



N2W

cpm_api_client

API Version: 2.7.0

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Chapter 1. Overview

This guide describes how to use `cpm_api_client` a command line client for the `CPM RESTful API` server.

Currently the following operation systems are supported:

- Windows 7 x86 and above
- Ubuntu 14.04.5 and above

For more information regarding the `CPM RESTful API`, refer to the [CPM RESTful API User Guide](#).

`đ` `cpm_api_client` works with CPM version `2.7.0` and above.

1.1. Usage

To see list of supported commands run `cpm_api_client` without any arguments or with `-h/--help`.

```
cpm_api_client -h
```

```
usage: cpm_api_client [-c] [-h] <COMMAND> ...
```

```
N2W Software command line client (API version 2.7.0)
```

```
Optional Arguments:
```

```
đ -c, --color If set, print output with colors (only applicable for
```

```
đ ANSI/VT100 terminals and terminal emulators).
```

```
đ -h, --help Show this help message and exit.
```

```
API commands:
```

```
đ <COMMAND>
```

1.2. API Commands

All the APIs which are supported by the `CPM RESTful API` can be invoked from `cpm_api_client`.

When a command is invoked an HTTP request is sent to the `CPM RESTful API` server with all the supplied arguments converted to the proper API parameters.

To see available arguments for a specific command run `cpm_api_client` with `-h/--help`.

```
cpm_api_client <COMMAND> -h
```

In order to be compliant with [CPM RESTful API User Guide](#) the available arguments are divided to the following sections:

Optional Arguments

Arguments which are optional for `cpm_api_client` and are not specific for the invoked command.

```
-c, --color      If set, print output with colors (only applicable for
d               ANSI/VT100 terminals and terminal emulators).
-h, --help      Show this help message and exit.
```

Connection Arguments

Arguments which are needed to establish connection to the [CPM RESTful API](#) server.

```
--host HOST      HOST of the RESTful API server.
--skip_ssl_verification
d               If set, skip server side SSL certificate verification.
--request_timeout REQUEST_TIMEOUT
d               Timeout in seconds for API request (default: 60 seconds).
```

API Arguments

Arguments which are part of the API request [Accept](#) headers. See [Media Type](#) and [Versioning](#) for more information.

```
--api_version API_VERSION
d               API version to be used (default: 2.1.0).
--media_type MEDIA_TYPE
d               Media type for the response (default: application/json).
```

Authentication Arguments

Arguments needed for authentication. See [Authentication](#) for more information.

```
--access_token ACCESS_TOKEN
d               Access Token to authenticate with the CPM server.
```

Query Arguments

Arguments which are converted into URL parameters for the invoked API request.

Body Arguments

Arguments which are converted into JSON and are sent as the body of the invoked API request.

1.3. Authentication

CPM RESTful API authentication scheme requires passing an access token on each request. Without the access token, the request will be denied with the **HTTP 401 Unauthorized** error response and appropriate **WWW-Authenticate** header.

In order to authenticate `cpm_api_client` commands `--access_token` must be provided.

Obtain Tokens:

```
cpm_api_client token_obtain_api_key_create --host <HOST of the RESTful API server> --api_key  
<The API Authentication Key>
```

Refresh Access Token:

```
cpm_api_client token_refresh_create --host <HOST of the RESTful API server> --refresh <The  
Refresh Token>
```



For more information regarding authentication, refer to the [CPM RESTful API User Guide](#).

1.4. Media Type

CPM RESTful API supports 2 types of media types in the **Accept** header `application/json` and `text/csv`.

By default, `cpm_api_client` is sending `application/json` in **Accept** header for most of the commands. `text/csv` is sent for reports and logs.

`--media_type` can be provided in order to change the media type for a command.

1.5. Versioning

In order to support backward compatibility, CPM RESTful API is versioned.

By default, `cpm_api_client` is sending the latest API version for all the commands.

`--api_version` can be provided in order to change the API version for a command.

1.6. Configuration File

`cpm_api_client` enables using a configuration file named `cpm_api_client.cfg`, the file must be located in the same directory where the `cpm_api_client` binary is located and a default one is already provided.

`cpm_api_client.cfg` contains two sections:

[arguments]

Arguments that can be used with the invoked command and are used as default values if not provided when the command is invoked.

If `cpm_api_client` is invoked with arguments the values from `cpm_api_client.cfg` are ignored.

[logging]

Provides logging arguments. Should not be modified unless requested by support team.

Default Configuration File

```
[arguments]
host=127.0.0.1
skip_ssl_verification=no
request_timeout=60
color=no
;access_token=<your token here>

[logging]
log_level=INFO
```

d

`access_token` can be added within [arguments] section. In the provided default configuration file it is commented out using `;`.

Chapter 2. Examples

Below are sample commands which use the following variables:

Variable	Description
\$HOST	RESTful API server host.
\$TOKEN	Access token for authentication.

2.1. Schedules APIs

Below are sample commands to create a schedule, update it, show a list of schedules, and delete the created schedule.

2.1.1. Create a CPM Schedule

This sample shows how to create a weekly CPM schedule for the `root` user.

Sample Request:

```
cpm_api_client schedules_create --host $HOST --access_token $TOKEN --name sample --every_unit
W --every_how_many 1 --user 1
```

Sample Response:

```
{
  "content_type": "application/json",
  "response": {
    "description": null,
    "disable_times": [],
    "end_date": null,
    "every_how_many": 1,
    "every_unit": "W",
    "id": 1,
    "last_modified": "2018-08-01T12:00:00.000000Z",
    "name": "sample",
    "start_date": "2018-08-01T12:00:00.000000Z",
    "user": "1"
  },
  "status": 201
}
```

2.1.2. Update a CPM Schedule

This sample shows how to update a CPM schedule with `id=1` to run once a month.

