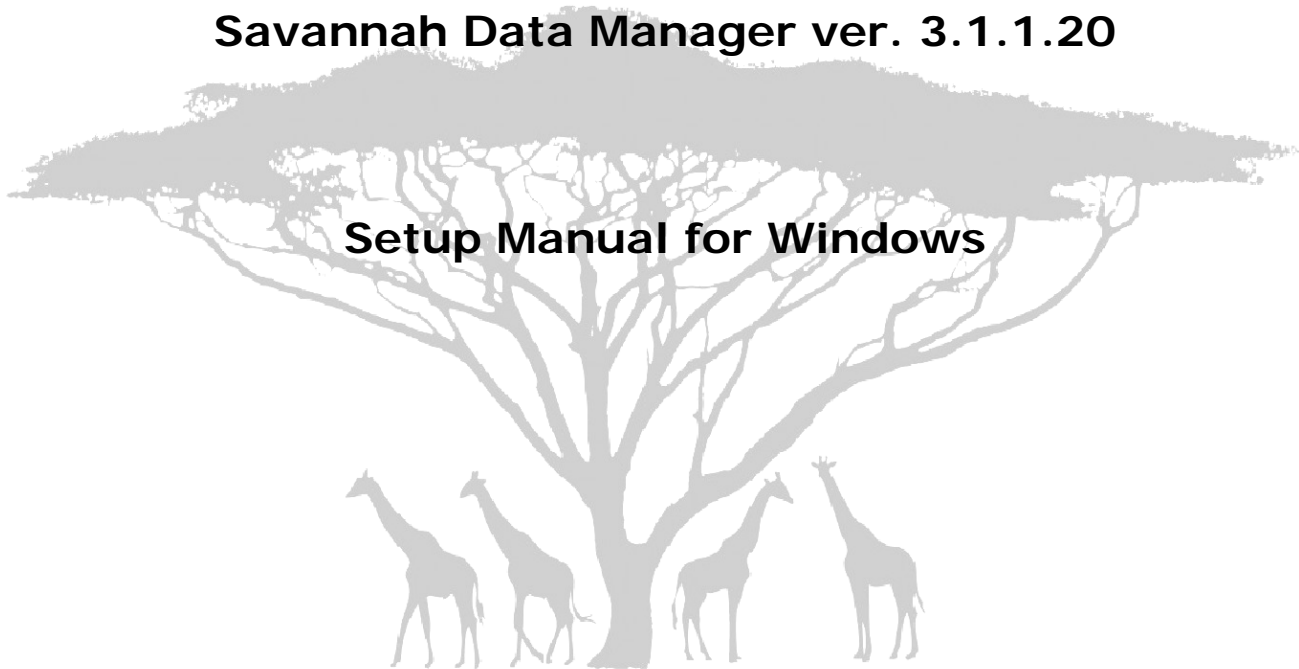


Savannah Data Manager ver. 3.1.1.20



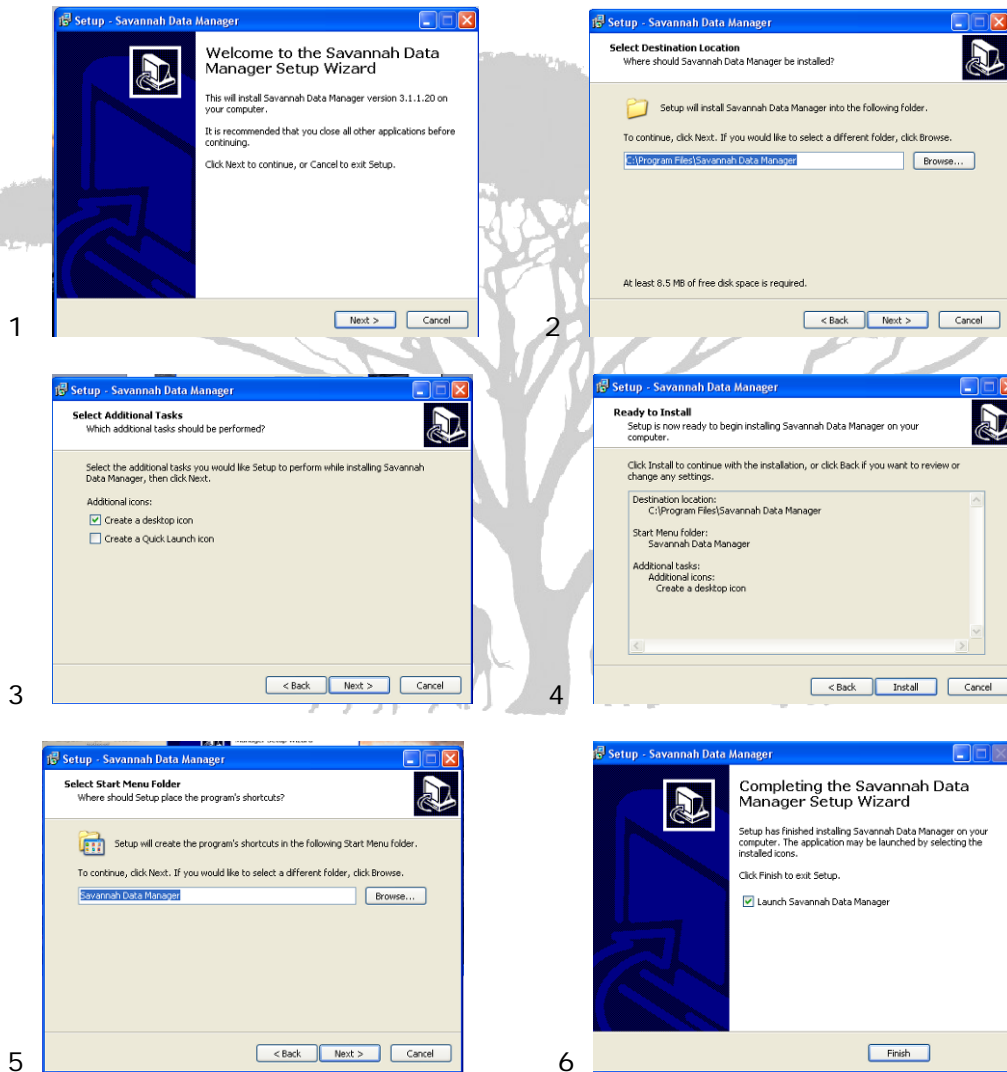
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Program Setup

