
nexus3-cli Documentation

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CHAPTER 1

Command-line Interface

Logging level can be configured by setting an environment variable named `LOG_LEVEL`. Valid values are: DEBUG, INFO, WARNING (default), ERROR, CRITICAL.

CHAPTER 2

API

2.1 nexuscli

2.1.1 nexuscli package

Subpackages

[nexuscli.api package](#)

Subpackages

[nexuscli.api.cleanup_policy package](#)

Submodules

[nexuscli.api.cleanup_policy.collection module](#)

```
class nexuscli.api.cleanup_policy.collection.CleanupPolicyCollection(client=None)
Bases: object
```

A class to manage Nexus 3 Cleanup Policies.

Parameters `client` ([nexuscli.nexus_client.NexusClient](#)) – the client instance that will be used to perform operations against the Nexus 3 service. You must provide this at instantiation or set it before calling any methods that require connectivity to Nexus.

`GROOVY_SCRIPT_NAME = 'nexus3-cli-cleanup-policy'`
Groovy script used by this class

`create_or_update(cleanup_policy)`

Creates the given Cleanup Policy in the Nexus repository. If a policy with the same name already exists, it will be updated.

Parameters `cleanup_policy` (`CleanupPolicy`) – the policy to create or update.
Raises `exception.NexusClientCreateCleanupPolicyError` – when the Nexus API returns an error or unexpected result.

get_by_name (`name`)
Get a Nexus 3 cleanup policy by its name.

Parameters `name` (`str`) – name of the wanted policy

Returns the requested object

Return type `CleanupPolicy`

Raises `exception.NexusClientInvalidRepository` – when a repository with the given name isn't found.

list ()
Return all cleanup policies.

Returns every policy as a list of `CleanupPolicy` instances.

Return type `list[CleanupPolicy]`

nexuscli.api.cleanup_policy.model module

class `nexuscli.api.cleanup_policy.model.CleanupPolicy` (`client`, `**kwargs`)
Bases: `object`

Represents a Nexus Cleanup Policy.

Parameters

- **client** (`nexuscli.nexus_client.NexusClient`) – the client instance that will be used to perform operations against the Nexus 3 service. You must provide this at instantiation or set it before calling any methods that require connectivity to Nexus.
- **name** (`str`) – name of the new policy.
- **format** (`str`) – ‘all’ or the name of the repository format this policy applies to.
- **mode** (`str`) – ‘delete’
- **criteria** (`dict`) – the deletion criteria for the policy. Supports one or more of the following attributes:
 - `lastDownloaded` (`int`): days since artefact last downloaded;
 - `lastBlobUpdated` (`int`): days since last update to artefact;

configuration

Nexus 3 Cleanup Policy representation as a python dict. The dict returned by this property can be converted to JSON for use with the `nexus3-cli-cleanup-policy` groovy script created by the `CleanupPolicyCollection` methods.

Example structure and attributes common to all repositories:

```
>>> cleanup_policy = {  
>>>     'name': 'my-policy',  
>>>     'format': 'bower',  
>>>     'mode': 'delete',  
>>>     'criteria': {  
>>>         'lastDownloaded': 172800,
```

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```
>>>         'lastBlobUpdated': 86400
>>>     }
>>> }
```

Depending on the repository type and format (recipe), other attributes will be present.

Returns cleanup policy as a dict

Return type dict

nexuscli.api.cleanup_policy.validations module

nexuscli.api.cleanup_policy.validations.**policy_criteria**(raw_policy)

Ensures the policy criteria fields are valid. Will transform strings to the correct type where needed.

Parameters raw_policy – as returned by the *CleanupPolicy configuration*

Raises ValueError – when a criterion has an invalid value.

nexuscli.api.cleanup_policy.validations.**policy_name**(raw_policy)

Ensure the policy has a name

Raises ValueError – when the name attribute is missing.

Module contents

nexuscli.api.repository package

Submodules

nexuscli.api.repository.collection module

class nexuscli.api.repository.collection.RepositoryCollection(*client=None*)

Bases: object

A class to manage Nexus 3 repositories.

Parameters client ([nexuscli.nexus_client.NexusClient](#)) – the client instance that will be used to perform operations against the Nexus 3 service. You must provide this at instantiation or set it before calling any methods that require connectivity to Nexus.

create(repository)

Creates a Nexus repository with the given format and type.

Parameters repository ([Repository](#)) – the instance containing the settings for the repository to be created.

Raises [NexusClientCreateRepositoryError](#) – error creating repository.

delete(name)

Delete a repository.

Parameters name ([str](#)) – name of the repository to be deleted.

get_by_name(name)

Get a Nexus 3 repository by its name.

Parameters `name` (`str`) – name of the repository wanted

Return type `nexuscli.api.repository.model.Repository`

Raises `exception.NexusClientInvalidRepository` – when a repository with the given name isn't found.

get_raw_by_name (`name`)

Return the raw dict for the repository called `name`. Remember to `refresh()` to get the latest from the server.

Parameters `name` (`str`) – name of the repository wanted

Return type `dict`

Raises `exception.NexusClientInvalidRepository` – when a repository with the given name isn't found.

raw_list ()

A raw representation of the Nexus repositories.

Returns for the format, see List Repositories.

Return type `dict`

refresh ()

Refresh local list of repositories with latest from service. A raw representation of repositories can be fetched using `raw_list()`.

`nexuscli.api.repository.collection.get_repository_class(raw_configuration)`

Given a raw repository configuration, returns its corresponding class.

Parameters `raw_configuration` (`dict`) – configuration as returned by the `SCRIPT_NAME_GET` groovy script.

Returns repository class

nexuscli.api.repository.model module

class `nexuscli.api.repository.model.AptHostedRepository` (`name,`
`gpg='public.gpg.key',`
`passphrase=None,`
`**kwargs)`

Bases: `nexuscli.api.repository.model.AptRepository`, `nexuscli.api.repository.model.HostedRepository`

configuration

As per `Repository.configuration` but specific to this repository recipe and type.

Return type `str`

class `nexuscli.api.repository.model.AptProxyRepository` (`name,` `flat=False,`
`**kwargs)`

Bases: `nexuscli.api.repository.model.AptRepository`, `nexuscli.api.repository.model.ProxyRepository`

configuration

As per `Repository.configuration` but specific to this repository recipe and type.

Return type `str`

```
class nexuscli.api.repository.model.AptRepository(name, distribution='bionic',  

