "mnp_min_coverage": 6,
        "mnp_min_variant_score": 10,
        "mnp_strand_bias": "0.95",
        "mnp_strand_bias_pval": 1,
        "outlier_probability": "0.01",
        "position_bias": "0.75",
        "position_bias_pval": "0.05",
        "position_bias_ref_fraction": "0.05",
        "prediction_precision": 1,
        "process_input_positions_only": 1,
        "realignment_threshold": 1,
        "snp_min_allele_freq": "0.1",
        "snp_min_cov_each_strand": 0,
        "snp_min_coverage": 6,
        "snp_min_variant_score": 10,
        "snp_strand_bias": "0.95",
        "snp_strand_bias_pval": 1,
        "suppress_recalibration": 0,
        "use_position_bias": 0
    }
},
"version": "5.8.0.19"
}
},
"seqKitBarcode": null,
"sequencekitname": "IonPGMHiQ",
"sseBedFile": "",
"storageHost": null,
"storage_options": "A",
"templatingKitBarcode": null,
"templatingKitName": "Ion PGM Hi-Q OT2 Kit - 200",
"tfKey": "ATCG",
"thumbnailalignmentargs": "",
"thumbnailanalysisargs": "",
"thumbnailbasecallerargs": "",
"thumbnailbeadfindargs": "",
"thumbnailcalibrateargs": "",
"thumbnaillionstatsargs": "",
"usePostBeadfind": true,
"usePreBeadfind": true,
"username": "ionuser",
"variantfrequency": ""
}
]
}
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.55 Onetouch Plan Template Summary Resource

Resource URL `http://mytorrentserver/rundb/api/v1/onetouchplantemplatesummary/`

Schema URL

`http://mytorrentserver/rundb/api/v1/onetouchplantemplatesummary/schema/`

### Resource Fields

field	help text	default	nullable	readonly	bl
<b>origin</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>isReverseRun</b>	Boolean data. Ex: True	false	false	false	true
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>storage_options</b>	Unicode string data. Ex: “Hello World”	A	false	false	false
<b>preAnalysis</b>	Boolean data. Ex: True	true	false	false	true
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planStatus</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>isCustom_kitSettings</b>	Boolean data. Ex: True	false	false	false	true
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>id</b>	Integer data. Ex: 2673		false	false	true
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true
<b>isFavorite</b>	Boolean data. Ex: True	false	false	false	true
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>isPlanGroup</b>	Boolean data. Ex: True	false	false	false	true
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>runType</b>	Unicode string data. Ex: “Hello World”	GENS	false	false	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planPGM</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>isSystemDefault</b>	Boolean data. Ex: True	false	false	false	true
<b>autoName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>isReusable</b>	Boolean data. Ex: True	false	false	false	true
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false
<b>isSystem</b>	Boolean data. Ex: True	false	false	false	true

Table 2.15 – continued from previous page

field	help text	default	nullable	readonly	bla
<b>libkit</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>planName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>adapter</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>planExecuted</b>	Boolean data. Ex: True	false	false	false	true
<b>username</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>storageHost</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>expName</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false
<b>runname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>planGUID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>cycles</b>	Integer data. Ex: 2673	n/a	true	false	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false

## Example Response

```
{
    "meta": {
        "previous": null,
        "total_count": 37,
        "offset": 0,
        "limit": 1,
        "next": "/rundb/api/v1/onetouchplantemplatesummary/?offset=1&limit=1&
→format=json"
    },
    "objects": [
        {
            "origin": "ampliseq.com|5.8.0",
            "isReverseRun": false,
            "planDisplayedName": "PGx Research Panel",
            "storage_options": "A",
            "preAnalysis": true,
            "planShortID": "009C5",
            "planStatus": "planned",
            "runMode": "",
            "isCustom_kitSettings": false,
            "sampleTubeLabel": null,
            "planExecutedDate": null,
            "samplePrepKitName": null,
            "reverse_primer": null,
            "seqKitBarcode": null,
            "id": 130,
            "metaData": {},
            "isFavorite": false,
            "samplePrepProtocol": "",
            "isPlanGroup": false,
            "templatingKitName": "Ion PGM Hi-Q OT2 Kit - 200",
            "runType": "AMPS",
            "templatingKitBarcode": null,
        }
    ]
}
```

```
        "planPGM": null,
        "isSystemDefault": false,
        "autoName": null,
        "isReusable": true,
        "controlSequencekitname": "",
        "date": "2018-02-08T19:41:44.000698+00:00",
        "isSystem": false,
        "libkit": null,
        "categories": "",
        "planName": "PGx_Research_Panel",
        "pairedEndLibraryAdapterName": "",
        "adapter": null,
        "irworkflow": "",
        "planExecuted": false,
        "username": "ionuser",
        "usePostBeadfind": true,
        "storageHost": null,
        "expName": "",
        "libraryReadLength": 0,
        "runname": null,
        "usePreBeadfind": true,
        "planGUID": "7489c32d-d3ed-4cc1-a7a2-e59b819ea395",
        "cycles": null,
        "resource_uri": "/rundb/api/v1/onetouchplantemplatesummary/130/"
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.56 Planned Experiment Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plannedexperiment/>

Schema URL <http://mytorrentserver/rundb/api/v1/plannedexperiment/schema/>

## Resource Fields

field	help text
<b>adapter</b>	Unicode string data. Ex: "Hello World"
<b>applicationCategoryDisplayedName</b>	Unicode string data. Ex: "Hello World"
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>applicationGroupDisplayedName</b>	Unicode string data. Ex: "Hello World"
<b>autoAnalyze</b>	Boolean data. Ex: True
<b>autoName</b>	Unicode string data. Ex: "Hello World"
<b>barcodeId</b>	Unicode string data. Ex: "Hello World"
<b>barcodedSamples</b>	Unicode string data. Ex: "Hello World"
<b>base_recalibration_mode</b>	Unicode string data. Ex: "Hello World"
<b>bedfile</b>	Unicode string data. Ex: "Hello World"
<b>categories</b>	Unicode string data. Ex: "Hello World"
<b>chefInfo</b>	A dictionary of data. Ex: { 'price': 26.73, 'name': 'Daniel' }
<b>childPlans</b>	A list of data. Ex: [ 'abc', 26.73, 8 ]
<b>chipBarcode</b>	Unicode string data. Ex: "Hello World"
<b>chipType</b>	Unicode string data. Ex: "Hello World"
<b>controlSequencekitname</b>	Unicode string data. Ex: "Hello World"
<b>cycles</b>	Integer data. Ex: 2673
<b>date</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"
<b>earlyDatFileDeletion</b>	Boolean data. Ex: True
<b>endBarcodeKitName</b>	Unicode string data. Ex: "Hello World"
<b>expName</b>	Unicode string data. Ex: "Hello World"
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>flows</b>	Integer data. Ex: 2673
<b>flowsInOrder</b>	Unicode string data. Ex: "Hello World"
<b>forward3primeadapter</b>	Unicode string data. Ex: "Hello World"
<b>id</b>	Integer data. Ex: 2673
<b>irworkflow</b>	Unicode string data. Ex: "Hello World"
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isDuplicateReads</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: "Hello World"
<b>library</b>	Unicode string data. Ex: "Hello World"
<b>libraryKey</b>	Unicode string data. Ex: "Hello World"
<b>libraryPrepType</b>	Unicode string data. Ex: "Hello World"
<b>libraryPrepTypeDisplayedName</b>	Unicode string data. Ex: "Hello World"
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>librarykitname</b>	Unicode string data. Ex: "Hello World"
<b>metaData</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_hotSpotRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_reference</b>	Unicode string data. Ex: "Hello World"
<b>mixedTypeRNA_targetRegionBedFile</b>	Unicode string data. Ex: "Hello World"
<b>notes</b>	Unicode string data. Ex: "Hello World"
<b>origin</b>	Unicode string data. Ex: "Hello World"

Table 2.16 – continued from previous page

field	help text
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>platform</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>realign</b>	Boolean data. Ex: True
<b>regionfile</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse3primeadapter</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>reverselibrarykey</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sample</b>	Unicode string data. Ex: “Hello World”
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>sampleGroupName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSetDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resources.
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>selectedPlugins</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>sequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>sseBedFile</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”
<b>tfKey</b>	Unicode string data. Ex: “Hello World”
<b>usePostBeadfnd</b>	Boolean data. Ex: True
<b>usePreBeadfnd</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: “Hello World”
<b>variantfrequency</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/plannedexperiment/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 135
    },
    "objects": [
        {
            "adapter": null,
            "alignmentargs": "",
            "analysisargs": "",
            "applicationCategoryDisplayedName": "Oncology - Solid Tumor",
            "applicationGroup": "/rundb/api/v1/applicationgroup/5/",
            "applicationGroupDisplayedName": "DNA and Fusions (Separate Libraries)",
            "autoAnalyze": true,
            "autoName": null,
            "barcodeId": "Ion Dual Barcode Kit 1-96",
            "barcodedSamples": {},
            "base_recalibration_mode": "standard_recal",
            "basecallerargs": "",
            "beadfindargs": "",
            "bedfile": "",
            "calibrateargs": "",
            "categories": "Oncomine;onco_solidTumor;barcodes_8;p4o",
            "chefInfo": {},
            "childPlans": [],
            "chipBarcode": "",
            "chipType": "530",
            "controlSequencekitname": null,
            "custom_args": false,
            "cycles": null,
            "date": "2019-10-03T20:53:08.000623+00:00",
            "earlyDatFileDeletion": false,
            "endBarcodeKitName": "",
            "expName": "",
            "experiment": "/rundb/api/v1/experiment/163/",
            "flows": 500,
            "flowsInOrder": "",
            "forward3primeadapter": "ATCACCGACTGCCCATAGAGAGGCTGAGAC",
            "id": 170,
            "ionstatsargs": "",
            "irworkflow": "",
            "isCustom_kitSettings": false,
            "isDuplicateReads": false,
            "isFavorite": false,
            "isPlanGroup": false,
            "isReusable": true,
            "isReverseRun": false,
            "isSystem": true,
            "isSystemDefault": false,
            "libkit": null,
            "library": "",
            "libraryKey": "TCAG",
            "libraryPrepType": ""
        }
    ]
}
```

```
"libraryPrepTypeDisplayedName": "",  
"libraryReadLength": 200,  
"librarykitname": "Ion AmpliSeq Library Kit Plus",  
"metaData": {},  
"mixedTypeRNA_hotSpotRegionBedFile": null,  
"mixedTypeRNA_reference": null,  
"mixedTypeRNA_targetRegionBedFile": null,  
"notes": "",  
"origin": "|5.12.1",  
"pairedEndLibraryAdapterName": null,  
"parentPlan": null,  
"planDisplayedName": "Oncomine Tumor Specific Fusions",  
"planExecuted": false,  
"planExecutedDate": null,  
"planGUID": "aa9309c5-5922-49f3-b901-987383b03e57",  
"planName": "Oncomine_Tumor_Specific_Fusions",  
"planPGM": "",  
"planShortID": "OZT4F",  
"planStatus": "inactive",  
"platform": "S5",  
"preAnalysis": true,  
"prebasecallerargs": "",  
"prethumbnailbasecallerargs": "",  
"project": "",  
"projects": [],  
"qcValues": [  
    {  
        "id": 487,  
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",  
        "qcType": {  
            "defaultThreshold": 30,  
            "description": "",  
            "id": 1,  
            "maxThreshold": 100,  
            "minThreshold": 0,  
            "qcName": "Bead Loading (%)",  
            "resource_uri": "/rundb/api/v1/qctype/1/"  
        },  
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/487/",  
        "threshold": 30  
    },  
    {  
        "id": 488,  
        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",  
        "qcType": {  
            "defaultThreshold": 30,  
            "description": "",  
            "id": 2,  
            "maxThreshold": 100,  
            "minThreshold": 1,  
            "qcName": "Key Signal (1-100)",  
            "resource_uri": "/rundb/api/v1/qctype/2/"  
        },  
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/488/",  
        "threshold": 30  
    },  
    {  
        "id": 489,
```

```

        "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
        "qcType": {
            "defaultThreshold": 30,
            "description": "",
            "id": 3,
            "maxThreshold": 100,
            "minThreshold": 0,
            "qcName": "Usable Sequence (%)",
            "resource_uri": "/rundb/api/v1/qctype/3/"
        },
        "resource_uri": "/rundb/api/v1/plannedexperimentqc/489/",
        "threshold": 30
    }
],
"realign": false,
"regionfile": "",
"resource_uri": "/rundb/api/v1/plannedexperiment/170/",
"reverse3primeadapter": "",
"reverse_primer": null,
"reverselibrarykey": "",
"runMode": "single",
"runType": "AMPS_RNA",
"runname": null,
"sample": "",
"sampleDisplayedName": "",
"sampleGrouping": "/rundb/api/v1/samplegroupotype_cv/7/",
"sampleGroupingName": "Single Fusions",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSetDisplayedName": "",
"sampleSets": [],
"sampleTubeLabel": null,
"selectedPlugins": {},
"seqKitBarcode": null,
"sequencekitname": "Ion S5 Sequencing Kit",
"sseBedFile": "",
"storageHost": null,
"storage_options": "A",
"templatingKitBarcode": null,
"templatingKitName": "Ion Chef S530 V2",
"tfKey": "ATCG",
"thumbnailalignmentargs": "",
"thumbnailanalysisargs": "",
"thumbnailbasecallerargs": "",
"thumbnailbeadfindargs": "",
"thumbnailcalibrateargs": "",
"thumbnaillionstatsargs": "",
"usePostBeadfind": false,
"usePreBeadfind": true,
"username": null,
"variantfrequency": ""
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.57 Planned Experiment Db Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plannedexperimentdb/>

Schema URL <http://mytorrentserver/rundb/api/v1/plannedexperimentdb/schema/>

### Resource Fields

field	help text
<b>adapter</b>	Unicode string data. Ex: “Hello World”
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>autoName</b>	Unicode string data. Ex: “Hello World”
<b>categories</b>	Unicode string data. Ex: “Hello World”
<b>childPlans</b>	A list of data. Ex: [’abc’, 26.73, 8]
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>cycles</b>	Integer data. Ex: 2673
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>expName</b>	Unicode string data. Ex: “Hello World”
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>id</b>	Integer data. Ex: 2673
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True

Table 2.17 – continued from previous page

field	help text
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>parentPlan</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>project</b>	Unicode string data. Ex: “Hello World”
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.
<b>qcValues</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sampleGrouping</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”
<b>usePostBeadfind</b>	Boolean data. Ex: True
<b>usePreBeadfind</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: “Hello World”

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/plannedexperimentdb/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 135
  },
  "objects": [
    {
      "adapter": null,
      "id": "12345678901234567890123456789012",
      "label": "Planned Experiment 12345678901234567890123456789012"
    }
  ]
}
```

```
"applicationGroup": "/rundb/api/v1/applicationgroup/5/",
"autoName": null,
"categories": "Oncomine;onco_solidTumor;barcodes_8;p4o",
"childPlans": [],
"controlSequencekitname": null,
"cycles": null,
"date": "2019-10-03T20:53:08.000623+00:00",
"expName": "",
"experiment": "/rundb/api/v1/experiment/163/",
"id": 170,
"irworkflow": "",
"isCustom_kitSettings": false,
"isFavorite": false,
"isPlanGroup": false,
"isReusable": true,
"isReverseRun": false,
"isRequired": true,
"isSystemDefault": false,
"libkit": null,
"libraryReadLength": 200,
"metaData": {},
"origin": "|5.12.1",
"pairedEndLibraryAdapterName": null,
"parentPlan": null,
"planDisplayedName": "Oncomine Tumor Specific Fusions",
"planExecuted": false,
"planExecutedDate": null,
"planGUID": "aa9309c5-5922-49f3-b901-987383b03e57",
"planName": "Oncomine_Tumor_Specific_Fusions",
"planPGM": "",
"planShortID": "OZT4F",
"planStatus": "inactive",
"preAnalysis": true,
"project": "",
"projects": [],
"qcValues": [
  {
    "id": 487,
    "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
    "qcType": {
      "defaultThreshold": 30,
      "description": "",
      "id": 1,
      "maxThreshold": 100,
      "minThreshold": 0,
      "qcName": "Bead Loading (%)",
      "resource_uri": "/rundb/api/v1/qctype/1/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/487/",
    "threshold": 30
  },
  {
    "id": 488,
    "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
    "qcType": {
      "defaultThreshold": 30,
      "description": "",
      "id": 2,
```

```

        "maxThreshold": 100,
        "minThreshold": 1,
        "qcName": "Key Signal (1-100)",
        "resource_uri": "/rundb/api/v1/qctype/2/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/488/",
    "threshold": 30
},
{
    "id": 489,
    "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",
    "qcType": {
        "defaultThreshold": 30,
        "description": "",
        "id": 3,
        "maxThreshold": 100,
        "minThreshold": 0,
        "qcName": "Usable Sequence (%)",
        "resource_uri": "/rundb/api/v1/qctype/3/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/489/",
    "threshold": 30
}
],
"resource_uri": "/rundb/api/v1/plannedexperimentdb/170/",
"reverse_primer": null,
"runMode": "single",
"runType": "AMPS_RNA",
"runname": null,
"sampleGrouping": "/rundb/api/v1/samplegroupotype_cv/7/",
"samplePrepKitName": null,
"samplePrepProtocol": "",
"sampleSets": [],
"sampleTubeLabel": null,
"seqKitBarcode": null,
"storageHost": null,
"storage_options": "A",
"templatingKitBarcode": null,
"templatingKitName": "Ion Chef S530 V2",
"usePostBeadfind": false,
"usePreBeadfind": true,
"username": null
}
]
}
}

