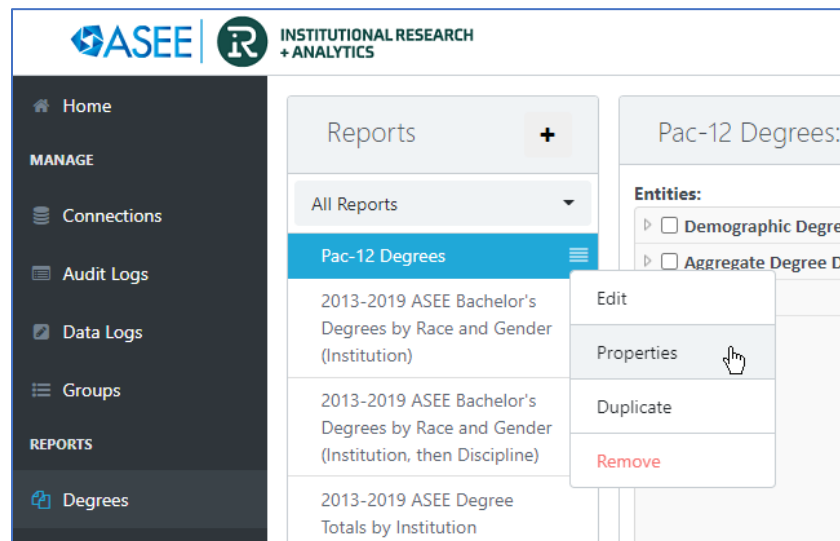


## Engineering Data Management System API Documentation

### Important Properties

Two properties, model Id and query Id, are required to execute and export data from the EDMS.

To access these properties, navigate to the EDMS, select the report from the reports list and click on the report menu item labeled “Properties”.



### Python: api\_export.py

#### Set-up

Open the config.ini file and enter your API username and password as well as the output value. The output value is the path to the output folder where you would like to save the query results (be sure to include a trailing '/'). The value for cookie can be empty.

```
[CREDENTIALS]
username = myusername
password = password123

[FILES]
output = /Users/myuser/ASEE_API/output/

[COOKIES]
cookie =
```

### Running the code

1. In your command line run the following: **python api\_export.py**
2. You will be prompted to enter a model\_id, query\_id, and the name of your CSV output file:

```
Enter your model_id: 298ffe00-c24b-481c-9449-25003ddc52a0
Enter your query_id: 6a0a707d-ba7a-472e-bafd-c1563f247e66
Enter your output filename: test_response.csv
```

### Error handling

There are two types of errors you may encounter:

1. AuthenticationException()
  - If you see an AuthenticationException() error the code failed to run because it was unable retrieve the authentication cookie using your username and password.
  - You should check to make sure your username and password are correct in this case.
2. FailedQueryException()
  - If you see a FailedQueryException() error the code failed to run either due to an error in your query or some other server issue with the API.
  - You should check to make sure your model\_id and query\_id are correct if you receive this error.

## **R: api\_export.Rmd**

### Set-up

1. If this is your first time running the code since opening RStudio you should run the first three Rmarkdown chunks by pressing the green play button in the right-hand corner of each:

```
# Import Libraries
```{r setup, include=FALSE}
knitr::opts_chunk$set(echo = TRUE)
library(httr)
library(readr)
```

# Only needs to be run the first time per session
```{r}
# Input cookie value or set to NULL if you don't have one
cookie <- NULL
```

# Credential Set Up
```{r}
# Input username
user <- "myusername"
# Input password
pass <- "password123"
```
```

The first two chunks need not be changed and will import the necessary libraries and initialize a NULL cookie value. The third chunk is where you should input your API username and password.

2. Next run the **Authentication and Export Functions** chunk of code. This will initialize the functions necessary to submit authentication and export queries to the API.
3. Next you should run the **Variable Set Up** chunk of code:

```
# Variable Set Up
```{r}
# Input the output file location
# i.e. /Users/{user}/ASEE_API/output/R_response.csv
output <- "/Users/myuser/ASEE_API/output/R_response.csv"
# Input model id
model_id <- "298ffe00-c24b-401c-9449-25003ddc52a0"
# Input query id
query_id <- "6a0a707d-ba7a-472e-bafd-c1563f247e66"
```
```

In here you will set the CSV output file location for your results as well as the `model_id` and `query_id` for your desired query.

4. Lastly run the remaining chunk of code which will run your query.
  - \*\*\* Note about the cookie value: The `get_cookie()` function will run if the cookie value is NULL or has expired. A new cookie value will be saved to the cookie variable and this value will persist for a set period of time as long as you don't close/restart your RStudio session. This value never needs to be set manually.
5. To run additional queries simply repeat steps 3 and 4.

### Error handling

If you see "Error in query please check that your `model_id` and `query_id` are correct." This means there is some issue with your query or the API server. First attempt to correct your `model_id` and `query_id`.