**kwargs)  
Bases: nexuscli.api.repository.model.Repository  
  
RECIPES = ('apt',)  
  
configuration
```

Repository configuration represented as a python dict. The dict returned by this property can be converted to JSON for use with the `nexus3-cli-repository-create` groovy script created by the `create()` method.

Example structure and attributes common to all repositories:

```
>>> common_configuration = {  
>>>     'name': 'my-repository',  
>>>     'online': True,  
>>>     'recipeName': 'raw',  
>>>     '_state': 'present',  
>>>     'attributes': {  
>>>         'storage': {  
>>>             'blobStoreName': 'default',  
>>>         },  
>>>         'cleanup': {  
>>>             'policyName': None,  
>>>         }  
>>>     }  
>>> }
```

Depending on the repository type and format (recipe), other attributes will be present.

Returns repository configuration

Return type dict

```
class nexuscli.api.repository.model.BowerHostedRepository(name,  
                                         write_policy='ALLOW',  
                                         **kwargs)  
Bases: nexuscli.api.repository.model.HostedRepository  
  
class nexuscli.api.repository.model.BowerProxyRepository(name, remote_url=None,  
                                         auto_block=True, content_max_age=1440,  
                                         meta-  
                                         data_max_age=1440,  
                                         nega-  
                                         tive_cache_enabled=True,  
                                         nega-  
                                         tive_cache_ttl=1440,  
                                         remote_auth_type=None,  
                                         remote_username=None,  
                                         remote_password=None,  
                                         **kwargs)  
Bases: nexuscli.api.repository.model.ProxyRepository  
  
class nexuscli.api.repository.model.DockerHostedRepository(name,  
                                         write_policy='ALLOW',  
                                         **kwargs)  
Bases: nexuscli.api.repository.model.HostedRepository, nexuscli.api.repository.model.DockerRepository
```

```
class nexuscli.api.repository.model.DockerProxyRepository(name,           in-
                                                         dex_type='REGISTRY',
                                                         use_trust_store_for_index_access=False,
                                                         in-
                                                         dex_url='https://index.docker.io/',
                                                         **kwargs)
Bases:      nexuscli.api.repository.model.ProxyRepository,      nexuscli.api.
repository.model.DockerRepository

INDEX_TYPES = ('REGISTRY', 'HUB', 'CUSTOM')

configuration
As per Repository.configuration but specific to this repository recipe and type.

Return type str

class nexuscli.api.repository.model.DockerRepository(name,           http_port=8084,
                                                       https_port=8085,
                                                       v1_enabled=False,
                                                       force_basic_auth=False,
                                                       **kwargs)
Bases: nexuscli.api.repository.model.Repository

RECIPES = ('docker',)

configuration
As per Repository.configuration but specific to this repository recipe and type.

Return type str

class nexuscli.api.repository.model.HostedRepository(name, write_policy='ALLOW',
                                                       **kwargs)
Bases: nexuscli.api.repository.model.Repository

A hosted Nexus repository.

Parameters
• name (str) – name of the repository.
• write_policy (str) – one of WRITE\_POLICIES. See Nexus documentation for de-
tails.
• kwargs – see Repository

TYPE = 'hosted'

WRITE_POLICIES = ['ALLOW', 'ALLOW_ONCE', 'DENY']
Nexus 3 repository write policies supported by this class.

configuration
As per Repository.configuration but specific to this repository recipe and type.

Return type str

upload_directory(src_dir, dst_dir, recurse=True, flatten=False)
Uploads all files in a directory to the specified destination directory in this repository, honouring options
flatten and recurse.

Parameters
• src_dir – path to local directory to be uploaded
• dst_dir – destination directory in dst_repo
```

- **recurse** (`bool`) – when True, upload directory recursively.
- **flatten** – when True, the source directory tree isn't replicated on the destination.

Returns number of files uploaded

Return type `int`

upload_file (`src_file`, `dst_dir`, `dst_file=None`)

Uploads a single file to the directory and file name specified.

Parameters

- **src_file** – path to the local file to be uploaded.
- **dst_dir** – directory under dst_repo to place file in.
- **dst_file** – destination file name. If not given, the basename of `src_file` name is used.

```
class nexuscli.api.repository.model.MavenHostedRepository(name,
                                                               write_policy='ALLOW',
                                                               **kwargs)
Bases:      nexuscli.api.repository.model.HostedRepository,      nexuscli.api.
repository.model.MavenRepository
```

A Maven hosted Nexus repository.

See [HostedRepository](#) and [MavenRepository](#)

```
class nexuscli.api.repository.model.MavenProxyRepository(name,
                                                               lay-
                                                               out_policy='PERMISSIVE',
                                                               ver-
                                                               sion_policy='RELEASE',
                                                               **kwargs)
Bases:      nexuscli.api.repository.model.MavenRepository,      nexuscli.api.
repository.model.ProxyRepository
```

A Maven proxy Nexus repository.

See [MavenRepository](#) and [ProxyRepository](#)

```
class nexuscli.api.repository.model.MavenRepository(name,
                                                               lay-
                                                               out_policy='PERMISSIVE',
                                                               version_policy='RELEASE',
                                                               **kwargs)
Bases: nexuscli.api.repository.model.Repository
```

A base Maven Nexus repository.

Parameters

- **name** (`str`) – name of the repository.
- **layout_policy** – one of `LAYOUT_POLICIES`. See Nexus documentation for details.
- **version_policy** – one of `VERSION_POLICIES`. See Nexus documentation for details.
- **kwargs** – see [Repository](#)

`LAYOUT_POLICIES = ('PERMISSIVE', 'STRICT')`

Maven layout policies

`RECIPES = ('maven',)`

```
VERSION_POLICIES = ('RELEASE', 'SNAPSHOT', 'MIXED')
```

Maven version policies

configuration

As per [Repository.configuration](#) but specific to this repository recipe and type.

Return type str

```
class nexuscli.api.repository.model.NpmHostedRepository(name,
                                                       write_policy='ALLOW',
                                                       **kwargs)
```

Bases: [nexuscli.api.repository.model.HostedRepository](#)

```
class nexuscli.api.repository.model.NpmProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440, metadata_max_age=1440, negative_cache_enabled=True,
                                                       negative_cache_ttl=1440, remote_auth_type=None, remote_username=None, remote_password=None,
                                                       **kwargs)
```

Bases: [nexuscli.api.repository.model.ProxyRepository](#)

```
class nexuscli.api.repository.model.NugetHostedRepository(name,
                                                       write_policy='ALLOW',
                                                       **kwargs)
```

Bases: [nexuscli.api.repository.model.HostedRepository](#)