```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.58 Planned Experiment Qc Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plannedexperimentqc/>

Schema URL <http://mytorrentserver/rundb/api/v1/plannedexperimentqc/schema>

#### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	in-integer
<b>plannedExperiment</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>qcType</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>threshold</b>	Integer data. Ex: 2673	0	false	false	false	false	in-integer

#### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/plannedexperimentqc/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 390  
    },  
    "objects": [  
        {  
            "id": 489,  
            "plannedExperiment": "/rundb/api/v1/plannedexperiment/170/",  
            "qcType": {  
                "defaultThreshold": 30,  
                "description": "",  
                "id": 3,  
                "maxThreshold": 100,  
                "minThreshold": 10  
            }  
        }  
    ]  
}
```

```

        "minThreshold": 0,
        "qcName": "Usable Sequence (%)",
        "resource_uri": "/rundb/api/v1/qctype/3/"
    },
    "resource_uri": "/rundb/api/v1/plannedexperimentqc/489/",
    "threshold": 30
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.59 Plan Template Basic Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plantemplatebasicinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/plantemplatebasicinfo/schema/>

### Resource Fields

field	help text
<b>adapter</b>	Unicode string data. Ex: “Hello World”
<b>applicationCategoryDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>applicationGroup</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>applicationGroupDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>autoName</b>	Unicode string data. Ex: “Hello World”
<b>barcodeKitName</b>	Unicode string data. Ex: “Hello World”
<b>categories</b>	Unicode string data. Ex: “Hello World”
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”
<b>cycles</b>	Integer data. Ex: 2673

Table 2.18 – continued from previous page

field	help text
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>eas</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>expName</b>	Unicode string data. Ex: “Hello World”
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.
<b>hotSpotRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>id</b>	Integer data. Ex: 2673
<b>irAccountName</b>	Unicode string data. Ex: “Hello World”
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”
<b>isCustom_kitSettings</b>	Boolean data. Ex: True
<b>isFavorite</b>	Boolean data. Ex: True
<b>isPlanGroup</b>	Boolean data. Ex: True
<b>isReusable</b>	Boolean data. Ex: True
<b>isReverseRun</b>	Boolean data. Ex: True
<b>isSystem</b>	Boolean data. Ex: True
<b>isSystemDefault</b>	Boolean data. Ex: True
<b>libkit</b>	Unicode string data. Ex: “Hello World”
<b>libraryReadLength</b>	Integer data. Ex: 2673
<b>metaData</b>	Unicode string data. Ex: “Hello World”
<b>notes</b>	Unicode string data. Ex: “Hello World”
<b>origin</b>	Unicode string data. Ex: “Hello World”
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”
<b>planExecuted</b>	Boolean data. Ex: True
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”
<b>planGUID</b>	Unicode string data. Ex: “Hello World”
<b>planName</b>	Unicode string data. Ex: “Hello World”
<b>planPGM</b>	Unicode string data. Ex: “Hello World”
<b>planShortID</b>	Unicode string data. Ex: “Hello World”
<b>planStatus</b>	Unicode string data. Ex: “Hello World”
<b>preAnalysis</b>	Boolean data. Ex: True
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource da
<b>reference</b>	Unicode string data. Ex: “Hello World”
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”
<b>runMode</b>	Unicode string data. Ex: “Hello World”
<b>runType</b>	Unicode string data. Ex: “Hello World”
<b>runname</b>	Unicode string data. Ex: “Hello World”
<b>sampleGroupName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>sequencingInstrumentType</b>	Unicode string data. Ex: “Hello World”
<b>storageHost</b>	Unicode string data. Ex: “Hello World”
<b>storage_options</b>	Unicode string data. Ex: “Hello World”
<b>targetRegionBedFile</b>	Unicode string data. Ex: “Hello World”
<b>templatePrepInstrumentType</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”

Table 2.18 – continued from previous page

field	help text
<b>usePostBeadfind</b>	Boolean data. Ex: True
<b>usePreBeadfind</b>	Boolean data. Ex: True
<b>username</b>	Unicode string data. Ex: "Hello World"

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/plantemplatebasicinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 103
  },
  "objects": [
    {
      "adapter": null,
      "applicationCategoryDisplayedName": "Oncology - ImmunoOncology",
      "applicationGroup": "/rundb/api/v1/applicationgroup/9/",
      "applicationGroupDisplayedName": "Immune Repertoire",
      "autoName": null,
      "barcodeKitName": "Ion Dual Barcode Kit 1-96",
      "categories": "onco_immune;immunology",
      "controlSequencekitname": null,
      "cycles": null,
      "date": "2019-10-03T20:53:08.000426+00:00",
      "eas": "/rundb/api/v1/experimentanalysissettings/159/",
      "expName": "",
      "experiment": "/rundb/api/v1/experiment/160/",
      "hotSpotRegionBedFile": "",
      "id": 167,
      "irAccountName": "",
      "irworkflow": "",
      "isCustom_kitSettings": false,
      "isFavorite": false,
      "isPlanGroup": false,
      "isReusable": true,
      "isReverseRun": false,
      "isSystem": true,
      "isSystemDefault": false,
      "libkit": null,
      "libraryReadLength": 200,
      "metaData": {},
      "notes": "",
      "origin": "|5.12.1",
      "pairedEndLibraryAdapterName": null,
      "planDisplayedName": "Ion Ampliseq Mouse TCRB-SR for S5",
      "planExecuted": false,
      "planExecutedDate": null,
      "planGUID": "18b7b769-c7b9-4df9-9c70-3fe1794f4868",
      "planName": "Ion_Ampliseq_Mouse_TCRB-SR_for_S5",
      "planPGM": "",
      "planShortID": "MX7ER",
      "planStatus": "planned",
      "preAnalysis": true,
      "runType": "normal"
    }
  ]
}
```