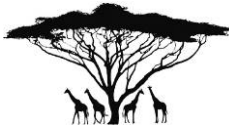
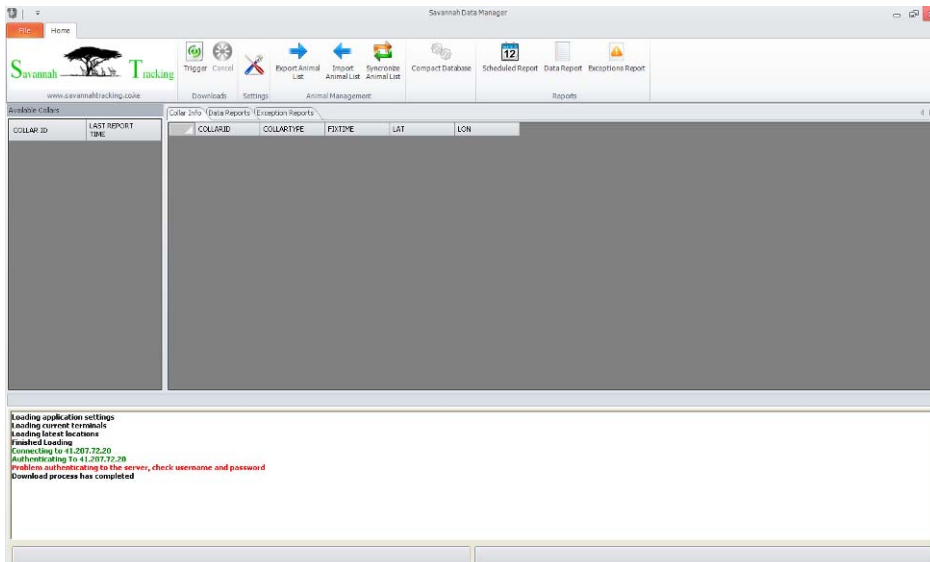
1) Download the Savannah Tracking Data Manager setup file "sdm.exe" from drop box on <http://dl.dropbox.com/u/49101503/sdm.exe>

