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**NI MEASURMENT PLUGIN PACKAGE BUILDER**

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# Overview

NI Measurement Plugin Package Builder enables users to build Python Measurement Plugins as NI package files and upload to SystemLink feeds.

# Software Requirements

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| **Packages Dependency** | **Version** |
| Python | 3.8 and above |
| NI Package Manager | 2022 Q4 and above |
| NISystemLink Feeds Manager | 1.0.0-dev1 and above |

# Installation

1. Open Command Prompt.
2. Run the below command to install the whl files

*pip install* ***<path\_to\_ni\_measurement\_plugin\_package\_builder-X\_X\_X-py3-none-any.whl> <path\_to\_nisystemlink\_feeds\_manager-X\_X\_X-py3-none-any.whl>***

Note:

* Require Internet access to install the external dependencies of NI Measurement Plugin Package Builder.
* For uploading the packages, if the API URL and Workspace are not provided then the SystemLink client configuration will be utilized, whereas API key and Feed name must be provided.
* For building measurements, some unwanted files/folders present in measurement plugins will be ignored. Please find the list below,
  + *.venv*
  + *\_\_pycache\_\_*
  + *.cache*
  + *dist*
  + *.vscode*
  + *.vs*
  + *.env*
  + *poetry.lock*
  + .mypy\_cache
  + .pytest\_cache
  + coverage.xml

# How to run?

1. Open Command Prompt.
2. There are two ways in which user can build packages,
   1. Non-interactive mode
   2. Interactive mode

## Non-interactive mode

1. To build a single measurement plugin, run the command,

*ni-measurement-plugin-package-builder --plugin-dir*

*<measurement\_plugin\_directory>*

For example,

*ni-measurement-plugin-package-builder --plugin-dir*

*“C:/Users/examples/sample\_measurement”*

1. To build multiple measurement plugins, run the command,

*ni-measurement-plugin-package-builder --base-dir*

*<measurement\_plugin\_base\_directory> --selected-meas-plugins <list\_of\_comma\_separated\_meas\_plugins>*

For example,

*ni-measurement-plugin-package-builder --base-dir*

*“C:/Users/examples” --selected-meas-plugins “sample\_measurement,test\_measurement”*

1. To upload the single measurement package to systemlink, run the following command,

*ni-measurement-plugin-package-builder --plugin-dir <measurement\_plugin\_directory> --upload-packages --api-url <systemlink\_api\_url> --api-key <systemlink\_api\_key> --workspace <workspace\_name> --feed-name <name\_of\_the\_feed>*

For example,

*ni-measurement-plugin-package-builder --plugin-dir "C:\Users\examples\sample\_measurement" --upload-packages --api-url "https://dev-api.lifecyclesolutions.ni.com/" --api-key "123234" --workspace "sample\_workspace" --feed-name "example\_feed"*

1. To upload the multiple measurement packages to systemlink, run the following command,

*ni-measurement-plugin-package-builder --base-dir <measurement\_plugin\_base\_directory> --selected-meas-plugins <list\_of\_comma\_separated\_meas\_plugins> --upload-packages --api-url <systemlink\_api\_url> --api-key <systemlink\_api\_key> --workspace <workspace\_name> --feed-name <name\_of\_the\_feed>*

For example,

*ni-measurement-plugin-package-builder --base-dir "C:\Users\examples" --selected-meas-plugins "sample\_measurement,testing\_measurement" --upload-packages --api-url "https://dev-api.lifecyclesolutions.ni.com/" --api-key "123234" --workspace "sample\_workspace" --feed-name "example\_feed"*

1. Input arguments should be provided within double quotes.
2. For building multiple measurements both the required inputs will be required like *base directory* and *selected measurement plugins*.

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1. The command line interface will show the directory where the *.nipkg* files are generated.

A screen shot of a computer

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## Interactive mode

1. To start the tool in interactive mode, run the command

*ni-measurement-plugin-package-builder -i*

1. Users will be prompted to enter the required inputs for building measurements and uploading to SystemLink.
2. To build multiple measurement plugins, the parent directory containing the measurement plugin folders must be provided.
3. Users can provide comma separated measurement plugin indexes, for building measurements.

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1. The command line interface will show the directory where the *.nipkg* files are generated.

A computer screen with white text

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