```
        "projects": "",  
        "reference": "",  
        "resource_uri": "/rundb/api/v1/plantemplatebasicinfo/167/",  
        "reverse_primer": null,  
        "runMode": "single",  
        "runType": "MIXED",  
        "runname": null,  
        "sampleGroupName": "Self",  
        "samplePrepKitName": null,  
        "samplePrepProtocol": "",  
        "sampleTubeLabel": null,  
        "seqKitBarcode": null,  
        "sequencingInstrumentType": "s5",  
        "storageHost": null,  
        "storage_options": "A",  
        "targetRegionBedFile": "",  
        "templatePrepInstrumentType": "IonChef",  
        "templatingKitBarcode": null,  
        "templatingKitName": "Ion Chef S540 V1",  
        "usePostBeadfind": false,  
        "usePreBeadfind": true,  
        "username": null  
    }  
}  
]
```

#### Allowed list HTTP methods

- GET

#### Allowed detail HTTP methods

- GET

### 2.2.60 Plan Template Summary Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plantemplatesummary/>

Schema URL <http://mytorrentserver/rundb/api/v1/plantemplatesummary/schema>

#### Resource Fields

field	help text	default	nullable	readonly	bl
<b>adapter</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>autoName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>controlSequencekitname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>cycles</b>	Integer data. Ex: 2673	n/a	true	false	false
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false

Table 2.19 – continued from previous page

field	help text	default	nullable	readonly	bla
<b>expName</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>id</b>	Integer data. Ex: 2673		false	false	true
<b>irworkflow</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>isCustom_kitSettings</b>	Boolean data. Ex: True	false	false	false	true
<b>isFavorite</b>	Boolean data. Ex: True	false	false	false	true
<b>isPlanGroup</b>	Boolean data. Ex: True	false	false	false	true
<b>isReusable</b>	Boolean data. Ex: True	false	false	false	true
<b>isReverseRun</b>	Boolean data. Ex: True	false	false	false	true
<b>isSystem</b>	Boolean data. Ex: True	false	false	false	true
<b>isSystemDefault</b>	Boolean data. Ex: True	false	false	false	true
<b>libkit</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true
<b>origin</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>pairedEndLibraryAdapterName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planExecuted</b>	Boolean data. Ex: True		false	false	true
<b>planExecutedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false
<b>planGUID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planPGM</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>planStatus</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>preAnalysis</b>	Boolean data. Ex: True	true	false	false	true
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false
<b>reverse_primer</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true
<b>runType</b>	Unicode string data. Ex: “Hello World”	GENS	false	false	false
<b>runname</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>samplePrepKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>samplePrepProtocol</b>	Unicode string data. Ex: “Hello World”		true	false	false
<b>sampleTubeLabel</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>seqKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>storageHost</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>storage_options</b>	Unicode string data. Ex: “Hello World”	A	false	false	false
<b>templatingKitBarcode</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>templatingKitName</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false
<b>usePostBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>usePreBeadfind</b>	Boolean data. Ex: True	true	false	false	true
<b>username</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/plantemplatesummary/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 126
}
```

```
},
"objects": [
{
    "adapter": null,
    "autoName": null,
    "categories": "Oncomine;onco_solidTumor;barcodes_8;p40",
    "controlSequencekitname": null,
    "cycles": null,
    "date": "2019-10-03T20:53:08.000623+00:00",
    "expName": "",
    "id": 170,
    "irworkflow": "",
    "isCustom_kitSettings": false,
    "isFavorite": false,
    "isPlanGroup": false,
    "isReusable": true,
    "isReverseRun": false,
    "isSystem": true,
    "isSystemDefault": false,
    "libkit": null,
    "libraryReadLength": 200,
    "metaData": {},
    "origin": "|5.12.1",
    "pairedEndLibraryAdapterName": null,
    "planDisplayedName": "Oncomine Tumor Specific Fusions",
    "planExecuted": false,
    "planExecutedDate": null,
    "planGUID": "aa9309c5-5922-49f3-b901-987383b03e57",
    "planName": "Oncomine_Tumor_Specific_Fusions",
    "planPGM": "",
    "planShortID": "OZT4F",
    "planStatus": "inactive",
    "preAnalysis": true,
    "resource_uri": "/rundb/api/v1/plantemplatesummary/170/",
    "reverse_primer": null,
    "runMode": "single",
    "runType": "AMPS_RNA",
    "runname": null,
    "samplePrepKitName": null,
    "samplePrepProtocol": "",
    "sampleTubeLabel": null,
    "seqKitBarcode": null,
    "storageHost": null,
    "storage_options": "A",
    "templatingKitBarcode": null,
    "templatingKitName": "Ion Chef S530 V2",
    "usePostBeadfind": false,
    "usePreBeadfind": true,
    "username": null
}
]
}
```

#### Allowed list HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### 2.2.61 Plugin Resource

Resource URL <http://mytorrentserver/rundb/api/v1/plugin/>

Schema URL <http://mytorrentserver/rundb/api/v1/plugin/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>active</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>availableVer-sions</b>	A list of data. Ex: ['abc', 26.73, 8]	[]	false	true	false	false	list
<b>config</b>	Unicode string data. Ex: "Hello World"		true	false	false	false	string
<b>date</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>defaultSelected</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>description</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>hasAbout</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>input</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>isConfig</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>isInstance</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>isPlanConfig</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>isSupported</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>isUpgradable</b>	Boolean data. Ex: True	false	false	true	false	false	boolean
<b>majorBlock</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>packageName</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>path</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>pluginsettings</b>	Unicode string data. Ex: "Hello World"		true	false	false	false	string
<b>re-quires_configuration</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>script</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>selected</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>status</b>	Unicode string data. Ex: "Hello World"		true	false	false	false	string
<b>url</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>userinputfields</b>	Unicode string data. Ex: "Hello World"	{}	true	false	false	false	string
<b>version</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>versionedName</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/plugin/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 16
  },
  "objects": [
    {
      "active": true,
      "availableVersions": [
        "5.12.0.1"
      ]
    }
  ]
}
```

```

],
"config": {},
"date": "2019-11-08T21:45:21.000653+00:00",
"defaultSelected": false,
"description": "Whole Transcriptome AmpliSeq-RNA Analysis. (Ion supported)",
"hasAbout": true,
"id": 90,
"input": "/configure/plugins/plugin/90/configure/report/",
"isConfig": false,
"instance": true,
"isPlanConfig": true,
"isRequired": true,
"isUpgradable": false,
"majorBlock": true,
"name": "immuneResponseRNA",
"packageName": "ion-plugin-immuneresponsrna",
"path": "/results/plugins/immuneResponseRNA",
"pluginSettings": {
    "depends": [],
    "features": [],
    "runlevels": [
        "default"
    ],
    "runtypes": [
        "wholechip",
        "thumbnail",
        "composite"
    ]
},
"requires_configuration": false,
"resource_uri": "/rundb/api/v1/plugin/90/",
"script": "immuneResponseRNA.py",
"selected": true,
"status": {},
"url": "",
"userinputfields": {},
"version": "5.12.0.1",
"versionedName": "immuneResponseRNA--v5.12.0.1"
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

## 2.2.62 Plugin Result Resource

Resource URL <http://mytorrentserver/rundb/api/v1/pluginresult/>  
Schema URL <http://mytorrentserver/rundb/api/v1/pluginresult/schema>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>URL</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>apikey</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>can_terminate</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>endtime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	false	true	false	false	date-time
<b>files</b>	A list of data. Ex: ['abc', 26.73, 8]	n/a	false	true	false	false	list
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>inodes</b>	Unicode string data. Ex: “Hello World”	-1	false	false	false	false	string
<b>major</b>	Boolean data. Ex: True	n/a	false	true	false	false	boolean
<b>owner</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>path</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>plugin</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>plugin-Name</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>plugin-Version</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>plugin_result_jobs</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	re-related
<b>re-portLink</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>result</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>result-Name</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>size</b>	Unicode string data. Ex: “Hello World”	-1	false	false	false	false	string
<b>starttime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	false	true	false	false	date-time
<b>state</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>store</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string
<b>validation_errors</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/pluginresult/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 18
  },
  "objects": [
    {
      "id": 1,
      "name": "Test Plugin Result 1"
    },
    {
      "id": 2,
      "name": "Test Plugin Result 2"
    }
  ]
}
```

```
{  
    "URL": "/output/Home/Auto_user_CB1-42-r9723-314wfa-tl_94_006/plugin_out/  
↪PathogenomixRipseqNGS_out.25/",  
    "apikey": "7b20b457ab2701e26f93a9ca774338b5e33d779a",  
    "can_terminate": false,  
    "endtime": "2019-01-17T23:50:39.000550+00:00",  
    "files": [  
        "status_block.html"  
    ],  
    "id": 25,  
    "inodes": "7",  
    "major": false,  
    "owner": "/rundb/api/v1/user/1/",  
    "path": "/results/analysis/output/Home/Auto_user_CB1-42-r9723-314wfa-tl_  
↪94_006/plugin_out/PathogenomixRipseqNGS_out.25",  
    "plugin": "/rundb/api/v1/plugin/64/",  
    "pluginName": "PathogenomixRipseqNGS",  
    "pluginVersion": "5.10.0.5",  
    "plugin_result_jobs": [  
        {  
            "config": {  
                "copyNumberThreshold": "20",  
                "email": "osaebo",  
                "generateAllPrimerCombinations": true,  
                "generateReversedPrimerSets": false,  
                "isNC": false,  
                "maxClusterVariation": "1.0",  
                "ncCT": "33",  
                "password": "x13eple",  
                "primerCheckLength": "12",  
                "primerCheckMaxErrors": "3",  
                "primers": ">V1_2_A_F\nGTGCCTAAYACATGCAWGT\n>V1_2_A_  
↪R\nCTGGDCCGTRTCAGT",  
                "readLengthThreshold": "100",  
                "safetyMarginCT": "3",  
                "sampleCT": "16",  
                "trimEndsWithNoPrimer": "21",  
                "useCT": false,  
                "useFullPrimerCoverageReadsOnly": false,  
                "useReadsWithNoPrimer": false,  
                "useWalkingInsDel": false  
            },  
            "endtime": "2019-01-17T23:50:39.000550+00:00",  
            "grid_engine_jobid": 518,  
            "id": 25,  
            "resource_uri": "/rundb/api/v1/PluginResultJob/25/",  
            "run_level": "last",  
            "starttime": "2019-01-17T23:50:33.000769+00:00",  
            "state": "Completed"  
        }  
    ],  
    "reportLink": "/output/Home/Auto_user_CB1-42-r9723-314wfa-tl_94_006/",  
    "resource_uri": "/rundb/api/v1/pluginresult/25/",  
    "result": "/rundb/api/v1/results/6/",  
    "resultName": "Auto_user_CB1-42-r9723-314wfa-tl_94",  
    "size": "25475",  
    "starttime": "2019-01-17T23:50:33.000769+00:00",  
    "state": "Completed",  
}
```