```
class nexuscli.api.repository.model.NugetProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440, metadata_max_age=1440, negative_cache_enabled=True,
                                                       negative_cache_ttl=1440, remote_auth_type=None, remote_username=None, remote_password=None,
                                                       **kwargs)
```

Bases: [nexuscli.api.repository.model.ProxyRepository](#)

```
class nexuscli.api.repository.model.ProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440, metadata_max_age=1440, negative_cache_enabled=True,
                                                       negative_cache_ttl=1440, remote_auth_type=None, remote_username=None, remote_password=None,
                                                       **kwargs)
```

Bases: [nexuscli.api.repository.model.Repository](#)

A proxy Nexus repository.

Parameters

- **name** (`str`) – name of the repository.
- **remote_url** (`str`) – The URL of the repository being proxied, including the protocol scheme.
- **auto_block** (`bool`) – Auto-block outbound connections on the repository if remote peer is detected as unreachable/unresponsive.
- **content_max_age** (`int`) – How long (in minutes) to cache artifacts before rechecking the remote repository. Release repositories should use -1.
- **metadata_max_age** (`int`) – How long (in minutes) to cache metadata before rechecking the remote repository.
- **negative_cache_enabled** (`bool`) – Cache responses for content not present in the proxied repository
- **negative_cache_ttl** (`int`) – How long to cache the fact that a file was not found in the repository (in minutes)
- **kwargs** – see `Repository`

TYPE = 'proxy'

configuration

As per `Repository.configuration` but specific to this repository recipe and type.

Return type `str`

```
class nexuscli.api.repository.model.PypiHostedRepository(name,
                                                       write_policy='ALLOW',
                                                       **kwargs)
```

Bases: `nexuscli.api.repository.model.HostedRepository`

```
class nexuscli.api.repository.model.PypiProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440,
                                                       metadata_max_age=1440,
                                                       negative_cache_enabled=True,
                                                       negative_cache_ttl=1440,
                                                       remote_auth_type=None,
                                                       remote_username=None,
                                                       remote_password=None,
                                                       **kwargs)
```

Bases: `nexuscli.api.repository.model.ProxyRepository`

```
class nexuscli.api.repository.model.RawHostedRepository(name,
                                                       write_policy='ALLOW',
                                                       **kwargs)
```

Bases: `nexuscli.api.repository.model.HostedRepository`

```
class nexuscli.api.repository.model.RawProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440, meta-
                                                       data_max_age=1440, negative_cache_enabled=True,
                                                       negative_cache_ttl=1440,
                                                       remote_auth_type=None,
                                                       remote_username=None,
                                                       remote_password=None,
                                                       **kwargs)
```

Bases: *nexuscli.api.repository.model.ProxyRepository*

```
class nexuscli.api.repository.model.Repository(name, nexus_client=None,
                                               recipe='raw',
                                               blob_store_name='default',
                                               strict_content_type_validation=False,
                                               cleanup_policy=None)
```

Bases: *object*

A base Nexus repository.

Nexus 3 repository recipes (formats) supported by this class:

- bower
- npm
- nuget
- pypi
- raw
- rubygems
- docker
- apt

Parameters

- **name** (*str*) – name of the repository.
- **nexus_client** (*nexuscli.nexus_client.NexusClient*) – the *NexusClient* instance that will be used to perform operations against the Nexus 3 service. You must provide this at instantiation or set it before calling any methods that require connectivity to Nexus.
- **recipe** (*str*) – format (recipe) of the new repository. Must be one of *RECIPES*. See Nexus documentation for details.
- **blob_store_name** (*str*) – name of an existing blob store; ‘default’ should work on most installations.
- **strict_content_type_validation** (*bool*) – Whether to validate file extension against its content type.
- **cleanup_policy** (*str*) – name of an existing repository clean-up policy.

```
RECIPES = ('bower', 'npm', 'nuget', 'pypi', 'raw', 'rubygems', 'docker', 'apt')
TYPE = None
```

cleanup_policy

Groovy-formatted value for the cleanup/policy attribute.

configuration

Repository configuration represented as a python dict. The dict returned by this property can be converted to JSON for use with the `nexus3-cli-repository-create` groovy script created by the `create()` method.

Example structure and attributes common to all repositories:

```
>>> common_configuration = {
>>>     'name': 'my-repository',
>>>     'online': True,
>>>     'recipeName': 'raw',
>>>     '_state': 'present',
>>>     'attributes': {
>>>         'storage': {
>>>             'blobStoreName': 'default',
>>>         },
>>>         'cleanup': {
>>>             'policyName': None,
>>>         }
>>>     }
>>> }
```

Depending on the repository type and format (recipe), other attributes will be present.

Returns repository configuration

Return type `dict`

recipe_name

The Nexus 3 name for this repository's recipe (format). This is almost always the same as `name` with `maven` being the notable exception.

```
class nexuscli.api.repository.model.RubygemsHostedRepository(name,
                                                               write_policy='ALLOW',
                                                               **kwargs)
```

Bases: `nexuscli.api.repository.model.HostedRepository`

```
class nexuscli.api.repository.model.RubygemsProxyRepository(name,
                                                               remote_url=None,
                                                               auto_block=True,
                                                               content_max_age=1440,
                                                               meta_data_max_age=1440,
                                                               negative_cache_enabled=True,
                                                               negative_cache_ttl=1440,
                                                               remote_auth_type=None,
                                                               remote_username=None,
                                                               remote_password=None,
                                                               **kwargs)
```

Bases: `nexuscli.api.repository.model.ProxyRepository`

```
class nexuscli.api.repository.model.YumHostedRepository(name,
                                                       write_policy='ALLOW',
                                                       **kwargs)
```

Bases: `nexuscli.api.repository.model.HostedRepository`, `nexuscli.api.repository.model.YumRepository`

A Yum hosted Nexus repository.

See `HostedRepository` and `YumRepository`

```
class nexuscli.api.repository.model.YumProxyRepository(name, remote_url=None,
                                                       auto_block=True, content_max_age=1440, metadata_max_age=1440, negative_cache_enabled=True,
                                                       negative_cache_ttl=1440, remote_auth_type=None, remote_username=None, remote_password=None,
                                                       **kwargs)
```

Bases: `nexuscli.api.repository.model.ProxyRepository`, `nexuscli.api.repository.model.YumRepository`

A Yum proxy Nexus repository.

See `ProxyRepository` and `YumRepository`