2) Run the sdm.exe which will take you though the following steps:



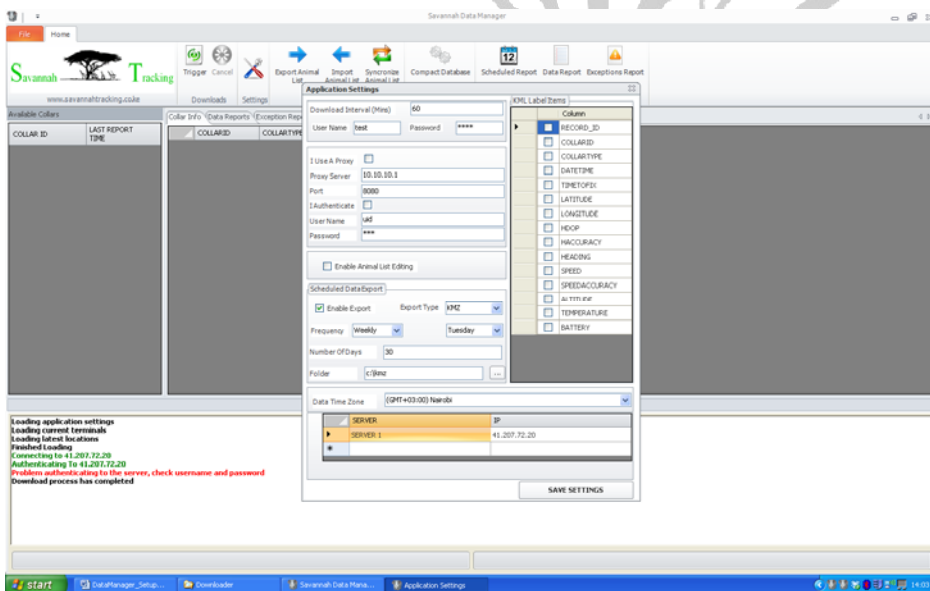
Use the suggested installation locations and setting or specify alternatives. Once the program starts you will see this page:

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You will initially receive a downloading error as you have not yet entered your credentials.

3) Go to “Settings” in the tool bar and select and enter the username and password provided to you at time of collar delivery.



Program overview

The program consists of a top tool bar and two windows.

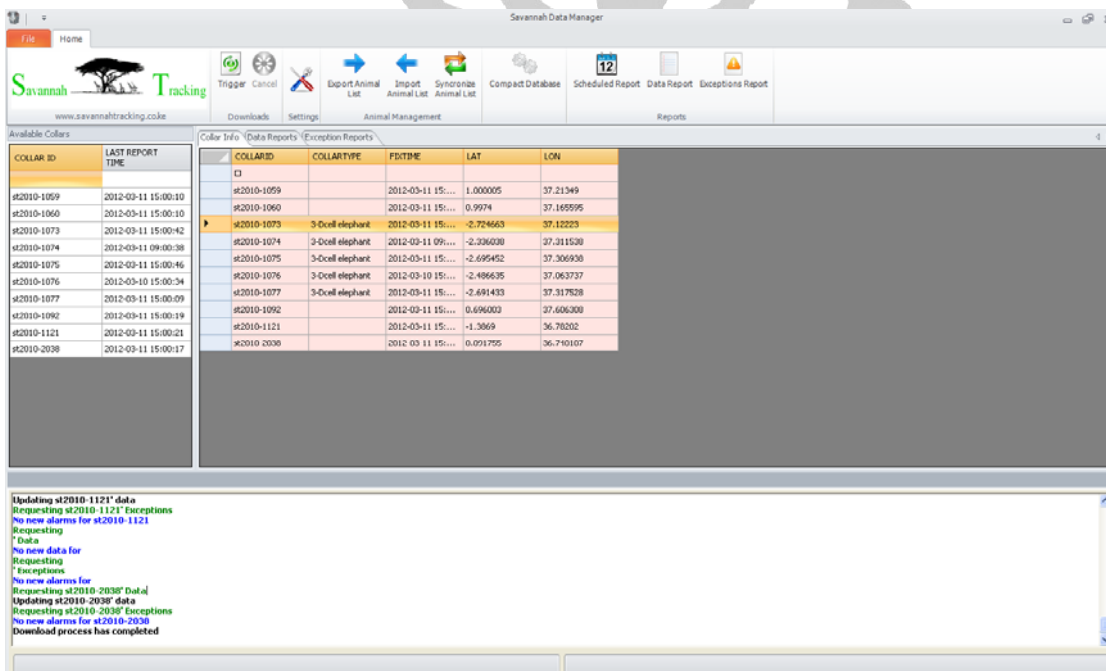
The left window:

This window gives you a quick overview of available units and the time of the last data report. You can re-download all data from a specific animal with a right click and select "re-download all data from selected animal" This action should only be taken in the unlikely event that you suspect a lack of available data or if the data from that animal has become corrupted. This action will close down and reboot the program and erase all data from the specified collar and re-download the entire dataset from the Savannah Tracking server. This is NOT the normal downloading mechanism and should generally not be used.

The right Window

This window contains three tabs,

- 1) Collar Info This Tab contains the animal list. The first 5 (highlighted) columns are fixed and cannot be edited. These columns provide an overview of the tracking units and the time and coordinates for the last acquired position. Additional columns can be added by the user. These columns can be used to append auxiliary data to each tracking unit (e.g. species, sex, age, area or any other information linked to the specific unit) which provides the full list of available units as well as the latest position (see details below).
- 2) Data Reports which provide an on screen display of data exported from the data base via the Data Report tool (see details below).
- 3) Exception reports which provide an on screen display of data obtained via the exception report tool. This is data send from the unit which contains information apart from the regular scheduled positions such as power –up; power down; low power etc.



COLLAR ID	LAST REPORT TIME	COLLAR ID	COLLAR TYPE	FSTIME	LAT	LON
st2010-1059	2012-03-11 15:00:10	st2010-1059		2012-03-11 15:00:10	1.000005	37.21349
st2010-1060	2012-03-11 15:00:10	st2010-1060		2012-03-11 15:00:10	0.9974	37.16595
st2010-1073	2012-03-11 15:00:42	st2010-1073	3-Ocell elephant	2012-03-11 15:00:42	-2.724663	37.12223
st2010-1074	2012-03-11 09:00:38	st2010-1074	3-Ocell elephant	2012-03-11 09:00:38	-2.336030	37.311520
st2010-1075	2012-03-11 15:00:46	st2010-1075	3-Ocell elephant	2012-03-11 15:00:46	-2.695452	37.306930
st2010-1076	2012-03-10 15:00:34	st2010-1076	3-Ocell elephant	2012-03-10 15:00:34	-2.486635	37.063737
st2010-1077	2012-03-11 15:00:09	st2010-1077	3-Ocell elephant	2012-03-11 15:00:09	-2.691433	37.317828
st2010-1092	2012-03-11 15:00:19	st2010-1092		2012-03-11 15:00:19	0.696003	37.606300
st2010-1121	2012-03-11 15:00:21	st2010-1121		2012-03-11 15:00:21	-1.3069	36.78202
st2010-2038	2012-03-11 15:00:17	st2010-2038		2012-03-11 15:00:17	0.091755	36.740107

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Editing animal list information

In order to add columns and edit information in the animal list displayed under Collar info "editing" must be activated in settings. Right click on the column heading and select the desired action. When adding columns you will be prompted for column name and data type. You must select "start editing" before you can enter data into the table. The animal list can be exported in two ways. 1) By with a right click in the collar info tab or 2) using the export tool. The export tool must be used if the file (SQL) is to be imported into another user's data manager to replace/update the animal list on their data manager. HINT: Assign a project data manager and only allow this person to enter additional data in the animal list. This data base manager can then email the updated list around to other users which can import this updated list. In this way all participant are using the same auxillary data.