```

        "store": {},
        "validation_errors": {
            "validation_errors": []
        }
    }
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.63 Plugin Result Job Resource

Resource URL <http://mytorrentserver/rundb/api/v1/PluginResultJob/>

Schema URL <http://mytorrentserver/rundb/api/v1/PluginResultJob/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>config</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>endtime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>grid_engine_jobid</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>run_level</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>starttime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>state</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/PluginResultJob/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 18  
    },  
    "objects": [  
        {  
            "config": {  
                "copyNumberThreshold": "20",  
                "email": "osaebo",  
                "generateAllPrimerCombinations": true,  
                "generateReversedPrimerSets": false,  
                "isNC": false,  
                "maxClusterVariation": "1.0",  
                "ncCT": "33",  
                "password": "x13eple",  
                "primerCheckLength": "12",  
                "primerCheckMaxErrors": "3",  
                "primers": ">V1_2_A_F\nnGTGCCTAAYACATGCAWGT\nn>V1_2_A_  
↳\nCTGGDCCGTRTCTCAGT",  
                "readLengthThreshold": "100",  
                "safetyMarginCT": "3",  
                "sampleCT": "16",  
                "trimEndsWithNoPrimer": "21",  
                "useCT": false,  
                "useFullPrimerCoverageReadsOnly": false,  
                "useReadsWithNoPrimer": false,  
                "useWalkingInsDel": false  
            },  
            "endtime": "2019-01-17T23:50:39.000550+00:00",  
            "grid_engine_jobid": 518,  
            "id": 25,  
            "resource_uri": "/rundb/api/v1/PluginResultJob/25/",  
            "run_level": "last",  
            "starttime": "2019-01-17T23:50:33.000769+00:00",  
            "state": "Completed"  
        }  
    ]  
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.64 Project Resource

Resource URL <http://mytorrentserver/rundb/api/v1/project/>

Schema URL <http://mytorrentserver/rundb/api/v1/project/schema/>

#### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>created</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>creator</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>modified</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>name</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string
<b>public</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>re-sultsCount</b>	Integer data. Ex: 2673	n/a	false	true	false	false	integer

#### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/project/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 2
  },
  "objects": [
    {
      "created": "2017-08-23T21:43:01.000074+00:00",
      "creator": "/rundb/api/v1/user/1/",
      "id": 2,
      "modified": "2018-04-27T18:59:37.000779+00:00",
      "name": "Hello World"
    }
  ]
}
```

```
        "name": "SampleData",
        "public": true,
        "resource_uri": "/rundb/api/v1/project/2/",
        "resultsCount": 0
    }
]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.65 Project Results Resource

Resource URL <http://mytorrentserver/rundb/api/v1/projectresults/>

Schema URL <http://mytorrentserver/rundb/api/v1/projectresults/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>analy-sisVer-sion</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>autoEx-empt</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>diskusage</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>frame-sPro-cessed</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>log</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>meta-Data</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true	false	string
<b>paren-tIDs</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>pro-cessed-Cycles</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>pro-cessed-flows</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	re-related
<b>reference</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>re-portLink</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>report-Status</b>	Unicode string data. Ex: “Hello World”	Nothing	true	false	false	false	string
<b>represen-tative</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>result-sName</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>result-sType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>runid</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>status</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>timeS-tamp</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>timeTo-Complete</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/projectresults/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 7  
    },  
    "objects": [  
        {  
            "analysisVersion": "_",  
            "autoExempt": false,  
            "diskUsage": 0,  
            "framesProcessed": 0,  
            "id": 7,  
            "log": "/output/Home/CA_Combined_demo_001_007/log.html",  
            "metaData": {},  
            "parentIDs": ":4:2:",  
            "processedCycles": 0,  
            "processedflows": 0,  
            "projects": [  
                "/rundb/api/v1/project/1/"  
            ],  
            "reference": "hg19",  
            "reportLink": "/output/Home/CA_Combined_demo_001_007/",  
            "reportStatus": "Nothing",  
            "representative": false,  
            "resource_uri": "/rundb/api/v1/projectresults/7/",  
            "resultsName": "CA_Combined_demo_001",  
            "resultsType": "CombinedAlignments",  
            "runid": "GOAMS",  
            "status": "Pending",  
            "timeStamp": "2018-02-28T17:32:01.000577+00:00",  
            "timeToComplete": "0"  
        }  
    ]  
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST

- PUT
- DELETE
- PATCH

## 2.2.66 Publisher Resource

Resource URL <http://mytorrentserver/rundb/api/v1/publisher/>

Schema URL <http://mytorrentserver/rundb/api/v1/publisher/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	false	false	false	false	date-time
<b>global_meta</b>	Unicode string data. Ex: “Hello World”	{ }	false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>path</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>version</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/publisher/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 2
  },
  "objects": [
    {
      "date": "2017-07-22T21:17:13.000054+00:00",
      "global_meta": {},
      "id": 2,
      "name": "BED",
      "path": "/results/publishers/BED",
      "resource_uri": "/rundb/api/v1/publisher/BED/",
      "version": "1.0"
    }
  ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.67 Qc Type Resource

Resource URL <http://mytorrentserver/rundb/api/v1/qctype/>

Schema URL <http://mytorrentserver/rundb/api/v1/qctype/schema/>

### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>defaultThreshold</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>maxThreshold</b>	Integer data. Ex: 2673	100	false	false	false	false	integer
<b>minThreshold</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>qcName</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/qctype/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 3
    },
    "objects": [
        {
            "defaultThreshold": 30,
            "description": "",
            "id": 3,
            "maxThreshold": 100,
            "minThreshold": 0,
            "qcName": "Usable Sequence (%)",
            "resource_uri": "/rundb/api/v1/qctype/3/"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.68 Quality Metrics Resource

Resource URL <http://mytorrentserver/rundb/api/v1/qualitymetrics/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/qualitymetrics/schema/>

### Resource Fields

field	help text	default	nullable	re
<b>id</b>	Integer data. Ex: 2673		false	fa
<b>q0_100bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q0_150bp_reads</b>	Integer data. Ex: 2673	0	false	fa
<b>q0_50bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q0_bases</b>	Unicode string data. Ex: "Hello World"	n/a	false	fa
<b>q0_max_read_length</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q0_mean_read_length</b>	Floating point numeric data. Ex: 26.73	n/a	false	fa
<b>q0_median_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q0_mode_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q0_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q17_100bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q17_150bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q17_50bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q17_bases</b>	Unicode string data. Ex: "Hello World"	n/a	false	fa
<b>q17_max_read_length</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q17_mean_read_length</b>	Floating point numeric data. Ex: 26.73	n/a	false	fa
<b>q17_median_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q17_mode_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q17_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q20_100bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q20_150bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q20_50bp_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q20_bases</b>	Unicode string data. Ex: "Hello World"	n/a	false	fa
<b>q20_max_read_length</b>	Floating point numeric data. Ex: 26.73	n/a	false	fa
<b>q20_mean_read_length</b>	Integer data. Ex: 2673	n/a	false	fa
<b>q20_median_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q20_mode_read_length</b>	Integer data. Ex: 2673	0	false	fa
<b>q20_reads</b>	Integer data. Ex: 2673	n/a	false	fa
<b>report</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	fa
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/qualitymetrics/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 6
  },
  "objects": [
    {
      "id": 6,
      "q0_100bp_reads": 1353,
      "q0_150bp_reads": 31,
      "q0_50bp_reads": 1485,
      "q0_bases": "194418",
      "q0_max_read_length": 159,
      "q0_mean_read_length": 127.403669724771,
      "q0_median_read_length": 135,
      "q0_mode_read_length": 141,
    }
  ]
}
```

