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**NI MEASURMENT PLUG-IN PACKAGE BUILDER**

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# Overview

NI Measurement Plug-in Package Builder enables users to build Python Measurement Plug-ins 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 Plug-in 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.
* The following files present in the measurement plug-ins will be ignored while building the .nipkg files,
  + *.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 plug-in, 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 plug-ins, 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 plug-ins*.

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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 plug-ins, the parent directory containing the measurement plug-in folders must be provided.
3. Users can provide comma separated measurement plug-in indexes, for building measurements.

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

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