Sample Request:

```
cpm_api_client schedules_update --host $HOST --access_token $TOKEN --name sample --id 1
--every_unit O --every_how_many 1
```

Sample Response:

```
{
  "content_type": "application/json",
  "response": {
    "description": null,
    "disable_times": [],
    "end_date": null,
    "every_how_many": 1,
    "every_unit": "O",
    "id": 1,
    "last_modified": "2018-08-01T12:00:00.000000Z",
    "name": "sample",
    "start_date": "2018-08-01T13:00:00.000000Z",
    "user": 1
  },
  "status": 200
}
```

2.1.3. List CPM Schedules

This sample shows how to get a list of all CPM schedules ordered by the scheduling frequency.

Sample Request:

```
cpm_api_client schedules_list --host $HOST --access_token $TOKEN --ordering
every_unit, every_how_many
```

Sample Response:

```
{
  "content_type": "application/json",
  "response": [
    {
      "id": 2,
      "name": "5minutes",
      "description": "",
      "user": 1,
      "every_unit": "M",
      "every_how_many": 5,
      "start_date": "2018-08-20T12:50:00Z",
    }
  ]
}
```

```

d      "end_date": null ,
d      "last_modified " : "2018-08-20T11:50:35Z " ,
d      "allow_on_sunday": true ,
d      "allow_on_monday": true ,
d      "allow_on_tuesday " : true ,
d      "allow_on_wednesday": true ,
d      "allow_on_thursday " : true ,
d      "allow_on_friday " : true ,
d      "allow_on_saturday " : true ,
d      "disable_times " : []
d    },
d    {
d      "id": 5,
d      "name": "10hours",
d      "description " : "",
d      "user": 1,
d      "every_unit " : "H",
d      "every_how_many": 10,
d      "start_date " : "2018-08-20T13:11:00Z " ,
d      "end_date": null ,
d      "last_modified " : "2018-08-20T12:11:21Z " ,
d      "allow_on_sunday": true ,
d      "allow_on_monday": true ,
d      "allow_on_tuesday " : true ,
d      "allow_on_wednesday": true ,
d      "allow_on_thursday " : true ,
d      "allow_on_friday " : true ,
d      "allow_on_saturday " : true ,
d      "disable_times " : []
d    },
d    {
d      "id": 4,
d      "name": "7weeks",
d      "description " : "",
d      "user": 1,
d      "every_unit " : "W",
d      "every_how_many": 7,
d      "start_date " : "2018-08-20T12:50:00Z " ,
d      "end_date": null ,
d      "last_modified " : "2018-08-20T11:51:03Z " ,
d      "disable_times " : []
d    },
d    {
d      "id": 1,
d      "name": "1month",
d      "description " : "",
d      "user": 1,
d      "every_unit " : "O",

```

```

d     "every_how_many": 1,
d     "start_date ": "2018-08-20T14:43:56Z ",
d     "end_date": null ,
d     "last_modified ": "2018-08-20T11:43:56Z ",
d     "disable_times ": []
d   },
d   {
d     "id": 3,
d     "name": "2months",
d     "description ": "",
d     "user": 1,
d     "every_unit ": "O",
d     "every_how_many": 2,
d     "start_date ": "2018-08-20T12:50:00Z ",
d     "end_date": null ,
d     "last_modified ": "2018-08-20T11:50:50Z ",
d     "disable_times ": []
d   }
d ],
d "status ": 200
}

```

2.1.4. Delete a CPM Schedule

This sample shows how to delete a CPM schedule with `id=1`.

Sample Request:

```
cpm_api_client schedules_delete --host $HOST --access_token $TOKEN --id 1
```

Sample Response:

```

{
d  "content_type ": "application/json ",
d  "response": null ,
d  "status ": 204
}

```

2.2. Logs APIs

2.2.1. Download Support Logs

This sample downloads support logs as `bz2` file into current working directory.

Sample Request:

```
cpm_api_client system_support_logs_list --host $HOST --access_token $TOKEN
```

Sample Response:

```
{
  "content_type": "application/x-bzip2",
  "response": "attachment; filename=cpm_logs_2018_12_16_15_32.tar.bz2",
  "status": 200
}
```

2.2.2. Download Cleanup Logs

This sample downloads cleanup logs as CSV file into current working directory.

Sample Request:

```
cpm_api_client settings_cleanup_list_logs --host $HOST --access_token $TOKEN
```

Sample Response:

```
{
  "content_type": "text/csv; charset=utf-8",
  "response": "attachment; filename=cleanup_log_2018-12-17_07-16-22.497640.csv",
  "status": 200
}
```

2.3. Reports APIs

2.3.1. Download Snapshots Report

This sample downloads snapshots report as CSV file into current working directory.

Sample Request:

```
cpm_api_client reports_snapshots_list --host $HOST --access_token $TOKEN
```

Sample Response:

```
{
  "content_type": "text/csv; charset=utf-8",
  "response": "attachment; filename=cpm_snapshots_report_for_user_root_2018-12-17_10-17.csv",
  "status": 200
}
```

2.3.2. Download Backups Report

This sample downloads backups report with `backup_id=1` as CSV file into current working directory.

Sample Request:

```
cpm_api_client reports_backups_list --host $HOST --access_token $TOKEN --backup_id 1
```

Sample Response:

```
{
  "content_type": "text/csv; charset=utf-8",
  "response": "attachment; filename=cpm_backup_report_for_user_root_2018-12-17_10-40.csv",
  "status": 200
}
```