```
class nexuscli.api.repository.model.YumRepository(name, depth=1, **kwargs)
```

Bases: `nexuscli.api.repository.model.Repository`

A Yum base Nexus repository.

Parameters

- `name` (`str`) – name of the repository.
- `depth` (`int`) – The Yum repodata depth. Usually 1.
- `kwargs` – see `Repository`

`RECIPES = ('yum',)`

configuration

As per `Repository.configuration` but specific to this repository recipe and type.

Return type `str`

nexuscli.api.repository.upload module

Methods to implement upload for specific repository formats (recipes)

```
nexuscli.api.repository.upload.upload_file_raw(repository, src_file, dst_dir, dst_file)
```

Upload a single file to a raw repository.

Parameters

- `repository` (`nexuscli.api.repository.model.Repository`) – repository instance used to access Nexus 3 service.
- `src_file` – path to the local file to be uploaded.
- `dst_dir` – directory under dst_repo to place file in. When None, the file is placed under the root of the raw repository

- **dst_file** – destination file name.

Raises

- `exception.NexusClientInvalidRepositoryPath` – invalid repository path.
- `exception.NexusClientAPIError` – unknown response from Nexus API.

`nexuscli.api.repository.upload.upload_file_yum(repository, src_file, dst_dir, dst_file)`
Upload a single file to a yum repository.

Parameters

- **repository** (`nexuscli.api.repository.model.Repository`) – repository instance used to access Nexus 3 service.
- **src_file** – path to the local file to be uploaded.
- **dst_dir** – directory under dst_repo to place file in.
- **dst_file** – destination file name.

Raises `exception.NexusClientAPIError` – unknown response from Nexus API.

`nexuscli.api.repository.util module`

`nexuscli.api.repository.util.get_files(src_dir, recurse=True)`

Walks the given directory and collects files to be uploaded. If recurse option is False, only the files on the root of the directory will be returned.

Parameters

- **src_dir** – location of files
- **recurse** – If false, only the files on the root of src_dir are returned

Returns file set to be used with upload_directory

Return type `set`

`nexuscli.api.repository.util.get_upload_subdirectory(dst_dir, file_path, flatten=False)`

Find the destination subdirectory based on given parameters. This is mostly so the `flatten` option is honoured.

Parameters

- **dst_dir** – destination directory
- **file_path** – file path, using REMOTE_PATH_SEPARATOR as the directory separator.
- **flatten** (`bool`) – when True, sub_directory will be flattened (ie: file_path structure will not be present in the destination directory)

Returns the appropriate sub directory in the destination directory.

Return type `str`

`nexuscli.api.repository.validations module`

`nexuscli.api.repository.validations.ensure_known(target, value, known)`

Validate whether the target argument is known and supported. The target is only used to provide a friendlier message to the user. The given value is checked against known and supported.

Parameters

- **target** (*str*) – name of the target, as known to the end-user.
- **value** (*str*) – value of the target key.
- **known** (*list, tuple*) – known possible values for the target.

Raises `ValueError` – if given value is not in known.

Module contents

`nexuscli.api.script` package

Submodules

`nexuscli.api.script.model` module

```
class nexuscli.api.script.model.Script
Bases: object
```

A Class representing a Nexus 3 script.

```
class nexuscli.api.script.model.ScriptCollection(client=None)
Bases: object
```

A class to manage Nexus 3 scripts.

Parameters `client` (`nexuscli.nexus_client.NexusClient`) – the client instance that will be used to perform operations against the Nexus 3 service. You must provide this at instantiation or set it before calling any methods that require connectivity to Nexus.

`client`
as per `client` argument of `ScriptCollection`.

Type `nexuscli.nexus_client.NexusClient`

`create(script_name, script_content, script_type='groovy')`

Create the given script in the Nexus 3 service.

Parameters

- `script_name` (*str*) – name of script to be created.
- `script_content` (*str*) – script code.
- `script_type` (*str*) – type of script to be created.

Raises `exception.NexusClientAPIError` – if the script creation isn't successful; i.e.: any HTTP code other than 204.

`create_if_missing(name, content=None, script_type='groovy')`

Creates a script in the Nexus 3 service IFF a script with the same name doesn't exist. Equivalent to checking if the script exists with `get()` and, if not, creating it with `create()`.

Parameters

- `name` (*str*) – name of script to be created.
- `content` (`Union[str, NoneType]`) – script code. If not given, the method will use `nexuscli.nexus_util.groovy_script()` to read the script code from a local file.
- `script_type` (*str*) – type of script to be created.

Raises `exception.NexusClientAPIError` – if the script creation isn’t successful; i.e.: any HTTP code other than 204.

delete (`script_name`)

Deletes a script from the Nexus 3 repository.

Parameters `script_name` – name of script to be deleted.

Raises `exception.NexusClientAPIError` – if the Nexus service fails to delete the script; i.e.: any HTTP code other than 204.

exists (`name`)

Check if a script exists.

Parameters `name` – of script to verify existence.

Returns True if it exists, false otherwise

Return type `bool`

Raises `exception.NexusClientAPIError` – if the response from the Nexus service isn’t recognised; i.e.: any HTTP code other than 200, 404.

get (`name`)

Get a Nexus 3 script by name.

Parameters `name` – of script to be retrieved.

Returns the script or None, if not found

Return type `dict, None`

Raises `exception.NexusClientAPIError` – if the response from the Nexus service isn’t recognised; i.e.: any HTTP code other than 200, 404.

list ()

List of all script names on the Nexus 3 service.

Returns a list of names

Return type `list`

Raises `exception.NexusClientAPIError` – if the script names cannot be retrieved; i.e.: any HTTP code other than 200.

run (`script_name, data=`)

Runs an existing script on the Nexus 3 service.

Parameters

- `script_name` – name of script to be run.
- `data` – parameters to be passed to the script, via HTTP POST. If the script being run requires a certain format or encoding, you need to prepare it yourself. Typically this is `json.dumps(data)`.

Returns the content returned by the script, if any.

Return type `str, dict`

Raises `exception.NexusClientAPIError` – if the Nexus service fails to run the script; i.e.: any HTTP code other than 200.

Module contents

Module contents

nexuscli.cli package

Submodules

nexuscli.cli.root_commands module

Handles base/root commands (as opposed to subcommands)

`nexuscli.cli.root_commands.cmd_del(*args, **kwargs)`
Alias for `cmd_delete()`

`nexuscli.cli.root_commands.cmd_delete(nexus_client, options)`
Performs nexus3 delete

`nexuscli.cli.root_commands.cmd_dl(*args, **kwargs)`
Alias for `cmd_download()`

`nexuscli.cli.root_commands.cmd_download(nexus_client, args)`
Performs nexus3 download

`nexuscli.cli.root_commands.cmd_list(nexus_client, args)`
Performs nexus3 list

`nexuscli.cli.root_commands.cmd_login(_, __)`
Performs nexus3 login

`nexuscli.cli.root_commands.cmd_ls(*args, **kwargs)`
Alias for `cmd_list()`

`nexuscli.cli.root_commands.cmd_up(*args, **kwargs)`
Alias for `cmd_upload()`

`nexuscli.cli.root_commands.cmd_upload(nexus_client, args)`
Performs nexus3 upload

nexuscli.cli.subcommand_cleanup_policy module

Usage:

```
nexus3 cleanup_policy create <policy_name> [-format=<format>] [-downloaded=<days>] [-updated=<days>]  
nexus3 cleanup_policy list
```

Options:

- `--format=<format>` Accepted: all or a repository format [default: all]
- `--downloaded=<days>` Cleanup criteria; last downloaded in this many days.
- `--updated=<days>` Cleanup criteria; last updated in this many days.

Commands: `cleanup_policy create` Create or update the cleanup policy `<policy_name>` `cleanup_policy list` List all existing cleanup policies.

```
nexuscli.cli.subcommand_cleanup_policy.cmd_create(nexus_client, args)
    Performs nexus3 cleanup_policy create

nexuscli.cli.subcommand_cleanup_policy.cmd_list(nexus_client, _)
    Performs nexus3 cleanup_policy list

nexuscli.cli.subcommand_cleanup_policy.main(argv=None)
    Entrypoint for nexus3 cleanup_policy subcommand.
```

nexuscli.cli.subcommand_repository module

Usage: nexus3 repository list nexus3 repository show <repo_name> nexus3 repository (deleteldel) <repo_name> [-force] nexus3 repository create hosted (bower|npm|nuget|pypi|raw|rubygems|docker)

```
<repo_name> [-blob=<store_name>] [-strict-content] [-cleanup=<c_policy>] [-write=<w_policy>]
```

nexus3 repository create proxy (bower|npm|nuget|pypi|raw|rubygems|yum) <repo_name>

```
<remote_url>      [-blob=<store_name>]      [-strict-content]      [-cleanup=<c_policy>]      [-re-
mote_auth_type=<remote_auth_type>]          [-remote_username=<username>]          [-re-
mote_password=<password>]
```

nexus3 repository create hosted maven <repo_name> [-blob=<store_name>] [-strict-content]
[-cleanup=<c_policy>] [-write=<w_policy>] [-version=<v_policy>] [-layout=<l_policy>]

nexus3 repository create proxy maven <repo_name> <remote_url> [-blob=<store_name>]
[-strict-content] [-cleanup=<c_policy>] [-version=<v_policy>] [-layout=<l_policy>]
[-remote_auth_type=<remote_auth_type>] [-remote_username=<username>] [-re-
mote_password=<password>]

nexus3 repository create hosted yum <repo_name> [-blob=<store_name>] [-strict-content]
[-cleanup=<c_policy>] [-write=<w_policy>] [-depth=<repo_depth>]

nexus3 repository create proxy docker <repo_name> <remote_url> [-blob=<store_name>] [-strict-
content] [-cleanup=<c_policy>] [-v1_enabled] [-force_basic_auth] [-index_type=<index_type>]
[-http_port=<http_port>] [-https_port=<https_port>] [-remote_auth_type=<remote_auth_type>] [-re-
mote_username=<username>] [-remote_password=<password>]

nexus3 repository create hosted docker

```
<repo_name>      [-blob=<store_name>]      [-strict-content]      [-cleanup=<c_policy>]
[-write=<w_policy>]      [-v1_enabled]      [-force_basic_auth]      [-http_port=<http_port>]
[-https_port=<https_port>]
```

nexus3 repository create hosted apt <repo_name> [-blob=<store_name>] [-strict-content]
[-cleanup=<c_policy>] [-write=<w_policy>] [-gpg=<gpg-file-path>] [-passphrase=passphrase]
[-distribution=<distribution>]

nexus3 repository create proxy apt <repo_name> <remote_url> [-blob=<store_name>] [-strict-
content] [-cleanup=<c_policy>] [-write=<w_policy>] [-remote_auth_type=<remote_auth_type>]
[-remote_username=<username>] [-remote_password=<password>] [-flat] [-distribu-
tion=<distribution>]

Options:

- blob=<store_name> Use this blob with new repository [default: default] # noqa: E501
- depth=<repo_depth> Depth (0-5) where repodata folder(s) exist [default: 0]
- layout=<l_policy> Accepted: strict, permissive [default: strict]
- strict-content Enable strict content type validation

```
--version=<v_policy> Accepted: release, snapshot, mixed [default: release]
--write=<w_policy> Accepted: allow, allow_once, deny [default: allow_once]
--cleanup=<c_policy> Accepted: an existing Cleanup Policy name

-f --force Do not ask for confirmation before deleting -v1_enabled Enable v1 registry [default: False] --index_type=<index_type> Accepted: registry, hub, custom [default: registry] --force_basic_auth Force to use basic authentication against this docker repo --remote_auth_type=<remote_auth_type> Accepted: username [default: None] --remote_username=<remote_username> Remote username --remote_password=<remote_password> Remote password --gpg=<gpg-file-path> gpg file [default: ./public.gpg.key] --passphrase=<passphrase> passphrase for the given gpg [default: ] --distribution=<distribution> filter distributions [default: buster] --flat flat repository [default: False]
```

Commands: repository create Create a repository using the format and options provided repository delete Delete a repository. repository list List all repositories available on the server repository show Show the configuration for a repository as JSON.