```

        "q0_reads": 1526,
        "q17_100bp_reads": 1353,
        "q17_150bp_reads": 31,
        "q17_50bp_reads": 1485,
        "q17_bases": "178131",
        "q17_max_read_length": 159,
        "q17_mean_read_length": 127.403669724771,
        "q17_median_read_length": 135,
        "q17_mode_read_length": 141,
        "q17_reads": 1526,
        "q20_100bp_reads": 1353,
        "q20_150bp_reads": 31,
        "q20_50bp_reads": 1485,
        "q20_bases": "172077",
        "q20_max_read_length": 159,
        "q20_mean_read_length": 127,
        "q20_median_read_length": 135,
        "q20_mode_read_length": 141,
        "q20_reads": 1526,
        "report": "/rundb/api/v1/results/6/",
        "resource_uri": "/rundb/api/v1/qualitymetrics/6/"
    }
]
}

```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.69 Reference Genome Resource

Resource URL <http://mytorrentserver/rundb/api/v1/referencegenome/>  
 Schema URL <http://mytorrentserver/rundb/api/v1/referencegenome/schema/>

## Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>cel- ery_task_id</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	2019-11-19T06:33:01.000642+00:00	false	false	false	false	date-time
<b>enabled</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>iden- tity_hash</b>	Unicode string data. Ex: “Hello World”	None	true	false	false	false	string
<b>in- dex_version</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>notes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>refer- ence_path</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>re- source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>short_name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>source</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>species</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>ver- bose_error</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>version</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/referencegenome/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 7
  },
  "objects": [
    {
      "celery_task_id": "c645df38-1c40-4c84-a627-74b3f82efa4e",
      "date": "2018-08-02T23:23:43.000395+00:00",
      "enabled": true,
      "id": 8,
      "identity_hash": null,
      "notes": "This is a test object for the reference genome API. It contains basic information such as ID, date created, and status.",

      "reference_genome": {
        "id": 1,
        "name": "Human Reference Genome"
      }
    }
  ]
}
```

```

    "index_version": "tmap-f3",
    "name": "Reference for AmpliSeq Mouse Transcriptome runs",
    "notes": "",
    "reference_path": "/results/referenceLibrary/tmap-f3/AmpliSeq_Mouse_
    ↪Transcriptome_V1_Reference",
    "resource_uri": "/rundb/api/v1/referencegenome/8/",
    "short_name": "AmpliSeq_Mouse_Transcriptome_V1_Reference",
    "source": "/results/referenceLibrary/temp/o_1cjueovofqd516ha144414641jqd7.
    ↪fasta",
    "species": "",
    "status": "complete",
    "verbose_error": "",
    "version": ""
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.70 Results Resource

Resource URL <http://mytorrentserver/rundb/api/v1/results/>

Schema URL <http://mytorrentserver/rundb/api/v1/results/schema/>

### Resource Fields

field	help text	default	null
<b>analysisVersion</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>analysisMetrics</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>autoExempt</b>	Boolean data. Ex: True	false	false

Table 2.21 – continued from previous page

field	help text	default	null
<b>bamLink</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>diskusage</b>	Integer data. Ex: 2673	n/a	true
<b>eas</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>experiment</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true
<b>filesystempath</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>framesProcessed</b>	Integer data. Ex: 2673	n/a	false
<b>i18nstatus</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>id</b>	Integer data. Ex: 2673		false
<b>libmetrics</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>log</b>	Unicode string data. Ex: “Hello World”		false
<b>metaData</b>	Unicode string data. Ex: “Hello World”	{}	false
<b>parentIDs</b>	Unicode string data. Ex: “Hello World”		false
<b>planShortID</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>pluginState</b>	A dictionary of data. Ex: {‘price’: 26.73, ‘name’: ‘Daniel’}	n/a	false
<b>pluginStore</b>	A dictionary of data. Ex: {‘price’: 26.73, ‘name’: ‘Daniel’}	n/a	false
<b>pluginresults</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>processedCycles</b>	Integer data. Ex: 2673	n/a	false
<b>processedflows</b>	Integer data. Ex: 2673	n/a	false
<b>projects</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>qualitymetrics</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>reference</b>	Unicode string data. Ex: “Hello World”	n/a	true
<b>reportLink</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>reportStatus</b>	Unicode string data. Ex: “Hello World”	Nothing	true
<b>reportstorage</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false
<b>representative</b>	Boolean data. Ex: True	false	false
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>resultsName</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>resultsType</b>	Unicode string data. Ex: “Hello World”		false
<b>runid</b>	Unicode string data. Ex: “Hello World”		false
<b>status</b>	Unicode string data. Ex: “Hello World”	n/a	false
<b>tfmetrics</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false
<b>timeStamp</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false
<b>timeToComplete</b>	Unicode string data. Ex: “Hello World”	n/a	false

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/results/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 7
  },
  "objects": [
    {
      "analysisVersion": "_",
      "analysismetrics": [],
      "autoExempt": false,
      "bamLink": "/output/Home/CA_Combined_demo_001_007/download_links/NONE_
→ReportOnly_NONE_CA_Combined_demo_001.bam",
      "category": "None"
    }
  ]
}
```

```

    "diskusage": 0,
    "eas": "/rundb/api/v1/experimentanalysissettings/123/",
    "experiment": "/rundb/api/v1/experiment/124/",
    "filesystempath": "/results/analysis/output/Home/CA_Combined_demo_001_007
    ↵",
    "framesProcessed": 0,
    "i18nstatus": {
        "i18n": "Pending",
        "state": "Other"
    },
    "id": 7,
    "libmetrics": [],
    "log": "/output/Home/CA_Combined_demo_001_007/log.html",
    "metaData": {},
    "parentIDs": ":4:2:",
    "planShortID": "",
    "pluginresults": [],
    "processedCycles": 0,
    "processedflows": 0,
    "projects": [
        "/rundb/api/v1/project/1/"
    ],
    "qualitymetrics": [],
    "reference": "hg19",
    "reportLink": "/output/Home/CA_Combined_demo_001_007/",
    "reportStatus": "Nothing",
    "reportsstorage": {
        "default": true,
        "dirPath": "/results/analysis/output",
        "id": 1,
        "name": "Home",
        "resource_uri": "",
        "webServerPath": "/output"
    },
    "representative": false,
    "resource_uri": "/rundb/api/v1/results/7/",
    "resultsName": "CA_Combined_demo_001",
    "resultsType": "CombinedAlignments",
    "runid": "GOAMS",
    "status": "Pending",
    "tfmetrics": [],
    "timeStamp": "2018-02-28T17:32:01.000577+00:00",
    "timeToComplete": "0"
}
]
}
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### 2.2.71 Rig Resource

Resource URL <http://mytorrentserver/rundb/api/v1/rig/>  
Schema URL <http://mytorrentserver/rundb/api/v1/rig/schema/>

### Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>alarms</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string
<b>comments</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>dis-play_state</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>ftppass-word</b>	Unicode string data. Ex: “Hello World”	ionguest	false	false	false	false	string
<b>ftprootdir</b>	Unicode string data. Ex: “Hello World”	results	false	false	false	false	string
<b>ftpserver</b>	Unicode string data. Ex: “Hello World”	192.168.20	false	false	false	false	string
<b>ftpuser-name</b>	Unicode string data. Ex: “Hello World”	ionguest	false	false	false	false	string
<b>host_address</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>last_clean_date</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>last_experiment</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>last_init_date</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>location</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>serial</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>state</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>type</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>update-Command</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string
<b>updateflag</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>update-home</b>	Unicode string data. Ex: “Hello World”	192.168.20	false	false	false	false	string
<b>version</b>	Unicode string data. Ex: “Hello World”	{}	false	false	true	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/rig/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 4
    },
    "objects": [
        {
            "alarms": {},
            "comments": "",
            "display_state": "",
            "ftppassword": "ionguest",
            "ftprootdir": "results",
            "ftpserver": "192.168.201.1",
            "ftpusername": "ionguest",
            "host_address": "",
            "last_clean_date": "",
            "last_experiment": "",
            "last_init_date": "",
            "location": {
                "comments": "",
                "defaultlocation": true,
                "id": 1,
                "name": "Home",
                "resource_uri": "/rundb/api/v1/location/1/"
            },
            "name": "S5_DemoData",
            "resource_uri": "/rundb/api/v1/rig/S5_DemoData/",
            "serial": "",
            "state": "",
            "type": "",
            "updateCommand": {},
            "updateflag": false,
            "updatehome": "192.168.201.1",
            "version": {}
        }
    ]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.72 Run Type Resource

Resource URL <http://mytorrentserver/rundb/api/v1/runtype/>

Schema URL <http://mytorrentserver/rundb/api/v1/runtype/schema/>

#### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>alter-name</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>application-Groups</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	false	false	re-related
<b>barcode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>meta</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>nucleotide-Type</b>	Unicode string data. Ex: “Hello World”	dna	false	false	true	false	string
<b>re-source-uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

#### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/runtype/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 15  
    },  
}
```

```
"objects": [
    {
        "alternate_name": "AmpliSeq HD - DNA and Fusions (Single Library)",
        "applicationGroups": [
            "/rundb/api/v1/applicationgroup/11/"
        ],
        "barcode": "",
        "description": "AmpliSeq HD - DNA and Fusions (Single Library)",
        "id": 15,
        "isActive": true,
        "meta": {},
        "nucleotideType": "dna",
        "resource_uri": "/rundb/api/v1/runtype/15/",
        "runType": "AMPS_HD_DNA_RNA_1"
    }
]
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.73 Sample Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sample/>

Schema URL <http://mytorrentserver/rundb/api/v1/sample/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	true	false	false	false	date-time
<b>descrip-tion</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>dis-played-Name</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>experi-ments</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	true	false	re-related
<b>exter-nalId</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sample-Sets</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	true	false	re-related
<b>status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/sample/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 23
    },
    "objects": [
        {
            "date": "2018-04-13T22:17:13.000114+00:00",
            "description": "",
            "displayName": "Sample 9",
            "experiments": [
                "/rundb/api/v1/experiment/136/"
            ],
            "externalId": "",
            "id": 26,
            "name": "Sample_9",
            "resource_uri": "/rundb/api/v1/sample/26/",
            "sampleSets": [],
            "status": "planned"
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT

### Allowed detail HTTP methods

- GET
- POST
- PUT

## 2.2.74 Sample Annotation Cv Resource

Resource URL [http://mytorrentserver/rundb/api/v1/sampleannotation\\_cv/](http://mytorrentserver/rundb/api/v1/sampleannotation_cv/)

Schema URL [http://mytorrentserver/rundb/api/v1/sampleannotation\\_cv/schema/](http://mytorrentserver/rundb/api/v1/sampleannotation_cv/schema/)

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>annotation-Type</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>iRAnnotation-Type</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>iRValue</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isIRCompatible</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sampleGroup-Type_CV</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>value</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/sampleannotation_cv/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 90
  },
}
```

```
"objects": [
    {
        "annotationType": "16s_markers",
        "iRAnnotationType": "16S_Markers",
        "iRValue": "Target Species",
        "id": 90,
        "isActive": true,
        "isIRCompatible": true,
        "resource_uri": "/rundb/api/v1/sampleannotation_cv/90/",
        "sampleGroupType_CV": null,
        "uid": "SAMPLEANNOTATE_CV_0090",
        "value": "Target Species"
    }
]
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.75 Sample Attribute Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sampleattribute/>

Schema URL <http://mytorrentserver/rundb/api/v1/sampleattribute/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>creation-Date</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>dataType</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>dataType_name</b>	Unicode string data. Ex: "Hello World"	n/a	true	true	true	false	string
<b>description</b>	Unicode string data. Ex: "Hello World"	n/a	true	false	false	false	string
<b>displayed-Name</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isManda-tory</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>lastModi-fiedDate</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	true	false	false	true	false	date-time
<b>re-source_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>sample-Count</b>	Integer data. Ex: 2673	n/a	false	true	false	false	integer

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 1
    },
    "objects": [
        {
            "creationDate": "2019-02-21T20:37:39.000872+00:00",
            "dataType": "/rundb/api/v1/sampleattributedatatype/1/",
            "dataType_name": "Text",
            "description": "",
            "displayName": "customattribute",
            "id": 1,
            "isActive": true,
            "isMandatory": false,
            "lastModifiedDate": "2019-02-21T20:38:36.000274+00:00",
            "resource_uri": "/rundb/api/v1/sampleattribute/1/",
            "sampleCount": 0
        }
    ]
}
```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.76 Sample Attribute Data Type Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sampleattributedatatype/>  
Schema URL <http://mytorrentserver/rundb/api/v1/sampleattributedatatype/schema/>

### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>dataType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>description</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/sampleattributedatatype/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 2  
    },  
    "objects": [  
        {  
            "id": 1,  
            "name": "String Type",  
            "description": "A simple string type.",  
            "datatype": "string",  
            "is_active": true,  
            "re-source_uri": null  
        }  
    ]  
}
```

```
{  
    "dataType": "Integer",  
    "description": "Whole number",  
    "id": 2,  
    "isActive": true,  
    "resource_uri": "/rundb/api/v1/sampleattributedatatype/2/"  
}  
]  
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.77 Sample Group Type Cv Resource

Resource URL [http://mytorrentserver/rundb/api/v1/samplegroupertype\\_cv/](http://mytorrentserver/rundb/api/v1/samplegroupertype_cv/)

Schema URL [http://mytorrentserver/rundb/api/v1/samplegroupertype\\_cv/schema/](http://mytorrentserver/rundb/api/v1/samplegroupertype_cv/schema/)

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>description</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>displayed-Name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>iRAnnotationType</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>iRValue</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isIRCompatible</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sampleAnnotation_set</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	true	false	related
<b>sampleSets</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	true	false	related
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/samplegroup_type_cv/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 7
    },
    "objects": [
        {
            "description": "",
            "displayedName": "Single Fusions",
            "iRAnnotationType": "RelationshipType",
            "iRValue": "SINGLE_RNA_FUSION",
            "id": 7,
            "isActive": true,
            "isIRCompatible": true,
            "resource_uri": "/rundb/api/v1/samplegroup_type_cv/7/",
            "sampleAnnotation_set": [],
            "sampleSets": [],
            "uid": "SAMPLEGROUP.CV_0007"
        }
    ]
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.78 Sample Prep Data Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sampleprepdata/>

Schema URL <http://mytorrentserver/rundb/api/v1/sampleprepdata/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>endTime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrument-Name</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>instrumentStatus</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>kitType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>lastUpdate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>logPath</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>message</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>operationMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>packageVer</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>progress</b>	Floating point numeric data. Ex: 26.73	0	false	false	true	false	float
<b>reagentsExpi-ration</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>reagentsLot</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>reagentsPart</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>remainingSec-onds</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>samplePrep-DataType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>scriptVersion</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>solutionsExpi-ration</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>solutionsLot</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>solutionsPart</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>startTime</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>tipRackBar-code</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": null,
    "offset": 0,
    "previous": null,
    "total_count": 0
  },
  "objects": []
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.79 Sample Set Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sampleset/>

