

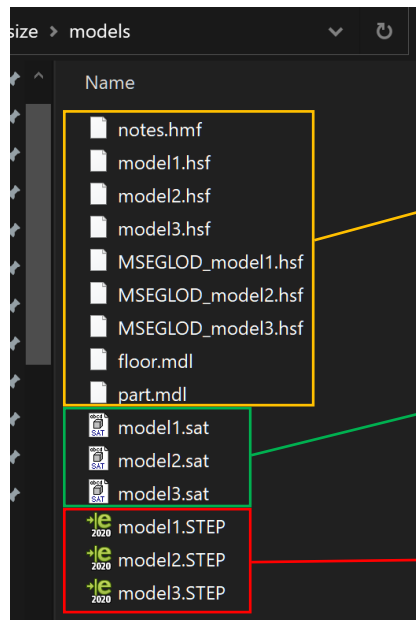
How to Reduce the File Size of a Simulation

Introduction

MotoSim Simulation files can easily be quite large. A simulation with just a single robot, and no other models, is about 75MB. It is common for simulations to increase in size to hundreds of megabytes to several gigabytes. Multiply this by an untold number of simulations, and it can fill up a large storage device quickly. Below are some tips to reduce the file size of a simulation. Some simulations can be reduced by as much as 95%.

Trim the Models Folder

3D models take up most of the space in a simulation. Those files are in a subfolder called “models”. File formats such as STEP, Parasolid (X_T), and IGES (IGS) can all be safely deleted since they are only used as an intermediary file. SAT files can also be deleted UNLESS one is being used in CAM function.



HMF, HSF, MDL files must be left alone. These files make up most of the 3D models in a simulation.

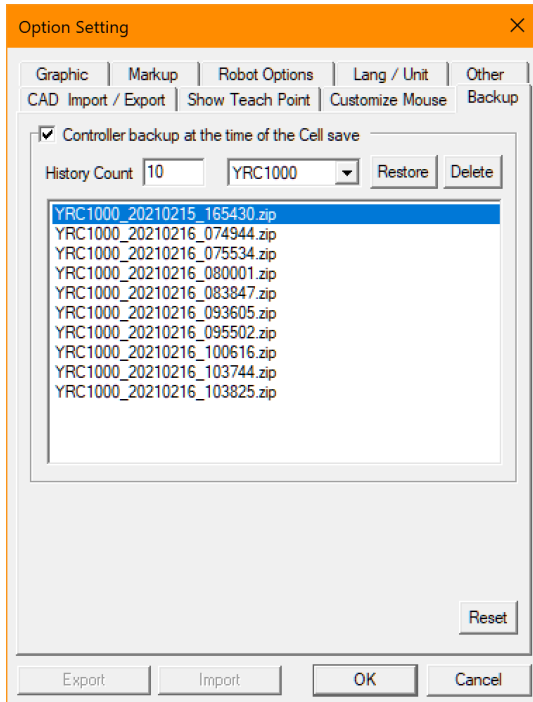
If a part was imported for CAM Function, then that model must NOT be deleted. But all remaining .sat files can be deleted.

These files (STEP, X_T, IGES, ETC...) are used to simply import the geometry into MotoSim. After all models have been added, they can safely be deleted.

This document captures ideas, experiences, and informal recommendations from the Yaskawa Partner Support team. It is meant to augment – not supersede manuals or documentation from motoman.com. Please contact the Partner Support team at partnersupport@motoman.com for updates or clarification.

Remove Redundant Backups

MotoSim automatically backs up the controller data each time a simulation is saved. This is designed for users to go back to an earlier version if something breaks in the current simulation. However, if the simulation is finished, one way to trim some additional space is to delete the backups.



To see and delete the Backups, in MotoSim:

1. Click on the application button
2. Select Options
3. Select the Backup tab
4. Use the DELETE button to remove all unnecessary backups

Compress the Simulation

When archiving or sharing a simulation, it is advised to compress it with a tool like 7zip (Free, 7zip.org). This will reduce the simulation size further (significantly actually). This should be done after the extraneous models and controller backups are deleted. The sample simulation used for this article started out at 610MB. After the models and controller backups were removed and the simulation was compressed; the resulting file size dropped to 72MB.