```
nexuscli.cli.subcommand_repository.cmd_create(nexus_client, args)
```

Performs nexus3 repository create commands

```
nexuscli.cli.subcommand_repository.cmd_del(*args, **kwargs)
```

Alias for [cmd_delete\(\)](#)

```
nexuscli.cli.subcommand_repository.cmd_delete(nexus_client, args)
```

Performs nexus3 repository delete

```
nexuscli.cli.subcommand_repository.cmd_list(nexus_client, _)
```

Performs nexus3 repository list

```
nexuscli.cli.subcommand_repository.cmd_show(nexus_client, args)
```

Performs “nexus3 repository show

```
nexuscli.cli.subcommand_repository.main(argv=None)
```

Entry point for nexus3 repository subcommand.

nexuscli.cli.subcommand_script module

Usage: nexus3 script create <script_name> <script_path> [-script_type=<type>] nexus3 script list nexus3 script run <script_name> [<script_args>] nexus3 script (deleteldel) <script_name>

Options:

```
--script_type=<type> Script type [default: groovy]
```

Commands: script create Create or update a script using the <script_path> file script list List all scripts available on the server script del Remove existing <script_name> script run Run the existing <script_name> with optional <script_args>

```
nexuscli.cli.subcommand_script.cmd_create(nexus_client, args)
```

Performs nexus3 script create

```
nexuscli.cli.subcommand_script.cmd_del(*args, **kwargs)
```

Alias for [cmd_delete\(\)](#)

```
nexuscli.cli.subcommand_script.cmd_delete(nexus_client, args)
```

Performs nexus3 script delete

```
nexuscli.cli.subcommand_script.cmd_list(nexus_client, _)
```

Performs nexus3 script list

```
nexuscli.cli.subcommand_script.cmd_run(nexus_client, args)
```

Performs nexus3 script run

```
nexuscli.cli.subcommand_script.main(argv=None)
```

Entry point for nexus3 script subcommand.

nexuscli.cli.util module

```
nexuscli.cli.util.find_cmd_method(arguments, methods)
```

Helper to find the corresponding python method for a CLI command.

Suitable python methods must be named cmd_COMMAND, where *COMMAND* is the CLI command and cmd_ is a hard-coded prefix.

Parameters

- **arguments** – the return of docopt.docopt().
- **methods** – the return value from *globals()*, as-is

Returns the python method corresponding to the given CLI command. None if no suitable method is found.

Return type Union[callable, None]

```
nexuscli.cli.util.get_client()
```

Returns a Nexus Client instance. Prints a warning if a configuration file isn't file.

Return type *nexuscli.nexus_client.NexusClient*

```
nexuscli.cli.util.input_with_default(prompt, default=None)
```

Prompts for a text answer with an optional default choice.

Parameters

- **prompt** – question to be displayed to user
- **default** – default choice

Returns user-provided answer or None, if default not provided.

Return type Union[str, None]

Module contents

Nexus 3 CLI.

Usage: nexus3 --help # run this to see full list of commands/subcommands
nexus3 --version nexus3 login nexus3
(listlls) <repository_path> nexus3 (uploadup) <from_src> <to_repository> [-flatten] [-norecurse] nexus3
(downloaddl) <from_repository> <to_dst> [-flatten] [-nocache] nexus3 (deleteldel) <repository_path> nexus3
<subcommand> [<arguments>...]

Options:

-h --help This screen. For help with sub-commands, run *nexus3 <subcommand> -h*

- | | |
|--------------------|---|
| --version | Show the Nexus3 CLI version and exit |
| --flatten | Flatten directory structure on <i>nexus3</i> transfers [default: False] |
| --nocache | Force download even if local copy is up-to-date [default: False] |
| --norecurse | Don't process subdirectories on <i>nexus3 up</i> transfers [default: False] |

Commands: login Test login and save credentials to `~/.nexus-cli` list List all files within a path in the repository upload Upload file(s) to designated repository download Download an artefact or a directory to local file system delete Delete artefact(s) from repository

Sub-commands: cleanup_policy Cleanup Policy management. repository Repository management. script Script management.

`nexuscli.cli.main(argv=None)`
Entrypoint for the setuptools CLI console script

Submodules

`nexuscli.exception` module

```
class nexuscli.exception.CliReturnCode
    Bases: enum.Enum

    Error codes returned by nexuscli.cli

    API_ERROR = 2
    CONNECTION_ERROR = 3
    DOWNLOAD_ERROR = 4
    INVALID_CREDENTIALS = 5
    INVALID_SUBCOMMAND = 10
    NO_FILES = 1
    POLICY_NOT_FOUND = 20
    REPOSITORY_NOT_FOUND = 30
    SUBCOMMAND_ERROR = 11
    SUCCESS = 0
    UNKNOWN_ERROR = 99

exception nexuscli.exception.DownloadError(*args, cli_return_code=None)
    Bases: nexuscli.exception.NexusClientBaseError

    Error retrieving artefact from Nexus service.

    DEFAULT_CLI_RETURN_CODE = 4

exception nexuscli.exception.NexusClientAPIError(*args, cli_return_code=None)
    Bases: nexuscli.exception.NexusClientBaseError

    Unexpected response from Nexus service.

    DEFAULT_CLI_RETURN_CODE = 2

exception nexuscli.exception.NexusClientBaseError(*args, cli_return_code=None)
    Bases: Exception

    DEFAULT_CLI_RETURN_CODE = 99

exception nexuscli.exception.NexusClientConnectionError(*args,
                                                       cli_return_code=None)
    Bases: nexuscli.exception.NexusClientBaseError

    Generic network connector error.
```

```

DEFAULT_CLI_RETURN_CODE = 3

exception nexuscli.exception.NexusClientCreateCleanupPolicyError (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
Used when a cleanup policy creation operation in Nexus fails.

DEFAULT_CLI_RETURN_CODE = 11

exception nexuscli.exception.NexusClientCreateRepositoryError (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
Used when a repository creation operation in Nexus fails.

DEFAULT_CLI_RETURN_CODE = 11

exception nexuscli.exception.NexusClientInvalidCleanupPolicy (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
The given cleanup policy does not exist in Nexus.

DEFAULT_CLI_RETURN_CODE = 11

exception nexuscli.exception.NexusClientInvalidCredentials (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
Login credentials not accepted by Nexus service. Usually the result of a HTTP 401 response.

DEFAULT_CLI_RETURN_CODE = 5

exception nexuscli.exception.NexusClientInvalidRepository (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
The given repository does not exist in Nexus.

DEFAULT_CLI_RETURN_CODE = 30

exception nexuscli.exception.NexusClientInvalidRepositoryPath (*args,
                                                               cli_return_code=None)
Bases: nexuscli.exception.NexusClientBaseError
Used when an operation against the Nexus service uses an invalid or non-existent path.

```

nexuscli.nexus_client module

```

class nexuscli.nexus_client.NexusClient (config=None)
Bases: object

A class to interact with Nexus 3's API.

Unless all keyword arguments url, user and password are supplied, the class will attempt to read the configuration file and, if unsuccessful, use defaults.

