GeoSynoptic Panel

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SOLARIS
NATIONAL SYNCHROTRON RADIATION CENTRE

INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY

EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

Overview

Application for managing devices in a Tango-using control system.

Goals:

1) **synoptic view – map of the machine,**
2) **overview of devices' statuses,**
3) **quick detection of alarm states,**
4) **customisable display,**
5) **diagnostics.**

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Two parts:

1) Settings
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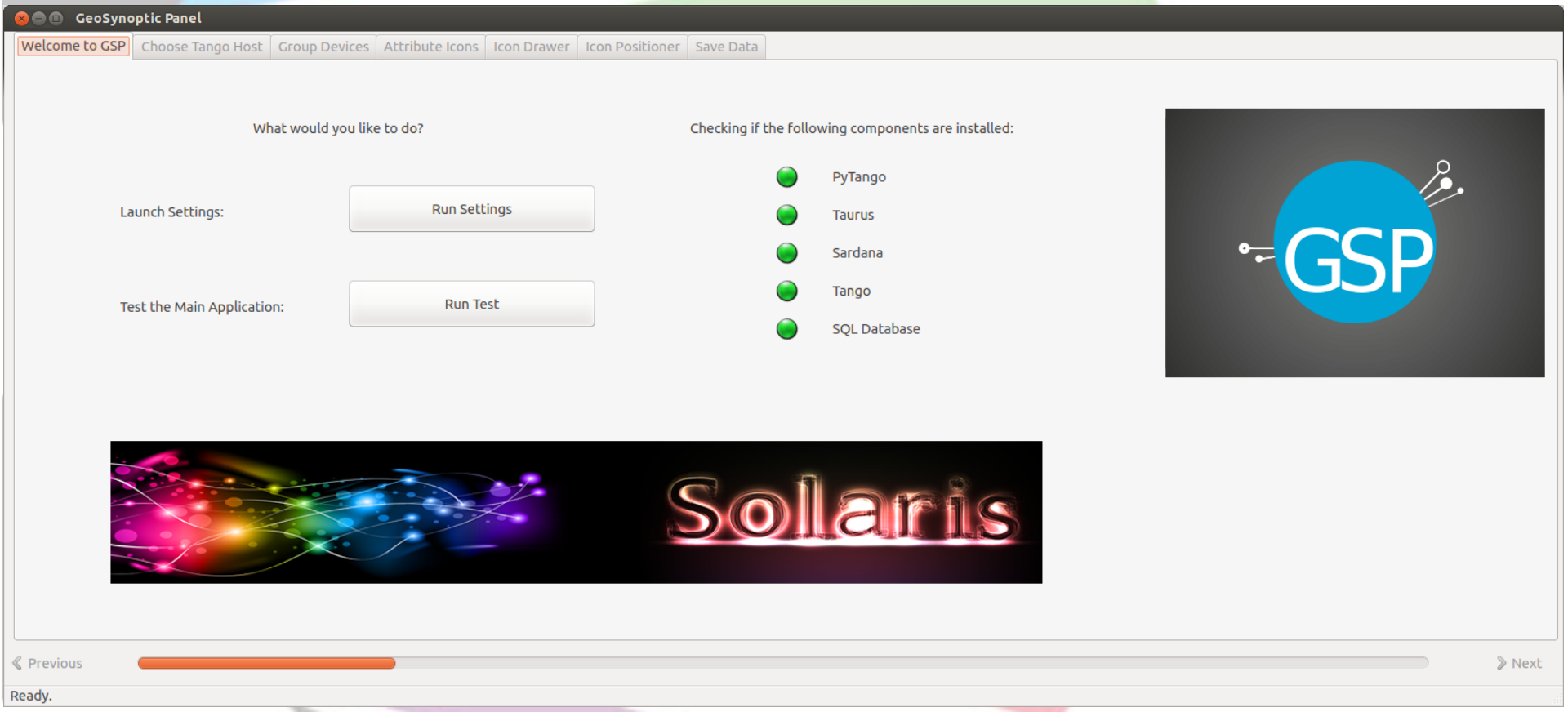
Work in progress :)