Schema URL <http://mytorrentserver/rundb/api/v1/sampleset/schema>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>SampleGroup-Type_CV</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>additionalCycles</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>combinedLibraryTubeLabel</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>creationDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>cyclingProtocols</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>description</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>displayName</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	true	true	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>lastModified-Date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>libraryPrepInstrument</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>libraryPrepInstrumentData</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>libraryPrepKit-DisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>libraryPrepKit-Name</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>libraryPrep-PlateType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>libraryPrepType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>libraryPrep-TypeDisplayed-Name</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>pcrPlateSerial-Num</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sampleCount</b>	Integer data. Ex: 2673	n/a	false	true	false	false	integer
<b>sampleGroup-TypeName</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>samples</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	true	false	true	false	re-related
<b>status</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/sampleset/?offset=1&limit=1&format=json",
    "offset": 0,
  }
}
```

```

    "previous": null,
    "total_count": 2
},
"objects": [
{
    "SampleGroupType_CV": null,
    "additionalCycles": null,
    "combinedLibraryTubeLabel": "",
    "creationDate": "2017-11-01T16:19:12.000371+00:00",
    "cyclingProtocols": null,
    "description": "",
    "displayedName": "Sample Set 1",
    "id": 2,
    "lastModifiedDate": "2017-11-01T16:19:12.000371+00:00",
    "libraryPrepInstrument": "",
    "libraryPrepInstrumentData": null,
    "libraryPrepKitDisplayedName": "",
    "libraryPrepKitName": "",
    "libraryPrepPlateType": "",
    "libraryPrepType": "",
    "libraryPrepTypeDisplayedName": "",
    "pcrPlateSerialNum": "",
    "readyForPlanning": true,
    "resource_uri": "/rundb/api/v1/sampleset/2/",
    "sampleCount": 8,
    "sampleGroupName": "",
    "samples": [
        "/rundb/api/v1/samplesetitem/6/",
        "/rundb/api/v1/samplesetitem/8/",
        "/rundb/api/v1/samplesetitem/10/",
        "/rundb/api/v1/samplesetitem/12/",
        "/rundb/api/v1/samplesetitem/14/",
        "/rundb/api/v1/samplesetitem/16/",
        "/rundb/api/v1/samplesetitem/18/",
        "/rundb/api/v1/samplesetitem/19/"
    ],
    "status": "created"
}
]
}

```

### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### Allowed detail HTTP methods

- GET

- POST
- PUT
- DELETE
- PATCH

### 2.2.80 Sample Set Item Resource

Resource URL <http://mytorrentserver/rundb/api/v1/samplesetitem/>  
Schema URL <http://mytorrentserver/rundb/api/v1/samplesetitem/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>assayGroup</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>biopsyDays</b>	Integer data. Ex: 2673	0	true	false	false	false	integer
<b>cancerType</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>cellNum</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cellularityPct</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>controlType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>coupleId</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>creationDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>description</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>dnabbarcode</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>embryoId</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>gender</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>lastModified-Date</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<b>mouseStrains</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>nucleotide-Type</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>pan-elPoolType</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>pcrPlateColumn</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>pcrPlateRow</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>population</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>relationship-Group</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>relationship-Role</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sample</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>sampleCollectionDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>sampleReceiptDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false	false	false	date-time
<b>sampleSet</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	true	false	re-related
<b>sample-Source</b>	Unicode string data. Ex: “Hello World”	n/a	true	false	false	false	string
<b>tubePosition</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string

## Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/samplesetitem/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 16  
    },  
    "objects": [  
        {  
            "assayGroup": null,  
            "biopsyDays": 0,  
            "cancerType": "",  
            "cellNum": "",  
            "cellularityPct": null,  
            "controlType": "",  
            "coupleId": "",  
            "creationDate": "2017-11-01T18:48:24.000678+00:00",  
            "description": "",  
            "dnabarcodes": null,  
            "embryoId": "",  
            "gender": "",  
            "id": 19,  
            "lastModifiedDate": "2017-11-01T18:48:24.000678+00:00",  
            "mouseStrains": null,  
            "nucleotideType": "",  
            "panelPoolType": null,  
            "pcrPlateColumn": "",  
            "pcrPlateRow": "",  
            "population": null,  
            "relationshipGroup": 0,  
            "relationshipRole": "",  
            "resource_uri": "/rundb/api/v1/samplesetitem/19/",  
            "sample": "/rundb/api/v1/sample/16/",  
            "sampleCollectionDate": null,  
            "sampleReceiptDate": null,  
            "sampleSet": "/rundb/api/v1/sampleset/2/",  
            "sampleSource": null,  
            "tubePosition": ""  
        }  
    ]  
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.81 Sample Set Item Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/samplesetiteminfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/samplesetiteminfo/schema/>

## Resource Fields

field	help text	default	nullable	read
<b>assayGroup</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>biopsyDays</b>	Integer data. Ex: 2673	0	true	false
<b>cancerType</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>cellNum</b>	Unicode string data. Ex: “Hello World”		true	false
<b>cellularityPct</b>	Integer data. Ex: 2673	n/a	true	false
<b>controlType</b>	Unicode string data. Ex: “Hello World”		true	false
<b>coupleId</b>	Unicode string data. Ex: “Hello World”		true	false
<b>creationDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false
<b>description</b>	Unicode string data. Ex: “Hello World”		true	false
<b>dnabbarcode</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	true
<b>dnabbarcodeKit</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>embryoId</b>	Unicode string data. Ex: “Hello World”		true	false
<b>gender</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>id</b>	Integer data. Ex: 2673		false	false
<b>lastModifiedDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false
<b>mouseStrains</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false
<b>panelPoolType</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>pcrPlateColumn</b>	Unicode string data. Ex: “Hello World”		true	false
<b>pcrPlateRow</b>	Unicode string data. Ex: “Hello World”		true	false
<b>population</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>relationshipGroup</b>	Integer data. Ex: 2673	n/a	true	true
<b>relationshipRole</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true
<b>sample</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false
<b>sampleCollectionDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false
<b>sampleDescription</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>sampleDisplayedName</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>sampleExternalId</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>samplePk</b>	Integer data. Ex: 2673	n/a	true	true

Table 2.22 – continued from previous page

field	help text	default	nullable	read
<b>sampleReceiptDate</b>	A date & time as a string. Ex: “2010-11-10T03:07:43”	n/a	true	false
<b>sampleSet</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false
<b>sampleSetPk</b>	Integer data. Ex: 2673	n/a	true	true
<b>sampleSetStatus</b>	Unicode string data. Ex: “Hello World”	n/a	true	true
<b>sampleSource</b>	Unicode string data. Ex: “Hello World”	n/a	true	false
<b>tubePosition</b>	Unicode string data. Ex: “Hello World”		true	false

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/samplesetiteminfo/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 16
    },
    "objects": [
        {
            "assayGroup": null,
            "attribute_dict": {
                "customattribute": ""
            },
            "biopsyDays": 0,
            "cancerType": "",
            "cellNum": "",
            "cellularityPct": null,
            "controlType": "",
            "coupleId": "",
            "creationDate": "2017-11-01T18:48:24.000678+00:00",
            "customattribute": "",
            "description": "",
            "dnabbarcode": "",
            "dnabbarcodeKit": "",
            "embryoId": "",
            "gender": "",
            "id": 19,
            "lastModifiedDate": "2017-11-01T18:48:24.000678+00:00",
            "mouseStrains": null,
            "nucleotideType": "",
            "panelPoolType": null,
            "pcrPlateColumn": "",
            "pcrPlateRow": "",
            "population": null,
            "relationshipGroup": 0,
            "relationshipRole": "",
            "resource_uri": "/rundb/api/v1/samplesetiteminfo/19/",
            "sample": "/rundb/api/v1/sample/16/",
            "sampleCollectionDate": null,
            "sampleDescription": "",
            "sampleDisplayedName": "test sample",
            "sampleExternalId": "",
            "samplePk": 16,
            "sampleReceiptDate": null,
        }
    ]
}
```

```
        "sampleSet": "/rundb/api/v1/sampleset/2/",
        "sampleSetGroupType": "",
        "sampleSetPk": 2,
        "sampleSetStatus": "created",
        "sampleSource": null,
        "tubePosition": ""
    }
]
}
```

#### Allowed list HTTP methods

- GET

#### Allowed detail HTTP methods

- GET

### 2.2.82 Sequencing Kit Info Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sequencingkitinfo/>

Schema URL <http://mytorrentserver/rundb/api/v1/sequencingkitinfo/schema/>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>applicationType</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>cartridgeBetweenUsageAbsoluteMaxDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>cartridgeExpirationDayLimit</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>categories</b>	Unicode string data. Ex: “Hello World”		true	false	false	false	string
<b>chipTypes</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>defaultCartridgeUsageCount</b>	Integer data. Ex: 2673	n/a	true	false	false	false	integer
<b>defaultFlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	related
<b>description</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>flowCount</b>	Integer data. Ex: 2673	n/a	false	false	false	false	integer
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>kitType</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>libraryReadLength</b>	Integer data. Ex: 2673	0	false	false	false	false	integer
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>nucleotideType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>parts</b>	Many related resources. Can be either a list of URIs or list of individually nested resource data.	n/a	false	false	false	false	related
<b>resource_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>sam-pilePrep_instrumentType</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>uid</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string

## Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/sequencingkitinfo/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 27
  },
}
```

```

"objects": [
    {
        "applicationType": "AMPS",
        "cartridgeBetweenUsageAbsoluteMaxDayLimit": null,
        "cartridgeExpirationDayLimit": null,
        "categories": "filter_s5HidKit",
        "chipTypes": "",
        "defaultCartridgeUsageCount": null,
        "defaultFlowOrder": null,
        "description": "Precision ID S5 Sequencing Kit",
        "flowCount": 650,
        "id": 20111,
        "instrumentType": "S5",
        "isActive": true,
        "kitType": "SequencingKit",
        "libraryReadLength": 0,
        "name": "precisionIDS5Kit",
        "nucleotideType": "",
        "parts": [
            {
                "barcode": "100041073B",
                "id": 20236,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20236/"
            },
            {
                "barcode": "100041074B",
                "id": 20237,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20237/"
            },
            {
                "barcode": "A33208",
                "id": 20260,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20260/"
            },
            {
                "barcode": "100049484",
                "id": 20263,
                "kit": "/rundb/api/v1/kitinfo/20111/",
                "resource_uri": "/rundb/api/v1/kitpart/20263/"
            }
        ],
        "resource_uri": "/rundb/api/v1/sequencingkitinfo/20111/",
        "runMode": "",
        "samplePrep_instrumentType": "",
        "uid": "SEQ0028"
    }
]
}

```

### Allowed list HTTP methods

- GET
- POST

- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.83 Sequencing Kit Part Resource

Resource URL <http://mytorrentserver/rundb/api/v1/sequencingkitpart/>

Schema URL <http://mytorrentserver/rundb/api/v1/sequencingkitpart/schema/>

#### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>barcode</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	true	string
<b>default-FlowOrder</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>kit</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string

#### Example Response