Parameters config (NexusConfig) – instance containing the configuration for the Nexus service used by this instance.

cleanup_policies
Instance of CleanupPolicyCollection. This will automatically use the existing instance of NexusClient to communicate with the Nexus service.

```

delete (*repository_path*)

Delete artefacts, recursively if *repository_path* is a directory.

Parameters **repository_path** (*str*) – location on the repository service.

Returns number of deleted files. Negative number for errors.

Return type *int*

download (*source*, *destination*, *flatten=False*, *nocache=False*)

Process a download. The source must be a valid Nexus 3 repository path, including the repository name as the first component of the path.

The destination must be a local file name or directory.

If a file name is given as destination, the asset may be renamed. The final destination will depend on *flatten*.

Parameters

- **source** (*str*) – location of artefact or directory on the repository service.
- **destination** (*str*) – path to the local file or directory.
- **flatten** (*bool*) – if True, the remote path isn't reproduced locally.
- **nocache** (*bool*) – if True, force download of a directory or artefact, ignoring an existing local copy. If false, it will not re-download an existing copy if its checksum matches the one in Nexus (as determined by *nexuscli.nexus_util.has_same_hash()*).

Returns number of downloaded files.

Return type *int*

download_file (*download_url*, *destination*)

Download an asset from Nexus artefact repository to local file system.

Parameters

- **download_url** (*str*) – fully-qualified URL to asset being downloaded.
- **destination** (*str*) – file or directory location to save downloaded asset. Must be an existing directory; any exiting file in this location will be overwritten.

Returns

http_delete (*endpoint*, ***kwargs*)

Performs a HTTP DELETE request on the given endpoint.

Parameters

- **endpoint** (*str*) – name of the Nexus REST API endpoint.
- **kwargs** – as per *requests.request()*.

Return type *requests.Response*

http_get (*endpoint*)

Performs a HTTP GET request on the given endpoint.

Parameters **endpoint** (*str*) – name of the Nexus REST API endpoint.

Return type *requests.Response*

http_head (*endpoint*)

Performs a HTTP HEAD request on the given endpoint.

Parameters **endpoint** (*str*) – name of the Nexus REST API endpoint.

Return type `requests.Response`

http_post (`endpoint`, `**kwargs`)

Performs a HTTP POST request on the given endpoint.

Parameters

- **endpoint** (`str`) – name of the Nexus REST API endpoint.
- **kwargs** – as per `requests.request()`.

Return type `requests.Response`

http_put (`endpoint`, `**kwargs`)

Performs a HTTP PUT request on the given endpoint.

Parameters

- **endpoint** (`str`) – name of the Nexus REST API endpoint.
- **kwargs** – as per `requests.request()`.

Return type `requests.Response`

http_request (`method`, `endpoint`, `service_url=None`, `**kwargs`)

Performs a HTTP request to the Nexus REST API on the specified endpoint.

Parameters

- **method** – one of get, put, post, delete.
- **endpoint** (`str`) – URI path to be appended to the service URL.
- **service_url** (`str`) – override the default URL to use for the request, which is created by joining `rest_url` and `endpoint`.
- **kwargs** – as per `requests.request()`.

Return type `requests.Response`

list (`repository_path`)

List all the artefacts, recursively, in a given `repository_path`.

Parameters `repository_path` (`str`) – location on the repository service.

Returns artefacts under `repository_path`.

Return type `typing.Iterator[str]`

list_raw (`repository_path`)

As per `list()` but yields raw Nexus artefacts as dicts.

Parameters `repository_path` (`str`) – location on the repository service.

Return type `typing.Iterator[dict]`

repositories

Instance of `RepositoryCollection`. This will automatically use the existing instance of `NexusClient` to communicate with the Nexus service.

Return type `RepositoryCollection`

rest_url

Full URL to the Nexus REST API, based on the `url` and `version` from config.

Return type `str`

scripts

Instance of *ScriptCollection*. This will automatically use the existing instance of *NexusClient* to communicate with the Nexus service.

server_version

Parse the Server header from a Nexus request response and return as version information. The method expects the header Server to be present and formatted as, e.g., ‘Nexus/3.19.1-01 (OSS)’

Returns the parsed version. If it can’t be determined, return None.

Return type Union[None,semver.VersionInfo]

split_component_path (component_path)

Splits a given component path into repository, directory, filename.

A Nexus component path for a raw directory must have this format:

repository_name/directory[(/subdir1) ...] [/ | filename]

A path ending in / represents a directory; otherwise it represents a filename.

```
>>> dst0 = 'myrepo0/dir/'  
>>> dst1 = 'myrepo1/dir/subdir/'  
>>> dst2 = 'myrepo2/dir/subdir/file'  
>>> dst3 = 'myrepo3/dir/subdir/etc/file.ext'  
>>> split_component_path(dst0)  
>>> ('myrepo0', 'dir', None)  
>>> split_component_path(dst1)  
>>> ('myrepo1', 'dir/subdir', None)  
>>> split_component_path(dst2)  
>>> ('myrepo2', 'dir/subdir', 'file')  
>>> split_component_path(dst3)  
>>> ('myrepo3', 'dir/subdir/etc', 'file.ext')
```

Parameters **component_path** (*str*) – the Nexus component path, as described above.

Returns tuple of (repository_name, directory, filename). If the given component_path doesn’t represent a file, then the filename is set to None.

Return type tuple[str, str, str]

upload (source, destination, recurse=True, flatten=False)

Process an upload. The source must be either a local file name or directory. The flatten and recurse options are honoured for directory uploads.

The destination must be a valid Nexus 3 repository path, including the repository name as the first component of the path.

Parameters

- **source** (*str*) – location of file or directory to be uploaded.
- **destination** (*str*) – destination path in Nexus, including repository name and, if required, directory name (e.g. raw repos require a directory).
- **recurse** (*bool*) – do not process sub directories for uploads to remote
- **flatten** (*bool*) – Flatten directory structure by not reproducing local directory structure remotely

Returns number of files uploaded.

nexuscli.nexus_config module