GSP - Settings

First part – the Settings

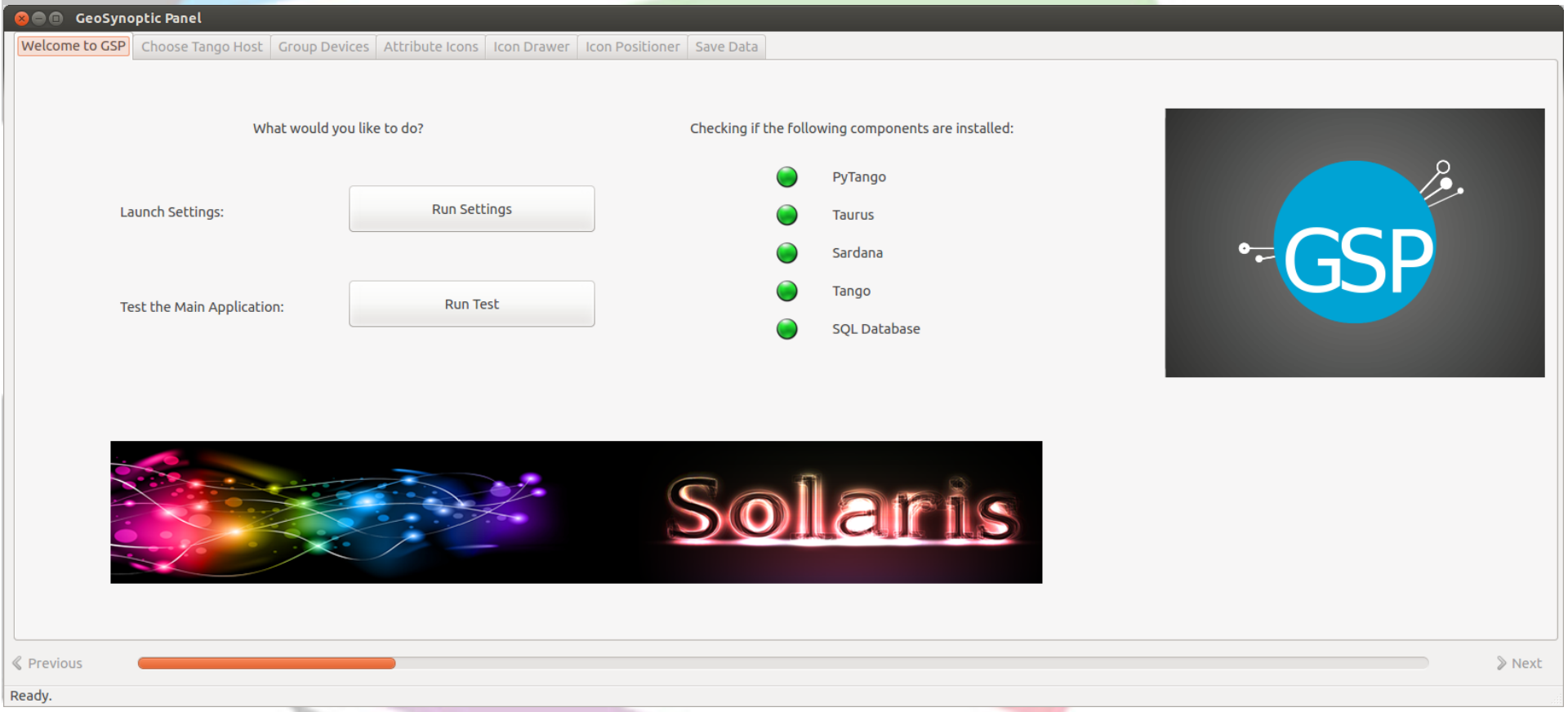
- Used to define configuration.
- Tabs – various options.
- Save & import of settings files.
- Status bar communication with the user.



GSP - Settings

Settings – Welcome to GSP.

- First tab – launching Settings or the Main Window.
- Checks for presence of components.