```
{  
    "meta": {  
        "limit": 1,  
        "next": "/rundb/api/v1/sequencingkitpart/?offset=1&limit=1&format=json",  
        "offset": 0,  
        "previous": null,  
        "total_count": 99  
    },  
    "objects": [  
        {  
            "barcode": "100049484",  
            "defaultFlowOrder": null,  
            "id": 2673,  
            "kit": {"$ref": "#/rundb/api/v1/sequencingkit/1"},  
            "re-source_uri": "http://mytorrentserver/rundb/api/v1/sequencingkitpart/1"  
        }  
    ]  
}
```

```
        "id": 20263,  
        "kit": "/rundb/api/v1/kitinfo/20111/",  
        "resource_uri": "/rundb/api/v1/sequencingkitpart/20263/"  
    }  
]  
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.84 Support Upload Resource

Resource URL <http://mytorrentserver/rundb/api/v1/supportupload/>

Schema URL <http://mytorrentserver/rundb/api/v1/supportupload/schema/>

## Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<code>cel- ery_task_id</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>con- tact_email</code>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<code>created</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time
<code>descrip- tion</code>	Unicode string data. Ex: “Hello World”		false	false	false	false	string
<code>file</code>	A single related resource. Can be either a URI or set of nested resource data.	n/a	true	false	false	false	re-related
<code>id</code>	Integer data. Ex: 2673		false	false	true	true	integer
<code>lo- cal_message</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>lo- cal_status</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>re- source_uri</code>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<code>result</code>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re-related
<code>ticket_id</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>ticket_message</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>ticket_status</code>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<code>updated</code>	A date & time as a string. Ex: “2010-11-10T03:07:43”	true	false	false	true	false	date-time

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": null,
        "offset": 0,
        "previous": null,
        "total_count": 0
    },
    "objects": []
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.85 Template Resource

Resource URL <http://mytorrentserver/rundb/api/v1/template/>

Schema URL <http://mytorrentserver/rundb/api/v1/template/schema/>

#### Resource Fields

field	help text	de-fault	nul-lable	read-only	blank	unique	type
<b>comments</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isofficial</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>key</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sequence</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string

#### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/template/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 6
  },
  "objects": [
    {
      "comments": " ",
      "id": 6,
      "isofficial": true,
      "key": "ATCG",
      "name": "TF_1",
      "resource_uri": "/rundb/api/v1/template/6/"
    }
  ]
}
```

```
        "sequence":  
        ↵ "GAATAATCCAGCCGCCAGGCATGGAAGAGCGTCGTAAGTATTGCAGGTTCAGGCAGGAAAGCGTGATTGACTACTGGCAAATAAAGTACGTTCC  
        ↵ "  
        }  
    ]  
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.86 Tf Metrics Resource

Resource URL <http://mytorrentserver/rundb/api/v1/tfmetrics/>

Schema URL <http://mytorrentserver/rundb/api/v1/tfmetrics/schema>

## Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>HPAccuracy</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>Q10Histo</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>Q10Mean</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>Q10ReadCount</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>Q17Histo</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>Q17Mean</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>Q17ReadCount</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>SysSNR</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>aveKey-Count</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>corrHP-SNR</b>	Unicode string data. Ex: “Hello World”		false	false	true	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>keypass</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>name</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string
<b>number</b>	Floating point numeric data. Ex: 26.73	n/a	false	false	false	false	float
<b>report</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	related
<b>re-source_uri</b>	Unicode string data. Ex: “Hello World”	n/a	false	true	false	false	string
<b>sequence</b>	Unicode string data. Ex: “Hello World”	n/a	false	false	false	false	string

## Example Response

```
"Q10Mean": 144,
"Q10ReadCount": 259462,
"Q17Histo": "5571 18198 104 5151 2507 67 1317 453 82 221 203 1122 26 151
←439 177 104 216 264 33 376 638 467 224 72 200 44 137 87 71 93 68 85 56 128 135 76
←37 452 52 25 99 57 3 48 60 250 1 20 4 502 69 169 62 134 58 51 155 44 197 507 106
←285 198 106 58 86 86 96 113 73 268 128 133 116 114 100 133 179 254 213 130 81 102
←39 190 170 255 66 163 146 64 57 59 28 29 8 45 12 14 157 181 71 214 37 41 84 75 108
←432 162 229 236 741 560 149 99 114 57 77 80 148 145 153 147 88 75 67 80 86 113 71
←115 99 132 40 138 88 192 319 328 217 199 549 955 1313 1193 524 3093 20272 152212
←24060 7616 2382 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
←0 0",
"Q17Mean": 125,
"Q17ReadCount": 227564,
"SysSNR": 9.37860903870432,
"aveKeyCount": 89,
"corrHPSNR": "",
"id": 10,
"keypass": 268035,
"name": "TF_1",
"number": 268035,
"report": "/rundb/api/v1/results/5/",
"resource_uri": "/rundb/api/v1/tfmetrics/10/",
"sequence": "
"GAATAATCCAGCCGCCAGGCATGGAAGAGCGTCGTAAGTATTGCAGGTTCAGGC GGAAAGCGTGATTGACTACTGGCAAATAAAGTACGTTCC
←"
}
]
}
```

## Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

## 2.2.87 Three Prime Adapter Resource

Resource URL <http://mytorrentserver/rundb/api/v1/threeprimeadapter/>

Schema URL <http://mytorrentserver/rundb/api/v1/threeprimeadapter/schema/>

### Resource Fields

field	help text	default	nul-lable	read-only	blank	unique	type
<b>chemistry-Type</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>description</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>direction</b>	Unicode string data. Ex: "Hello World"	For-ward	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	integer
<b>isActive</b>	Boolean data. Ex: True	true	false	false	true	false	boolean
<b>isDefault</b>	Boolean data. Ex: True	false	false	false	true	false	boolean
<b>name</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string
<b>resource_uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>runMode</b>	Unicode string data. Ex: "Hello World"	single	false	false	true	false	string
<b>sequence</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>uid</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	true	string

### Example Response

```
{
  "meta": {
    "limit": 1,
    "next": "/rundb/api/v1/threeprimeadapter/?offset=1&limit=1&format=json",
    "offset": 0,
    "previous": null,
    "total_count": 8
  },
  "objects": [
    {
      "chemistryType": "",
      "description": "Ion Xpress MuSeek adapter",
      "direction": "Forward",
      "id": 8,
      "isActive": true,
      "isDefault": false,
      "name": " Ion Xpress MuSeek adapter",
      "resource_uri": "/rundb/api/v1/threeprimeadapter/8/",
      "runMode": "single",
      "sequence": "TGCACGTGAAAGCACACAATCACCGACTGCC"
    }
  ]
}
```

```
        "uid": "FWD_0007"
    }
}
```

#### Allowed list HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

#### Allowed detail HTTP methods

- GET
- POST
- PUT
- DELETE
- PATCH

### 2.2.88 Torrent Suite Resource

Resource URL <http://mytorrentserver/rundb/api/v1/torrentsuite/>  
Schema URL <http://mytorrentserver/rundb/api/v1/torrentsuite/schema>/

#### Resource Fields

field	help text	de-default	nul-lable	read-only	blank	unique	type
<b>meta_version</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string
<b>locked</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	boolean
<b>logs</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	boolean
<b>versions</b>	Unicode string data. Ex: “Hello World”	n/a	true	true	true	false	string

#### Example Response

```
{  
    "locked": false,  
    "logs": false,  
    "meta_version": "5.12.1",  
    "versions": {  
        "ion-analysis": "5.12.27-1",  
        "ion-chefupdates": "5.12.3",  
        "ion-dbreports": "5.12.60-1",  
        "ion-docs": "5.12.1",  
        "ion-gpu": "5.12.1-1",  
        "ion-onetouchupdater": "5.0.2-1",  
        "ion-pipeline": "5.12.17-1",  
        "ion-plugins": "5.12.15-1",  
        "ion-publishers": "5.12.1-1",  
        "ion-referencelibrary": "2.2.0",  
        "ion-rsmts": "5.12.5-1",  
        "ion-sampleddata": "1.2.0-1",  
        "ion-torrentpy": "5.12.21-1",  
        "ion-torrentr": "5.12.23-1",  
        "ion-tsconfig": "5.12.23-1"  
    }  
}
```

#### Allowed list HTTP methods

- GET
- PUT

#### Allowed detail HTTP methods

None

### 2.2.89 User Resource

Resource URL <http://mytorrentserver/rundb/api/v1/user/>

Schema URL <http://mytorrentserver/rundb/api/v1/user/schema/>

## Resource Fields

field	help text	default	nul- lable	read- only	blank	unique	type
<b>date_joined</b>	date & time as a string. Ex: "2010-11-10T03:07:43"	2019-11-19T06:33:10.000022+00:00	false	false	false	false	date-time
<b>email</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>first_name</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>full_name</b>	Unicode string data. Ex: "Hello World"	n/a	false	false	false	false	string
<b>id</b>	Integer data. Ex: 2673		false	false	true	true	in- te- ger
<b>is_active</b>	Designates whether this user should be treated as active. Unselect this instead of deleting accounts.	true	false	false	true	false	boolean
<b>last_login</b>	A date & time as a string. Ex: "2010-11-10T03:07:43"	2019-11-19T06:33:10.000022+00:00	false	false	false	false	date-time
<b>last_name</b>	Unicode string data. Ex: "Hello World"		false	false	true	false	string
<b>pro- file</b>	A single related resource. Can be either a URI or set of nested resource data.	n/a	false	false	false	false	re- lated
<b>re- source uri</b>	Unicode string data. Ex: "Hello World"	n/a	false	true	false	false	string
<b>user- name</b>	Required. 30 characters or fewer. Letters, numbers and @/./+/-/_ characters	n/a	false	false	false	true	string

## Example Response

```
{
    "meta": {
        "limit": 1,
        "next": "/rundb/api/v1/user/?offset=1&limit=1&format=json",
        "offset": 0,
        "previous": null,
        "total_count": 6
    },
    "objects": [
        {
            "date_joined": "2017-07-24T18:11:45.000735+00:00",
            "email": "yourname@mail.com",
            "first_name": "",
            "full_name": "",
            "id": 6,
            "is_active": true,
            "last_login": "2017-07-24T18:11:45.000735+00:00",
            "last_name": "",
            "profile": {
                "id": 6,
                "last_read_news_post": "1984-11-06T00:00:00+00:00",
                "name": "",
                "needs_activation": false,
                "note": "",
                "phone_number": "",
                "resource_uri": "",
                "title": "user"
            }
        }
    ]
}
```

```

        },
        "resource_uri": "/rundb/api/v1/user/6/",
        "username": "dm_contact"
    }
]
}

```

### Allowed list HTTP methods

- GET

### Allowed detail HTTP methods

- GET

## 2.3 API Examples

See [API Reference](#) for a listing of all available APIs. This section has the setup common to all the API examples. See [Authentication](#) for more information on the authentication header. All examples use the third-party python library requests.

```

import requests

BASE_URL = "http://example.xyz"
USERNAME = "ionadmin"
API_KEY = "efb7a14021732d773a4258b69d9452042a31a6b6"

```

### 2.3.1 Fetching all Chips

Using the *Chip Resource API*.

```

headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}
object_list = []

next_url = "/rundb/api/v1/chip/"
while next_url:
    response = requests.get(BASE_URL + next_url, headers=headers, params={})
    response.raise_for_status()
    response_data = response.json()

    object_list += response_data["objects"]
    next_url = response_data["meta"]["next"] or None

print object_list