```
class nexuscli.nexus_config.NexusConfig(username='admin', password='admin123', url='http://localhost:8081', x509_verify=True, api_version='v1', config_path=None)
```

Bases: `object`

A class to hold Nexus 3's configuration.

Unless keyword arguments `url`, `user` and `password` are supplied, the class will attempt to read the configuration file and, if unsuccessful, use defaults.

Parameters

- `username` (`str`) – username for Nexus service at given url.
- `password` (`str`) – password for username above.
- `url` (`str`) – URL to Nexus 3 OSS service.
- `x509_verify` (`bool`) – toggle certificate validation.
- `api_version` (`str`) – Nexus REST API version to be used.
- `config_path` (`str`) – local file containing configuration above in JSON format with these keys: `nexus_url`, `nexus_user`, `nexus_pass` and `nexus_verify`.

api_version

Current API version in use.

Return type `str`

auth

Current username and password as a tuple.

Return type `tuple[str, str]`

config_file

Path to configuration file, as given by `config_path` during instantiation.

Return type `str`

dump()

Writes the current configuration to disk under property:`config_file`.

If a file already exists, it will be overwritten. The permission will be set to read/write to the owner only.

load()

Load the configuration settings from the file specified by `config_file`.

The configuration file is in JSON format and expects these keys: `nexus_user`, `nexus_pass`, `nexus_url`, `nexus_verify`.

to_dict

Current instance configuration.

Return type `dict`

url

The Nexus service URL

Return type `str`

x509_verify

Whether to validate the x509 certificate when using https to access the Nexus service

Return type `str`

nexuscli.nexus_util module

`nexuscli.nexus_util.calculate_hash(hash_name, file_path_or_handle)`

Calculate a hash for the given file.

Parameters

- `hash_name` (`str`) – name of the hash algorithm in `hashlib`
- `file_path_or_handle` (`str`) – source file name (`str`) or file handle (file-like) for the hash algorithm.

Returns the calculated hash

Return type `str`

`nexuscli.nexus_util.ensure_exists(path, is_dir=False)`

Ensures a path exists.

Parameters

- `path` (`pathlib.Path`) – the path to ensure
- `is_dir` (`bool`) – whether the path is a directory.

`nexuscli.nexus_util.filtered_list_gen(raw_response, term=None, partial_match=True)`

Iterates over items yielded by `raw_response_gen`, validating that:

1. the `path` dict key is a str
2. the `path` value starts with `starts_with` (if provided)

```
>>> r = [{  
>>>     'checksum': {  
>>>         'md5': 'd94b865aa7620c46ef8faef7059a311c',  
>>>         'sha1': '2186934d880cf24dd9ecc578335e290026695522',  
>>>         'sha256': 'b7bb3424a6a6(...)4113bc38fd7807528481a8ffe3cf',  
>>>         'sha512': 'e7806f3caa3e(...)3caeb9bbc54bbde286c07f837fdc'  
>>>     },  
>>>     'downloadUrl': 'http://nexus/repository/repo_name/a/file.ext',  
>>>     'format': 'yum',  
>>>     'id': 'Y2xvdWRlcEtWFuYWdlcj(...)mRiNWU0YjllZWQzMg',  
>>>     'path': 'a/fake.rpm',  
>>>     'repository': 'cloudera-manager'}]  
>>>  
>>> for i in filtered_list_gen(r, starts_with='a/fake.rpm')  
>>>     print(i['path'])  
a/fake.rpm  
>>> for i in filtered_list_gen(r, starts_with='b')  
>>>     print(i['path'])  
# (nothing printed)
```

Parameters

- `raw_response` (`iterable`) – an iterable that yields one element of a nexus search response at a time, such as the one returned by `_paginate_get()`.
- `term` (`str`) – if defined, only items with an attribute `path` that starts with the given parameter are returned.
- `partial_match` (`bool`) – if True, include items whose artefact path starts with the given term.

Yields `dict` – items that matched the filter.

`nexuscli.nexus_util.groovy_script(script_name)`

Returns the content for a groovy script located in the package installation path under script/groovy.

E.g.: `groovy_script('foo')` returns the content for the file at `.../site-packages/nexuscli/script/groovy/foo.groovy`.

Parameters `script_name` – file name of the groovy script; `.groovy` is appended to this parameter to form the file name.

Returns content for the groovy script

Return type `str`

`nexuscli.nexus_util.has_same_hash(artefact,filepath)`

Checks if a Nexus artefact has the same hash as a local filepath.

Parameters

- `artefact` (`dict`) – as returned by `list_raw()`
- `filepath` – local file path

Returns True if artefact and filepath have the same hash.

Return type `bool`

`nexuscli.nexus_util.validate_strings(*args)`

Checks that all given arguments have a string type (e.g. str, basestring, unicode etc)

Parameters `*args` – values to be validated.

Returns True if all arguments are of a string type. False otherwise.

Return type `bool`

Module contents

2.2 Examples

Here are some basic operations to get you started. The CLI implementation in `src/nexuscli/cli.py` is another good source of examples.

In all examples below you will need to instantiate a client:

```
>>> import nexuscli
>>> nexus_config = nexuscli.nexus_config.NexusConfig(password='supersecret')
>>> nexus_client = nexuscli.nexus_client.NexusClient(config=nexus_config)
>>> # update the local list of repositories on the client
>>> nexus_client.repositories.refresh()
>>> # retrieve the list of repositories
>>> repositories = nexus_client.repositories.raw_list()
>>> repositories[0]
{'name': 'maven-snapshots',
 'format': 'maven2',
 'type': 'hosted',
 'url': 'http://localhost:8081/repository/maven-snapshots'}
```

2.2.1 Create a repository

```
>>> r = nexuscli.repository.Repository(  
>>>     'hosted',  
>>>     name='my-repository',  
>>>     format='raw',  
>>>     blob_store_name='default',  
>>>     strict_content_type_validation=False,  
>>>     write_policy='allow',  
>>> )  
>>> nexus_client.repositories.create(r)  
>>> nexus_client.repositories.get_raw_by_name('my-repository')  
{'name': 'my-repository',  
 'format': 'raw',  
 'type': 'hosted',  
 'url': 'http://localhost:8081/repository/my-repository'}
```

2.2.2 Delete a repository

```
>>> nexus_client.repositories.delete('my-repository')
```

2.2.3 Upload a file

```
>>> repository = nexus_client.repositories.get_by_name('my-repository')  
>>> upload_count = repository.upload('/etc/passwd', '/etc/passwd')  
>>> print(upload_count)  
1
```

2.3 Sonatype Nexus 3 API documentation

- REST API
- Script API

CHAPTER 3

Groovy Scripts

This package makes use of Groovy scripts to perform actions that are not available through the Nexus 3 REST API.
All scripts added have names starting with `nexus3-cli-`.

```
$ nexus3 script list
Name (type)
nexus3-cli-cleanup-policy (groovy)
nexus3-cli-repository-create (groovy)
```

You can delete them all by running:

```
$ nexus3 script list | awk '{ print $1 }' | xargs --no-run-if-empty -n1 nexus3_
script del
Name (type)
```

To increase verbosity of logging for the scripts, create a new logger (e.g.: `http://localhost:8081/#admin/support/logging`) with logger name `org.sonatype.nexus.script.plugin.internal.rest.ScriptResource` and logging level DEBUG or TRACE.

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