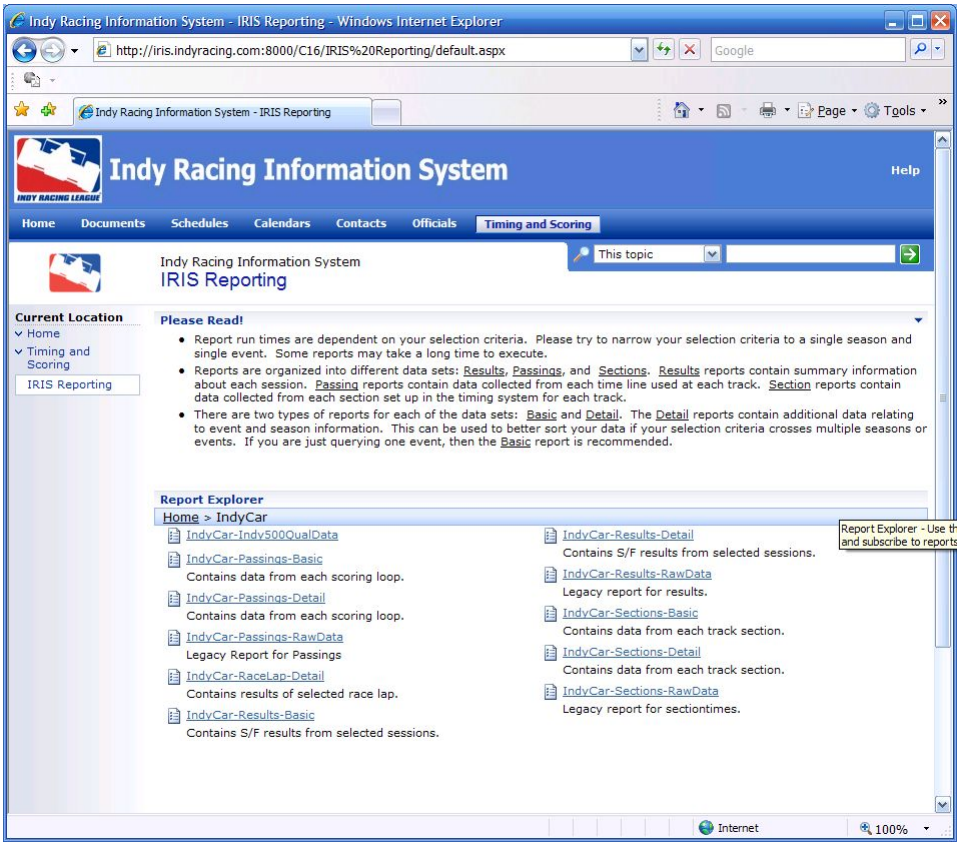
Indy Racing Information System

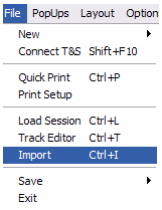
The Indy Racing Information System is a service provided by the IRL Timing and Scoring group that provides reports from every session at the end of each day of on track activity. There are a number of pre-defined reports in the system and you can create your own. Unfortunately the information is in a form that is often difficult to use. RaceTools provides a tool to import the IRIS reports and generate all of the reports you are used to creating with RaceTools. This is especially useful if you need to generate reports for events that you were not at, if a replay file is not available, or if the replay file is incomplete (which can occur if there were any data feed problems at the track). You can even generate reports for races before RaceTools was developed for the IRL in 2008.

Using the IRIS Import Module:

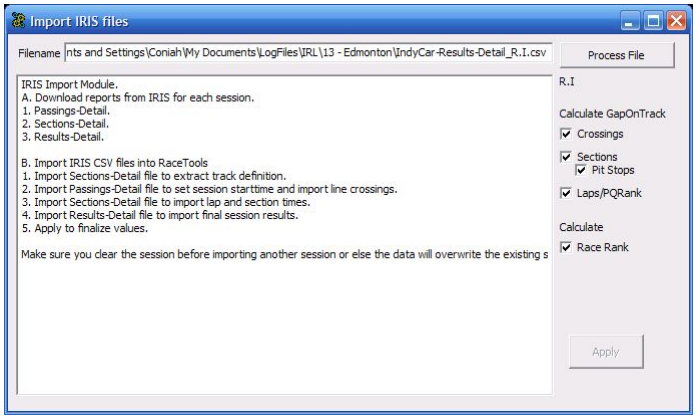
To recreate the session data required for RaceTools, you must export three reports for each session. You need to export CSV files for the Passing-Detail report, the Results-Detail report and the Sections-Detail report. To make the process easier, you can request the reports for a complete event (select the year and event, then select all sessions, all competitors and where appropriate, all sections or timelines. The reports will take a while to generate and download, but it beats generating 3 separate reports for each session of an event. The CSV Importer will automatically recognize when more than one session is included in a CSV file (one of the reasons why you need to generate the 'Detail' version of the reports because it includes the session information) and split the file into separate files for each session. Thus you will only need to export 3 reports from IRIS for each event instead of for each session. You will however need to import the three reports for each session.