```

```
[...]
```

## 2.3.2 Adding Filters

Using the *Chip Resource API*.

```
headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}
object_list = []

next_url = "/rundb/api/v1/chip/"
while next_url:
    response = requests.get(BASE_URL + next_url, headers=headers, params={"name__startswith": "31"})
    response.raise_for_status()
    response_data = response.json()

    object_list += response_data["objects"]
    next_url = response_data["meta"]["next"] or None

for chip in object_list[0:3]:
    print chip["name"]
```

```
314
316
318
```

## 2.3.3 Completed Runs and Reports

Using the *Composite Experiment Resource API*.

```
headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}
object_list = []

next_url = "/rundb/api/v1/compositeexperiment/"
while next_url:
    response = requests.get(BASE_URL + next_url, headers=headers)
    response.raise_for_status()
    response_data = response.json()

    object_list += response_data["objects"]
    next_url = response_data["meta"]["next"] or None

for experiment in object_list[0:3]:
    print experiment["displayName"]
    for report in experiment["results"]:
        print "    " + report["resultsName"] + " " + report["status"]
```

```
S5-530 cfDNA
    Reanalyze Completed
    S5-530_cfDNA Completed
    Auto_S5-530_cfDNA_89 Completed
S5-540 AmpliSeqExome
    S5-540_AmpliSeqExome Importing Failed
    Auto_S5-540_AmpliSeqExome_90 Completed
S5-540 WholeTranscriptomeRNA
    Auto_S5-540_WholeTranscriptomeRNA_91 Importing Failed
```

### 2.3.4 Fetching a Report

Using the *Results Resource API*.

```
headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}

report_response = requests.get(BASE_URL + "/rundb/api/v1/results/3/", headers=headers)
report_response.raise_for_status()
report_response_data = report_response.json()

print report_response_data["resultsName"]

for plugin_name, plugin_status in report_response_data["pluginState"].items():
    print "    " + plugin_name, plugin_status

lib_metrics_response = requests.get(BASE_URL + report_response_data["libmetrics"][0], ↵
                                     headers=headers)
lib_metrics_response.raise_for_status()
lib_metrics_response_data = lib_metrics_response.json()

print "%.1f million reads" % (lib_metrics_response_data["totalNumReads"]/1000000.0)
```

```
Auto_S5-540_WholeTranscriptomeRNA_91
  DataExport Completed
  ERCC_Analysis Completed
  sampleID Error
  coverageAnalysis Error
  AssemblerSPAdes Started
  FilterDuplicates Completed
  RunTransfer Completed
94.0 million reads
```

### 2.3.5 Planning a Non-barcoded Run

Using the *Planned Experiment Resource API*.

```
headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}
plan_json = {
    "library": "hg19",
    "planName": "DOCS_my_plan",
    "sample": "my_sample",
    "chipType": "520",
    "sequencekitname": "Ion S5 Sequencing Kit",
    "librarykitname": "Ion Xpress Plus Fragment Library Kit",
    "templatingKitName": "Ion 520/530 Kit-OT2"
}
response = requests.post(BASE_URL + "/rundb/api/v1/plannedexperiment/", ↵
                           headers=headers, json=plan_json)
response.raise_for_status()
print response.status_code
```

201

## 2.3.6 Planning a Barcoded Run

Using the *Planned Experiment Resource API*.

```
headers = {"Authorization": "ApiKey " + USERNAME + ":" + API_KEY}
plan_json = {
    "library": "hg19",
    "planName": "DOCS_my_plan",
    "sample": "my_sample",
    "chipType": "520",
    "sequencekitname": "Ion S5 Sequencing Kit",
    "librarykitname": "Ion Xpress Plus Fragment Library Kit",
    "templatingKitName": "Ion 520/530 Kit-OT2",
    "barcodeId": "IonXpress",
    "barcodedSamples": {
        'demo sample 1': {
            'barcodeSampleInfo': {
                'IonXpress_003': {
                    'description': 'description here',
                    'hotSpotRegionBedFile': '',
                    'nucleotideType': 'DNA',
                    'reference': 'hg19',
                    'targetRegionBedFile': ''
                }
            },
            'barcodes': ['IonXpress_003']
        },
        'demo sample 2': {
            'barcodeSampleInfo': {
                'IonXpress_004': {
                    'description': 'description here',
                    'hotSpotRegionBedFile': '',
                    'nucleotideType': 'DNA',
                    'reference': 'hg19',
                    'targetRegionBedFile': ''
                }
            },
            'barcodes': ['IonXpress_004']
        }
    }
}
response = requests.post(BASE_URL + "/rundb/api/v1/plannedexperiment/", ↴
    headers=headers, json=plan_json)
response.raise_for_status()
print response.status_code
```

201

## 2.4 Downloading Files: FASTA and FASTQ

The example below is a CLI script to download FASTA and FASTQ files from two plugins output with given report (Results) ID. One of plugin output has a non-deterministic file output name.

```
~$ python get_fasta_and_fastq.py -h
usage: get_plugin_fasta_fastq_data.py [-h] [--host [HOST]]
```

```

[--username [USERNAME] ]
[--password [PASSWORD] ]
[--resultPK [RESULTPK] ]

Get the FASTA and FASTQ from generateConsensus and FileExporter for all the
barcodes for the requested Result id

optional arguments:
-h, --help            show this help message and exit
--host [HOST]          target host to download files. (default: None)
--username [USERNAME]
                      TB account username. (default: ionadmin)
--password [PASSWORD]
                      TB account password. (default: ionadmin)
--resultPK [RESULTPK]
                      the result primary key or ID. Case insensitive.

```

```

# Copyright (C) 2021 Thermo Fisher Scientific. All Rights Reserved.

import os
import sys
import json
import argparse
import requests
from bs4 import BeautifulSoup

help_text = """
Requirement:
    one of these options must be used: '--host', '--resultPK', .

Logic:
- Downloads all Sample Consensus Sequences FASTA from the Generate Consensus
- Downloads compressed Zip which contains all FASTQ from FileExporter
- Make sure requests, bs4(BeautifulSoup4) modules are installed via pip
"""

class GetPluginResults:
    api_name = "results"
    deleted_count = 0
    ignored_names = []

    def __init__(self, inputArgs):
        self.host = inputArgs["host"]
        self.auth = (inputArgs["username"], inputArgs["password"])
        self.resultPK = inputArgs["resultPK"]

    def get_objects(self, url):
        try:
            out = requests.get(url, auth=self.auth)
            if out.ok:
                return out.json()
            else:
                print(
                    ">>> (Status Code: %d) Unable to retrieve %s"
                    % (out.status_code, out.url)
                )
        except requests.ConnectionError:

```

```
    print(">>> Unable to connect %s" % (url))

    def getFastaFastq(self):
        if self.resultPK:
            url = os.path.join(self.host, "rundb/api/v1", self.api_name, self.
        ↪resultPK)

            for obj in self.get_objects(url).get("pluginresults"):
                pluginUrl = str(self.host + obj)
                pluginOut = self.get_objects(pluginUrl)
                if pluginOut.get("pluginName") == "generateConsensus":
                    self.download_fasta(pluginOut)
                if pluginOut.get("pluginName") == "FileExporter":
                    self.download_fastq(pluginOut)

    def getStartPluginJson(self, pluginOut):
        startPluginUrl = self.host + pluginOut.get("URL") + "startplugin.json"
        req = requests.get(startPluginUrl, auth=self.auth)
        return req.json()

    def download_fasta(self, pluginOut):
        print("Starting FASTA download...")
        startPluginUrl = self.host + pluginOut.get("URL") + "startplugin.json"
        req = requests.get(startPluginUrl, auth=self.auth)
        data = req.json()
        allConsensusFastaIn = (
            data.get("expmeta").get("output_file_name_stem") + ".consensus.fasta"
        )
        allConsensusFastaOut = (
            data.get("expmeta").get("output_file_name_stem")
            +
            "_"
            +
            str(pluginOut.get("id"))
            +
            ".consensus.fasta"
        )
        try:
            file_url = self.host + pluginOut.get("URL") + allConsensusFastaIn
            req = requests.get(file_url, auth=self.auth)
            with open(allConsensusFastaOut, "wb") as f:
                f.write(req.content)
            print(allConsensusFastaIn)
        except Exception as Err:
            print("FASTQ download failed. Please check %s" % Err)
        print("Completed FASTA download")

    def download_fastq(self, pluginOut):
        print("Starting the FASTQ download...")
        resultDirPath = (
            self.getStartPluginJson(pluginOut)
            .get("runinfo")
            .get("results_dir")
            .split("/")
        )
        metal_url = os.path.join(
            self.host,
            "report",
            str(self.resultPK),
            "metal",
            resultDirPath[-2],

```

```

        resultDirPath[-1],
    )

    req = requests.get(metal_url, auth=self.auth)
    soup = BeautifulSoup(req.content, features="html.parser")
    rows = soup.find("table").find_all("tr")
    fastq_zip = None
    for row in rows:
        try:
            fileName = row.find("a").get_text()
            if "zip" in fileName:
                fastq_zip = fileName
                exit()
        except Exception:
            continue

    if fastq_zip:
        zipUrlIn = self.host + pluginOut.get("URL") + fastq_zip
        zipUrlOut = str(pluginOut.get("id")) + "_" + fastq_zip
        response = requests.get(
            zipUrlIn, stream=True, auth=("ionadmin", "ionadmin")
        )
        with open(zipUrlOut, "wb") as zip:
            for chunk in response.iter_content(chunk_size=512):
                if chunk: # filter out keep-alive new chunks
                    zip.write(chunk)
        print(fastq_zip)
    else:
        print("FASTQ download did not complete")
        exit()
    print("Completed FASTA download")

if __name__ == "__main__":
    parser = argparse.ArgumentParser(
        prog="get_plugin_fasta_fastq_data.py",
        description="Get the FASTA and FASTQ from generateConsensus and FileExporter "
        "for all the barcodes for the requested "
        "Result id",
    )

    parser.add_argument(
        "--host",
        nargs="?",
        help="target host to download files. (default: %(default)s)",
    )

    parser.add_argument(
        "--username",
        nargs="?",
        default="ionadmin",
        help="TB account username. (default: %(default)s)",
    )

    parser.add_argument(
        "--password",
        nargs="?",
        default="ionadmin",
        help="TB account password. (default: %(default)s)",
    )

```

```
        help="TB account password. (default: %(default)s)",
    )

parser.add_argument(
    "--resultPK",
    nargs="?",
    help="the result primary key or ID. " + "Case insensitive.",
)

args = vars(parser.parse_args())

if args.get("host") and args.get("resultPK"):
    if "http" not in args.get("host"):
        print("need to specifiy HTTP or HTTPS")
        sys.exit(1)

    pluginResultData = GetPluginResults(args)
    pluginResultData.getFastaFastq()

else:
    print("Error: one of the required options is not used")
    print(help_text)
    parser.parse_args(["-h"])
    sys.exit(1)
```

# CHAPTER 3

---

## Legal

---

The information in this guide is subject to change without notice.

**DISCLAIMER:** TO THE EXTENT ALLOWED BY LAW, LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

**Important Licensing Information:** These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

**Trademarks:** All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

For Research Use Only. Not for use in diagnostic procedures.