**NPM**

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* [Introduction](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Introduction)
* [Installing npm](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Installingnpm)
* [Understanding package.json](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Understandingpackage.json)
* [Where to find Packages?](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-WheretofindPackages?)
* [Where to find npm documentation?](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Wheretofindnpmdocumentation?)
* [Installing Packages](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-InstallingPackages)
* [Searching Packages](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-SearchingPackages)
* [Writing Packages](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-WritingPackages)
* [Showing things](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Showingthings)
* [Updating Packages](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-UpdatingPackages)
* [Development](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Development)
* [Publishing Packages](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-PublishingPackages)
* [Resources](http://tiger.in.alcatel-lucent.com:8090/display/AEC/NPM#NPM-Resources)

**Introduction**

Npm is the package manager that comes preinstalled with the Node.js server platform. It is used to install node programs from the npm registry. In short, it is a tool that aids a developer as they install and manager third party node programs.

**Installing npm**

Installing npm is simple, given that it is automatically installed when you install [NodeJS](http://nodejs.org/).

|  |  |
| --- | --- |
| 1  2 | # the verison of NodeJS  **npm** --v or **npm** –version |

**Understanding package.json**

The package.json file goes in the root of your package. It tells npm how your package is structured, and what to do to install it.

Most of the time, you only need the "name", "version", and "main" fields (even for node-waf compiled addons).

Some used fields in package.json

* name
* version
* description
* main
* keywords
* author & contributors
* dependencies
* devDependencies
* engines
* scripts

 It will probably look like this:

bower.json

|  |  |
| --- | --- |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17 | {    "name": "example",    "version": "0.0.0",    "description": "example project",    "main": "index.js",    "devDependencies": {      ...    },    "engines": {      "node": ">=0.10.0"    },    "scripts": {      ...    },    "author": "hmchung",    "license": "..."  } |

**Where to find Packages?**

* <https://www.npmjs.org/>

**Where to find npm documentation?**

1. You can find a project readme at <https://npmjs.org/doc/README.html>
2. Using the help command, we can view a summary of npm commands.

|  |  |
| --- | --- |
| 1 | **npm** help |

**Installing Packages**

You probably got npm because you want to install stuff. That's what package managers do, they install stuff.

Any package can be installed by using:

|  |  |
| --- | --- |
| 1  2  3  4  5  6 | **npm** install <package name>  **npm** install <tarball file>  **npm** install <tarball url>    # Install a package globally  **npm** install -g <package name> |

**Searching Packages**

1. Online you can search for npm packeges at <https://npmjs.org/>
2. The command line you can search the registry by using the following command.

|  |  |
| --- | --- |
| 1 | **npm** search <package name> |

**Writing Packages**

Installing [Yeoman - The workflow Tool](http://tiger.in.alcatel-lucent.com:8090/display/AEC/Yeoman+-+The+workflow+Tool) to create scaffolding

**Showing things**

Command Prompt

|  |  |
| --- | --- |
| 1  2  3 | # The npm ls command shows what's on your system, and also what's available in the registry.  # The arguments are beautifully colored greps.  **npm** ls |

**Updating Packages**

The update command does a few things.

1. Search the registry for new versions of all the packages installed.
2. If there's a newer version, then install it.
3. Point dependent packages at the new version, if it satisfies their dependency.
4. Remove the old versions, if no other package names them as a dependency

|  |  |
| --- | --- |
| 1 | **npm** update |

**Development**

The link command symlinks a package folder into your system, so that changes are automatically reflected. It also installs the "dependencies" and "devDependencies" packages from your package.json file.

|  |  |
| --- | --- |
| 1 | **npm** link |

**Publishing Packages**

|  |  |  |  |
| --- | --- | --- | --- |
| 1  2 |  |  | # Add your programs to this index  **npm** publish |

**Resources**

1. <https://www.npmjs.org/>

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