Multiparametric Toolbox 3.0
Getting Started

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Installation steps

1. Remove any previous installations of MPT2 and YALMIP from your path:

   ```
   rmpath(genpath(fileparts(which('mpt_init'))))
   ```

   ```
   rmpath(genpath(fileparts(which('yalmipdemo'))))
   ```

2. Create a directory where MPT and accompanying toolboxes will be installed to. Call the directory `tbxmanager` for instance.

3. Go to that directory in Matlab.

4. Install tbxmanager, our new mechanism for installing and updating free Matlab toolboxes:

   ```
   urlwrite('http://control.ee.ethz.ch/ mpt/tbx/tbxmanager.m', 'tbxmanager.m');
   ```

   ```
   savepath
   ```

5. Install MPT and required toolboxes

   ```
   tbxmanager install mpt mptdoc cddmex fourier glpkmex hysdel lcp sedumi yalmip
   ```

6. Edit startup.m and put these lines there:

   ```
   tbxmanager restorepath
   ```

   ```
   mpt_init
   ```

7. Type `mpt_init` to initialize MPT3.

First steps

Start by exploring MPT demos which can be found in the `demos` directory.

Update

The MPT package is continuously updated with new algorithms and bug fixes. It is recommended to keep updated with the latest version not just for main MPT module but for all submodules. This is achieved via

```
tbxmanager update
```

command that verifies if there is new version of any module available for download and if yes, then the module will be updated. The process also updates the Matlab path such that no additional steps are required. The new versions are available immediately after update.

Note that some modules may require clearing the cached variables for the update to work correctly (if there was any change in the objects and classes). This has to be done by the user issuing the command

```
clear all
```

or

```
clear classes
```

that clears all the cached variables and updates to new classes.

Uninstallation

To figure out what is installed on the computer, use the syntax

```
tbxmanager show installed
```

that returns a list of installed modules. To uninstall the module, type `tbxmanager uninstall` followed by the name of the module. For instance, the command

```
tbxmanager uninstall mptdoc
```
will uninstall the module `mptdoc`. If the module has been uninstalled, it is no longer present in the list of installed modules.