Reco3 – Steps for Simulation

# Preparation

## Stop all clients

1. Use Remote Desktop to enter the computers where the client is run
2. Open the running client terminal window
3. Press Q and then Enter
4. If the client states “Queue is empty” or “Shutdown signalled” and it doesn’t stop, you can kill the process in Task Manager

## Stop backend server and empty the queues

1. Use Remote Desktop to enter the Reco3 Server (the one where the console application Reco3CoreServer.exe is running).
2. Open the running client terminal window
3. Press Q and then Enter
4. Open Computer Management
5. Open ‘Services and Applications’ -> ‘Message Queuing’ -> ‘Private Queues’ where you will find the following 3 queues:
   * ydmc.batch.conversion
   * ydmc.batch.health
   * ydmc.batch.simulation
6. Open each of these and click on ‘Queue Messages’ and make sure that each queue is empty. If not then:
   1. Right click on ‘Queue Messages’
   2. Click on ‘All Tasks’
   3. Click on ‘Purge’
   4. Click Yes when you’re being asked if all the messages should be deleted

## Start backend server

1. Use Remote Desktop to enter the Reco3 server (the one where the application Reco3CoreServer.exe is to be run).
2. Open the Reco3 application folder, e.g. C:\Reco3\Reco3Core.
3. Run Reco3CoreServer.exe

## Start the clients

1. Use Remote Desktop to enter the computers where the clients are to be run
2. Open Windows Explorer
3. Enter the computer name to the IIS-server in the address field, e.g. \\RD0058994
4. Open the shared Reco3 application folder on the server where the client console application resides, e.g. \\RD0058994\Reco3\
5. Run Reco3Console.exe
6. Start the client in maximum 4 instances per client machine
7. You can start 1, but only 1, client on the server machine as well.
8. Open a web browser on your local machine, and go to the /developersupport address, e.g. <http://RD0058994/developersupport>
9. Make sure you can see the client computer(s) under the header ‘Clients’

# Conversion

## Create Roadmap

1. Open a web browser
2. Enter the address to the server where the IIS-application resides, e.g. <http://RD0058994>
3. Click on the menu item Simulations
4. Click “Add new roadmap…”
5. In the textfield Alias enter a name of your choice, e.g. JohnSim1
6. Enter 2018 for Startyear, since this is the base year
7. Enter the year you want for Endyear, e.g. 2019
8. Click on Save

## Edit Roadmap

1. In the table for Roadmaps on the site, find the newly create roadmap, i.e. JohnSim1 (above)
2. Click on Edit
3. On the row Baseline, click on Browse
4. Locate and click on the Baseline Xml-file with fleet data you want to use, and click Open
5. Click on Upload
6. Wait for the result message “File uploaded successfully…” being displayed on the page, or an error message if something goes wrong
7. Click on Save
8. Open Sql Server Management Studio (SSMS)
9. In the database ElmerFudd open the table RoadmapGroups
10. To verify that everything is as it should, you should now find the newly created entry, i.e. JohnSim1 (above), with the Xml uploaded to this table, with a Validation\_Status value set to 2, and with a ConvertToVehicleInput\_Status value set to 0.

## Convert Roadmap

1. Go back to where you were in the browser, i.e. in Simulations on the IIS-server
2. Click on Edit for the roadmap you are working with, i.e. JohnSim1 (above)
3. Click on “Lock and create!”
4. Wait for the result message “RoadmapGroup successfully locked”
5. Go back to the RoadmapGroups table in the database (and refresh if the table is open)
6. Verify that the ConvertToVehicleInput\_Status-value has now changed to 1, i.e. Completed by User
7. Click on Save
8. Click on Edit for the roadmap you are working with, i.e. JohnSim1 (above)
9. Click on the tab Status
10. Click on Convert

***A word of advice here!! Each click triggers a new conversion, so click only once. Unfortunately you will not get a UI response saying that it’s converting.***

1. Now the convert process has started, and this will probably take between 4 – 6 hours. If you go to the server and watch the server console for Reco3 you will see that the convert process is going on.
2. When the Conversion is done, open the RoadmapGroups table in the database and verify that the value for ConvertToVehicleInput\_Status has changed to the value 2, i.e. Converted with Success. If it hasn’t, then do the below substep (a).
   1. You will now change the ConvertToVehicleInput\_Status in the RoadmapGroups table to the value two (2) manually. Go to the database and click on New Query. Enter the following text but change the <Id>-part in the last row to the correct RoadmapGroupId, and then press F5:

UPDATE RoadmapGroups  
SET ConvertToVehicleInput\_Status = 2  
WHERE RoadmapGroupId = <Id>

1. Back in the web browser, the Convert-button should have changed to Simulate. If it hasn’t, press F5.
2. You should now have the message “Validated with success - Converted with success.” displayed on the page under the header “Status”.

# Simulation

## Simulate Roadmap

1. If you’re not already on the Simulate-page, then in the table with the conversions, click on Edit for the conversion you are working with.
2. Click on the Status tab if you not already have
3. Click on Simulate
4. Now the simulation process will start, and depending on how many clients you have started the simulation time (the time it takes before it has finished) can vary. For instance if you have 2 client computers with 4 client instances started on each, and 1 client started on the server computer, it will take around 4 days to complete.
5. Open Sql Server Management Studio (SSMS)
6. Find the RoadmapId for your Roadmap in the Roadmap table
7. Open the table VSumRecord and make sure that the SimulationId in this table is the same as the RoadmapId in the Roadmap table

## Create View (after Simulate Roadmap finishes)

1. Open SSMS and enter the database
2. Open Views
3. Right-click on an earlier View
4. Click on Design
5. Copy the Select-query you have there
6. Right-click on Views and select New view…
7. If the Add Table-pop up shows, then press Close
8. Paste the copied Select-query in the new View
9. Change the SimulationId to the number (SimulationId) you got earlier from the table VSumRecord (above)
10. Save the View with a name of your choice
11. E-mail the responsible person for the simulations the name of the View