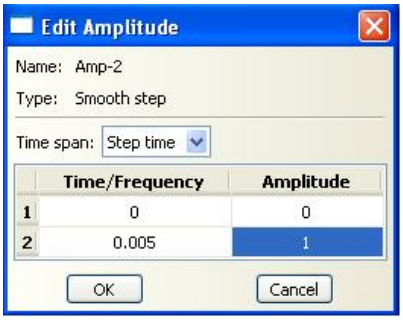
Restarting Example

Overview: we want to do another step which is actually a continue deepdrawing after a deepdrawing step.

- Lunch **Abaqus** software
- **File⟶Run script;** select *gsi_channel_caemodel.py*
- **File⟶save as;** *channel.cae*
- Try to understand the model
- Before submitting the job, go to Step module: **Output⟶Restart Requests**
- In Step module: **Output⟶Restart Requests**: enter 10 in the **Intervals** column
- In Job module: **Job⟶manager;** select the expchannel job and submit it
- **File⟶save as;** *continuechannel.cae*
- Here we like to do more deepdrawing, so:
- In Step module: **Step⟶create;** name=*Continue-displacement-punch*, procedure type=*Dynamic, explicit*, Ok, in Basic Tab, Time period=*0.005* and OK
- In Load module: **BC⟶manager;** select the cell from Continue-displacement-punch column and RefPunchBC row, Edit, set varaible U2=*-0.02* and just hold on a second before click on OK button
- Since you change the time period for the second step, you should be careful for the defined Amplitude and modify or create another Amplitude. Because if you don't do that the punch won't reach for additional U2=*-0.02m* since the total time 0.007 is adjusted for Amplitude 1(it means in time=0.005 your Amplitude is not 1), thus:
- In Edit Boundary condition window, click on create button for new defined, name=Amp-2, Type=smooth step and Continue, in Edit Amplitude window, fill the cells as below:



- It means in this step the punch will move additional 0.02m respect to the previous step
- In any module: **Model⟶Edit Attributes⟶*explicit***
- In Restart Tab, toggle on **Read data from job** and enter the name of pervious job, also enter the Step name in **Step name** of previous analysis (for this example the step name is Displace punch) and choose the "**Restart from the end of the step**" option and OK
- Now in Job module: **Job⟶create⟶**name=*Continue-dis* and click on Continue
- You see that in Edit Job window, in the submission Tab, **Restart** option is toggled, click on Ok and submit the Job.
- You see the total time is actually begins from 0.007 s which means you are just running the Second Step and use the previous step results
- Take a look at results

Overview: we want to use recovery ability of abaqus/explicit when our running Job is terminated somehow.

- Lunch **Abaqus** software
- **File⟶Run script;** select *gsi_channel_caemodel.py*
- **File⟶save as;** *channel.cae*
- Try to understand the model
- Before submitting the job, go to Step module: **Output⟶Restart Requests**
- In Step module: **Output⟶Restart Requests**: enter *n* in the **Intervals** column

- In Job module: **Job⟶manager;** select the expchannel job and submit it

- During the running of current job, kill the process after some time passed

Care should be taken if the current run interrupted someway other than killing the job by user, before do anything for recovery operation, you should delete the *expchannel*.lck file where it is located on the user define Temp directory.

- To continue the solution of that terminated step without running the whole job from the start point, in Job module: **Job⟶Edit⟶**select the terminated job file and in *Submission Tab*, choose the **Recovery** option

- Submit the job and you see that solution is running just after the time that previous analysis was terminated