

# Cartan package installation instructions

## Maple 6 and higher

### Windows

1. Create a folder (*not* the main Maple application folder) that you want to be readable by Maple; this is where the Cartan package will live. For example, you might create a folder called “MapleStuff” in your home directory.
2. Create a Maple initialization file that will tell Maple to look for files in the folder you created in Step 1. This should be a plain text file called “maple.ini”, and it should live in the top level of the Maple Users directory (e.g., in C:\Program\_Files\Maple\Users). It should consist of the following two lines (assuming the example above):

```
libname:= "C:\\Users\\UserName\\MapleStuff", libname:  
currentdir("C:\\Users\\UserName\\MapleStuff");
```

Note the double quotes, the double backslashes in the path names, and don't forget to replace “UserName” with your actual user name! If you have problems creating the file in this folder due to permissions, try creating it somewhere else and then moving it to this folder.

3. Create a Maple repository for user-defined packages in your new folder as follows: start up (or restart) Maple. Type

```
libname;
```

and check that your new folder is now the first item in the resulting list. Assuming that it is, type

```
march('create', libname[1], 200);
```

(Note the single forward quotes. The 200 is just an arbitrary large number that determines how many commands the repository can hold.) This will create files called “maple.ind” and “maple.lib” in your new folder.

4. Place the file Cartan2010\_11\_01 in your new folder, restart Maple, and type

```
read Cartan2010_11_01;
```

This will write the Cartan package to the Maple repository in your new folder and also create the file maple.hdb (which contains the help page for the Cartan package) in this folder. (Troubleshooting tip: occasionally Maple won't read this file correctly; the problem seems to be line endings of the wrong type for the particular operating system. If you encounter this problem, just open the file Cartan2010\_11\_01 in your favorite text editor, copy the contents of the entire file, and paste them directly into Maple.)

5. That's it! The package can now be loaded into Maple any time via the command

```
with(Cartan);
```

and the help page is accessible via

```
help(Cartan);
```

## Mac OS X

1. Create a folder (*not* the main Maple application folder) that you want to be readable by Maple; this is where the Cartan package will live. For example, you might create a folder called “MapleStuff” in your home directory.
2. Create a Maple initialization file that will tell Maple to look for files in the folder you created in Step 1. This should be a plain text file called “.mapleinit”, and it should live in the top level of your home directory. It should consist of the following two lines (assuming the example above):

```
libname:= "/Users/UserName/MapleStuff", libname:  
currentdir("/Users/UserName/MapleStuff");
```

Note the double quotes, and don’t forget to replace “UserName” with your actual user name! Many text editors (TextEdit, for example) won’t create plain text files by default, or will try to add “.txt” to the file name, so probably the simplest way to create this file is to open a terminal window and type the following commands:

```
cat > ~/.mapleinit << EOF  
libname:= "/Users/UserName/MapleStuff", libname:  
currentdir("/Users/UserName/MapleStuff");  
EOF
```

(Again, don’t forget to replace “UserName” with your actual user name.)

3. Create a Maple repository for user-defined packages in your new folder as follows: start up (or restart) Maple. Type

```
libname;
```

and check that your new folder is now the first item in the resulting list. Assuming that it is, type

```
march('create', libname[1], 200);
```

(Note the single forward quotes. The 200 is just an arbitrary large number that determines how many commands the repository can hold.) This will create files called “maple.ind” and “maple.lib” in your new folder.

4. Place the file Cartan2010\_11\_01 in your new folder, restart Maple, and type

```
read Cartan2010_11_01;
```

This will write the Cartan package to the Maple repository in your new folder and also create the file maple.hdb (which contains the help page for the Cartan package) in this folder. (Troubleshooting tip: occasionally Maple won’t read this file correctly; the problem seems to be line endings of the wrong type for the particular operating system. If you encounter this problem, just open the file Cartan2010\_11\_01 in your favorite text editor, copy the contents of the entire file, and paste them directly into Maple.)

5. That’s it! The package can now be loaded into Maple any time via the command

```
with(Cartan);
```

and the help page is accessible via

```
help(Cartan);
```

## Linux

1. Create a directory (*not* the main Maple application directory) that you want to be readable by Maple; this is where the Cartan package will live. For example, you might create a directory called “MapleStuff” in your home directory.
2. Create a Maple initialization file that will tell Maple to look for files in the directory you created in Step 1. This should be a plain text file called “.mapleinit”, and it should live in the top level of your home directory. It should consist of the following two lines (assuming the example above):

```
libname:= "/home/UserName/MapleStuff", libname:  
currentdir("/home/UserName/MapleStuff");
```

Note the double quotes, and don't forget to replace “UserName” with your actual user name! Probably the fastest way to create this file is to type the following commands in a terminal window:

```
cat > ~/.mapleinit << EOF  
libname:="/home/UserName/MapleStuff",libname:  
currentdir("/home/UserName/MapleStuff");  
EOF
```

(Again, don't forget to replace “UserName” with your actual user name.)

3. Create a Maple repository for user-defined packages in your new directory as follows: start up (or restart) Maple. Type

```
libname;
```

and check that your new directory is now the first item in the resulting list. Assuming that it is, type

```
march('create', libname[1], 200);
```

(Note the single forward quotes. The 200 is just an arbitrary large number that determines how many commands the repository can hold.) This will create files called “maple.ind” and “maple.lib” in your new directory.

4. Place the file Cartan2010\_11\_01 in your new directory, restart Maple, and type

```
read Cartan2010_11_01;
```

This will write the Cartan package to the Maple repository in your new directory and also create the file maple.hdb (which contains the help page for the Cartan package) in this directory. (Troubleshooting tip: occasionally Maple won't read this file correctly; the problem seems to be line endings of the wrong type for the particular operating system. If you encounter this problem, just open the file Cartan2010\_11\_01 in your favorite text editor, copy the contents of the entire file, and paste them directly into Maple.)

5. That's it! The package can now be loaded into Maple any time via the command

```
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