The top toolbar

In the tool bar you find short cuts to a number of actions you can take:

- 1) Trigger This triggers an unscheduled data query to the server (the normal data downloading runs automatically at scheduled intervals set under settings). Use this to download the very latest data that may have arrived since the program was last set to run the automatic download.
- 2) Settings System settings which was described on page 4
- 3) Export and import animal list. Importing or exporting the animal list to update the user appended meta data on the animal list.
- 4) Compact database If you have many units tracked over long periods the database may become fairly large. Running a compact database with reduce the size by compacting older data.
- 5) Scheduled report This triggers the creation of a scheduled report in KMZ format (see under visualization of data in Google Earth).
- 6) Data Report Allows you to query and exporting your data. Select the units you want included (no selection result in data from all units being included) and select the data headings you wish to include in the export (no selection result in all headings included). You can further use a general start/stop date for your query as well as create a query based on any of the data heading including any auxilliary data headings added in the animal list. Finally select the export format and destination folder. If output type is selected as NONE the data is only displayed I the data report tab window.
- 7) Exception Report In addition to the normal scheduled data collection the tracking unit sends information on e.g. power up, power down, low power, geo fencing violations etc. All these "alarm" data can be accessed and viewed creating an exception report

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Visualizing Data

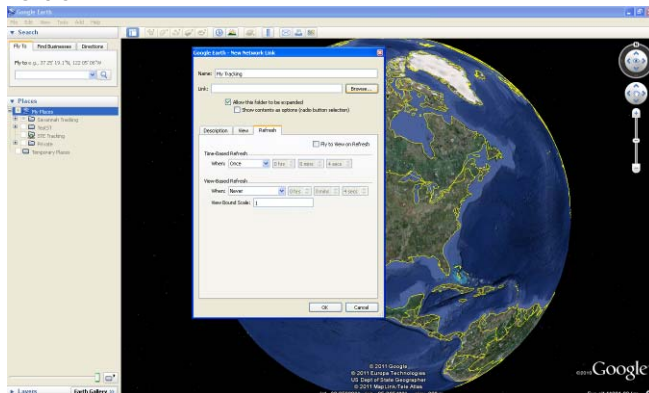
Data can be visualized in Google Earth by creating an automatically updated KMZ file on your local computer. This KMZ file will contain historic data from each of your units going back a user defined number of days in the past as well as show the last collected position from each unit. E.g. if you want to see the last week of data enter 7 days in settings and if you want to see the last month of data enter 30 days etc. The automatic generated kmz file will be stored under c:/kmz/ unless otherwise specified.

To set up this scheduled report and view your data in Google Earth:

- 1) In "Settings" tick "enable export" and select the duration of historic data included in the scheduled report as well as the frequency of the automatically scheduled report.
- 2) Trigger a scheduled report manually in the tool bar.
- 3) Open Google Earth. Under "My Places" select "add network link"



Name the link (e.g. My Tracking) and specify the path to the automatically generated KMZ file. (c:\kmz) Then specify how frequent Google Earth should refresh this file (hint, to avoid GE refreshing the link constantly you can set this to "Once" i.e. the link is refreshed upon opening Google Earth. If you wish to refresh the link later you can select "refresh" by right clicking the folder.



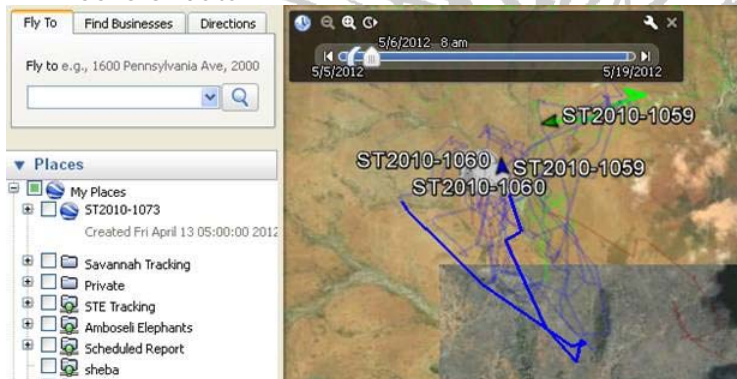
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Savannah Tracking also provide an automatically updated KMZ file on our server which can be accessed and viewed in Google Earth. In this way the users can view the last 2 weeks of data in Google earth without installing the full data manager and without getting access to the full dataset.

- 1) Open and save the provided kmz file in Google Earth (if not available please contact us and ask for this link to be created)
- 2) To run the most optimal animation in Google Earth un tick the historic locations like this:



- 3) Go to the top "Time Slider" in the map window and separate the first and last section of the slider a few notches to display a section of the path rather than just one instant of a time. Move the slider to the far left and click the clock to run the animation of the last 2 weeks of data



- 4) If the animation is running too fast select "setting" and choose the lowest speed. If you want the animation to loop (continuously replaying) select "loop animation"