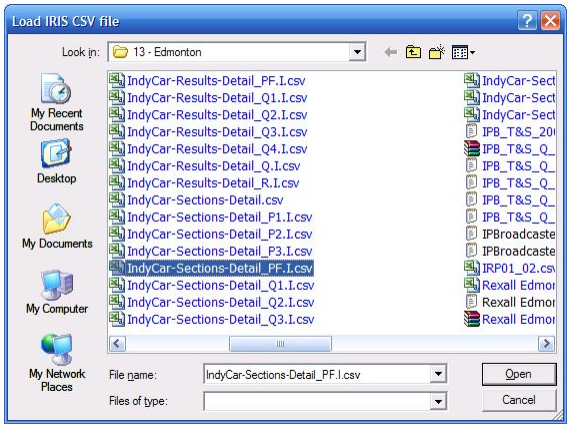
IRL's IRIS Report system:
http://iris.indyracing.com:8000/C16/IRIS%20Reporting/default.aspx



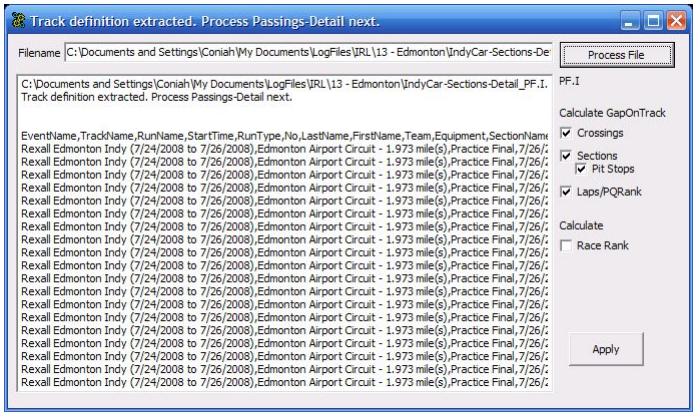


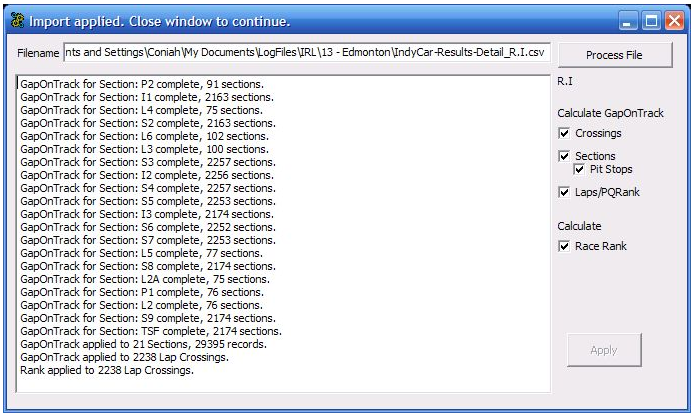
Once the IRIS files have been saved to your hard drive, open up RaceTools and go to the CSV Importer module (CTRL+I). I recommend clearing any data (File/New/Session, CTRL+N) before importing a session. Hit the Process button and look for the Sections-Detail file (ie. 'IndyCar-Sections-Detail.csv') for either the specific session or the event. If the file is for the event, RaceTools will split the files, appending the session code ('R.I', 'P1.I', 'P2.I', 'Q.I', etc.) to the filename. The first time through, the Sections-Detail file is parsed to obtain the track configuration. Once complete, the program will prompt you to process the 'Passings-Detail' report. If you hit Process (or ENTER), the most likely filename is already entered into the dialog so you can just hit OPEN (ENTER) to start parsing the Passings-Detail report. This file is required to obtain the StartTime for the session and also the line crossings. Next, the software will prompt you to process the 'Sections-Detail' report (again). This time it will use the data and not just extract the track definition. The reason we had to process the Sections-Detail report first was to obtain the track definition. The reason we have to process the Passings-Detail report second is to obtain the StartTime which is used for both the LineCrossingsLog and Sectionlog tables to calculate the ElapsedTime. Once the Sections-Detail report has been processed, you will prompted to process the Results-Detail report. Again, the Process button will be preselected and the suggested filename already entered in the Open Dialog so that if all goes well you just have to hit ENTER twice to start processing the file. This should be quick as it's just the final results with no historical data.





Now RaceTools has all of the raw data for the session. To complete the process, we need to fill in some of the calculated values, specifically, the GapOnTrack fields for each crossing, section and lap, the Rank after each completed Lap (either in race or non-race sessions) and Pit Stop information. To do this, select the APPLY button with the appropriate options selected. If you do not need GapOnTrack information for each timeline crossing, you can deselect the Crossings option. Nothing uses this value at this time, so it's safe to skip this calculation and save some time. If you do not need the GapOnTrack for each section nor pit stop information, you can deselect the Sections and Pit Stops options. Note that Sections option must be selected if you want the Pit Stops to be processed. I recommend keeping the Laps/QRank option selected since it is used by the TOW Filter and also fills in the Practice/Qualifying rank after each completed lap at the time the lap is completed. If the session is a race, the 'Race Rank' option should be automatically selected. Once the data has been calculated, you can close the CSV Importer window and use RaceTools as if it were the end of a session. You can reload the *.abs file at any time to recreate the reports. So that you know that the program is working, the window title will be updated with the



timeline or section being processed and the % complete for that timeline or section. Additional information is displayed in the textbox as each step is complete.

Note that generating the GapOnTrack data is very CPU/time intensive. It may take upwards of an hour and even longer to generate the GapOnTrack values for the LineCrossingLog and SectionLog tables. The GapOnTrack values for Laps is not nearly as time consuming. Currently RaceTools does not make use of the GapOnTrack values for line crossings or sections in the reports, but processing the sections is required if you need to rebuild the pit stop tables.