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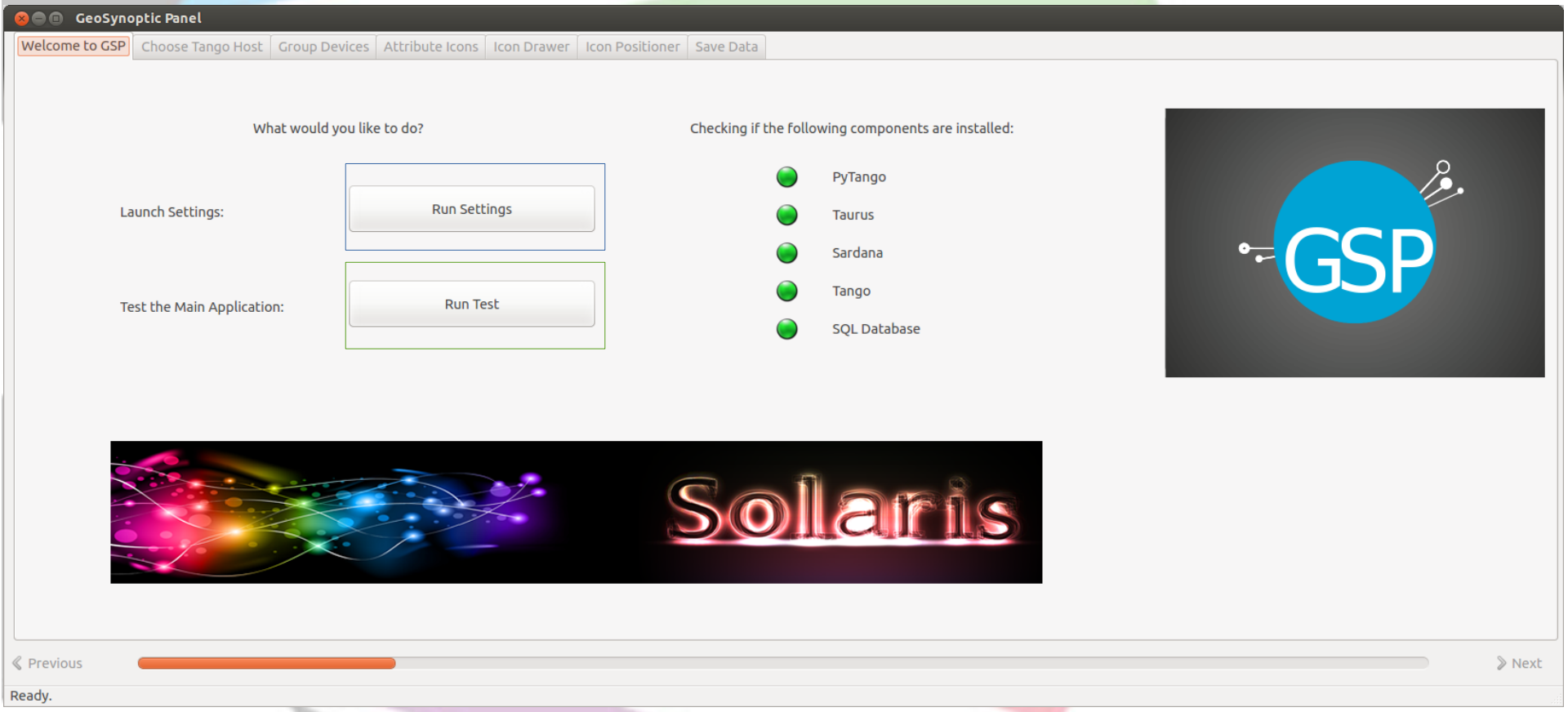
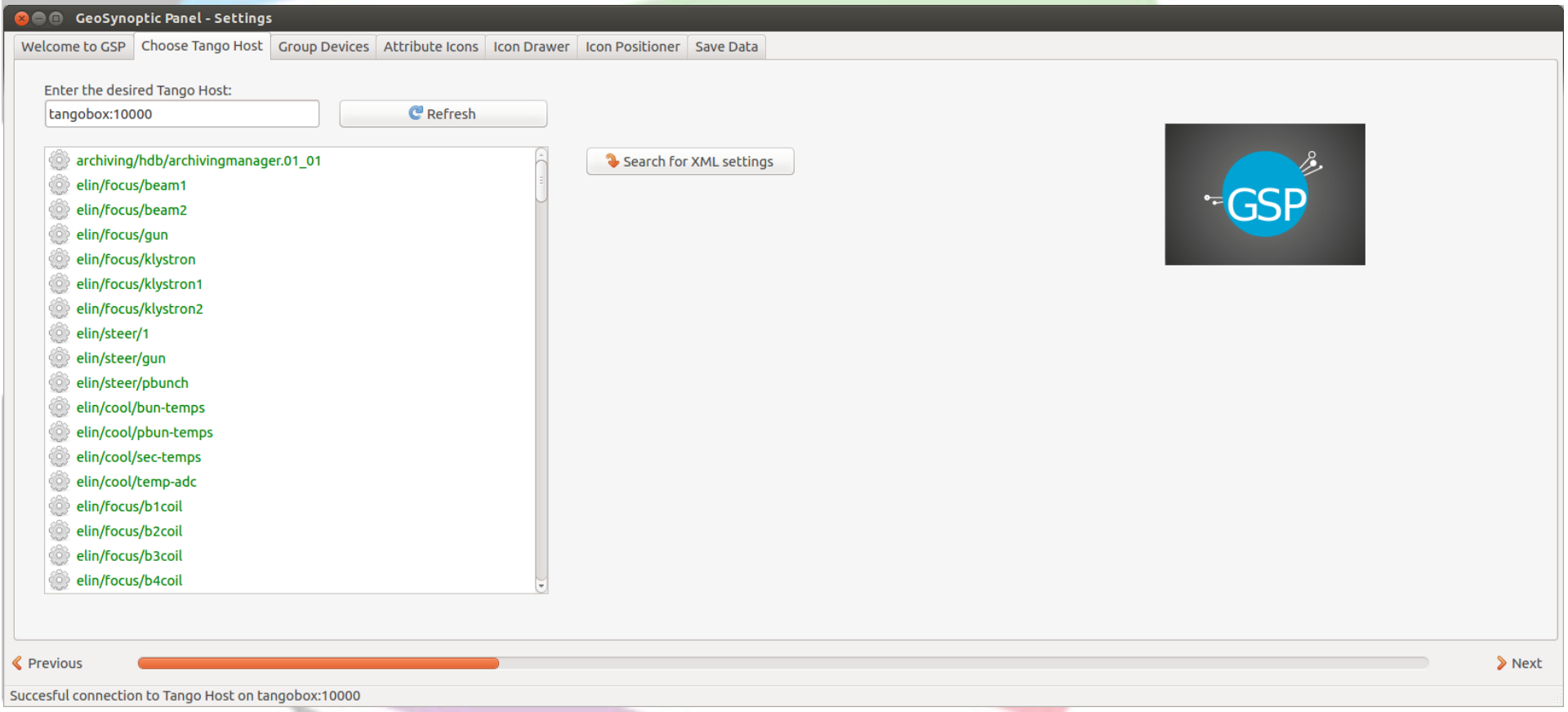


