Movie in VMD

Steps

- Select Extensions -> Visualization -> Movie Maker
    - Choose Tachyon as renderer
    - From settings, choose trajectory and keep data file
    - Choose a location to save data file
    - Choose ffmpeg2 as movie maker
    - Adjust movie length
- VMD produces frames with low resulotion. We will re-render frames from data file . From command line, execute following command

```
for file in *.dat ;
do
    tachyon $file -format PPM -res 1024 1024 -o "${file/.dat}".ppm ;
done
```

- Now, we have high resolution frames, all we need to combine all frames to produce movie. We will use ffmpeg to make movie.

```
ffmpeg  -i movie.%05d.ppm -f image2 -r 20 -f mp4 -q:v 0 -vcodec mpeg4  -b:v 5000k
movie.mp4
```

Some useful tips

- Change fps (Useful to disk size)

```
ffmpeg -i movie.mp4  -filter:v fps=fps=30 movie2.mp4
```

- Fast movie by Nx times, e.g. N=2.0

```
ffmpeg -i movie.mp4 -filter:v "setpts=PTS/2.0" movie2.mp4
```

- Multiple view (As mentioned in VMD manual)
    - It is possible to show multiple views of your molecule at once, which can be very helpful in some cases. Load the files pore.psf and pore.dcd again, creating a new molecule. (You may want to rename it by double-clicking its name.)

- Fix the original molecule by double-clicking the “F” next to its name in the VMD Main window. Now you can manipulate the view of the second copy without affecting the first. Make your window wider, and use the Translate mouse mode to shift your second view to the left of the first.