**Installing Node and Grunt Task Runner Extension**

To install Node go here : <http://nodejs.org/>

1. The latest version of node is v0.12.0.  If your version is older download the newest node here and run the installer.

<http://nodejs.org/download/>

or

\\psplserver2\Common\Rajesh\Evolution grunt

 Download the \*.msi file and double click to start the installer. Accept all the defaults

Installing Python

Python is required for several node modules and even installing node from source

1. download the latest version of Python 2.x.x here and run the installer.

<https://www.python.org/downloads/release/python-279/>

or

\\psplserver2\Common\Rajesh\Evolution grunt

**Note** : Do not install Python 3**.  Python 3 is major redo of the language and will not work** with certain node modules.  Fortunately Python 3 and Python 2 can coexist on your machine so there's no need to remove Python3

1. Add python to your Path variable   Search for "Control Panel" and open it.
2. Navigate from the Control Panel to System -> Advanced system settings
3. Click the Environment variables... button
4. Edit PATH and append ;C:\Python27\ to the end (substitute your Python version). Do not forget the trailing \.

Your PATH variable should now look something like mine :

C:\Program Files (x86)\Java\jdk1.7.0\_40\bin;C:\Users\jneed\AppData\Roaming\npm;C:\Python27\

1. Click OK. Note that changes to the PATH are only reflected in command prompts opened after the change took place.
2. Verify that you have the right python version by opening  a terminal (command line or power shell) and check your version of Python

   C:\>python --version

   Python 2.7.9

  You should now have version 2.7.9.

 Now we need to install LESS

Open a command line and type **npm install -g less**

Verify that LESS is installed by typing **lessc -v** in the command line. You should the version of less you are runing. Note: you may need to close and re-open the command console to refresh the PATH variable.

Next, install the grunt-cli

Open a command line and type **npm install -g grunt-cli.**

**Npm install grunt**

 Now we need Ensure that all Node package dependencies are installed.

Navigate to the root of the API folder **cd C:\Users\jneed\Projects\maple\Maple\API** Note: your path will be different.

type the command **npm install.**This will load all dependencies listed in the file package.json

**npm install imagemin-gifsicle --save-dev**

**npm install imagemin-gifsicle**

Although these instructions were meant for upgrading your front-end build tools, they can be used for a first install.

However there are three things you should install as well.

After you have installed Node run this from the command line

**npm install –g karma-cli grunt-cli bower**

This will install the command line interfaces for Karama (unit testing) Grunt (task runner) and Bower (JS Package Manger).

Updating Grunt/nodejs/npm and Just About Everything Else

Updating Node & npm

1. Open a terminal (command line or power shell) and check your version of node

C:\> node --version

v0.10.0

1. The latest version of node is v0.12.0.  If your version is older download the newest node here and run the installer.

<http://nodejs.org/download/>

This will install the latest version of npm along with node.

1. Close and reopen your terminal, this forces the path variables to reload, and check your version of node.

C:\> node --version

v0.12.0

You should now have v0.12.0.

1. Check your version of npm

   C:\> npm --version

   2.5.1

   You should now have version 2.5.1.

Updating Grunt and all Your Other Dependencies

1. Open a terminal navigate to the API folder of your solution.  This folder should contain your package.json file.  This is the file that defines all your dependencies.

Mine looks like this:

{

    "name": "EvoHCM",

    "version": "1.1.0",

    "description": "Awesome Payroll Web App",

    "scripts": {

        "test": "grunt test"

    },

    "keywords": [

        "Pure",

        "JavaScript",

        "Joy"

    ],

    "author": "iSystems",

    "dependencies": {},

    "devDependencies": {

        "bin-wrapper": "^2.0.2",

        "grunt": "^0.4.5",

        "grunt-arialinter": "^0.2.1",

        "grunt-autoprefixer": "^0.7.3",

        "grunt-concurrent": "^0.5.0",

        "grunt-contrib-clean": "^0.5.0",

        "grunt-contrib-concat": "^0.4.0",

        "grunt-contrib-connect": "^0.7.1",

        "grunt-contrib-copy": "^0.5.0",

        "grunt-contrib-cssmin": "^0.9.0",

        "grunt-contrib-htmlmin": "^0.3.0",

        "grunt-contrib-imagemin": "^0.8.1",

        "grunt-contrib-jshint": "~0.9.2",

        "grunt-contrib-less": "^0.11.4",

       "grunt-contrib-uglify": "^0.4.0",

        "grunt-contrib-watch": "^0.6.1",

        "grunt-filerev": "^0.2.1",

        "grunt-google-cdn": "^0.4.0",

        "grunt-jsdoc": "^0.5.7",

        "grunt-karma": "^0.9.0",

        "grunt-newer": "^0.7.0",

        "grunt-ng-annotate": "^0.3.0",

        "grunt-ngdocs": "^0.2.5",

        "grunt-svgmin": "^0.4.0",

        "grunt-usemin": "^2.1.1",

        "grunt-wiredep": "^1.7.0",

        "imagemin": "^2.2.1",

        "jshint-stylish": "^0.2.0",

        "karma": "^0.12.23",

        "karma-jasmine": "^0.1.5",

        "karma-phantomjs-launcher": "^0.1.4",

        "load-grunt-tasks": "^0.6.0",

        "optipng-bin": "^2.0.1",

        "time-grunt": "^0.3.1"

    },

    "engines": {

        "node": ">=0.10.0"

    }

}

1. Start the package update with this command

   C:\users\jneed\maple\Maple\API> npm update -g

**Note:** using the -g tells npm to update your local dependencies and your global dependencies such as grunt-cli and bower

**Note :** This may take a while because it's going to download a lot of node modules.

**Note :** You may see some warnings about unmet optional dependencies,  those are usually Macintosh dependencies and shouldn't affect your upgrade.

**Note :** Because we're updating global dependencies you may see errors about globally installed libraries that are not used in this solution.  If you do, try running the update without the -g flag.

1. Verify that you have the latest Grunt version

      C:\users\jneed\maple\Maple\API> grunt --version

      grunt-cli v0.1.13

      grunt v0.4.5