GSP - Settings

Settings – Choose Tango Host

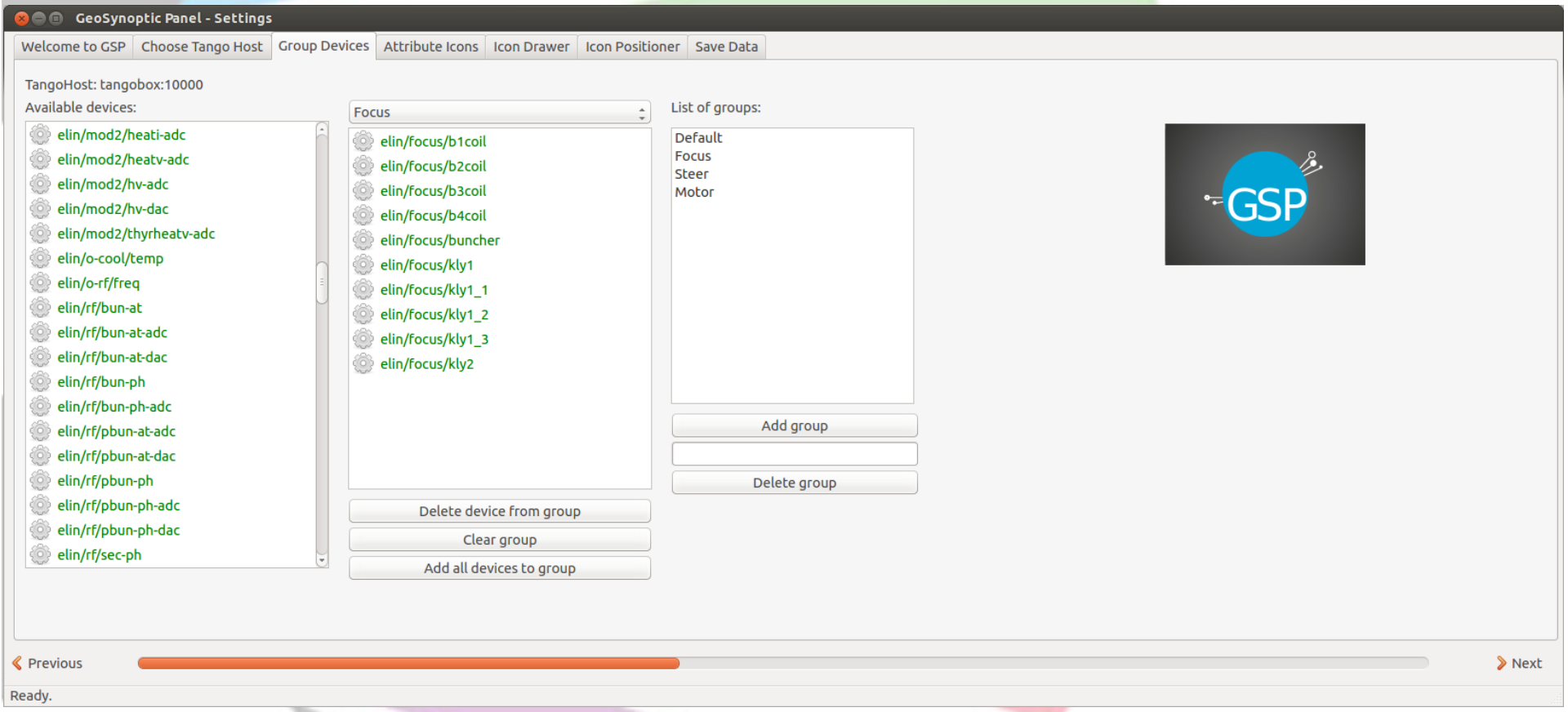
- Tango Host choice.
- Refresh – get all devices from the database.
- Import XML settings file.



GSP - Settings

Settings – Group Devices

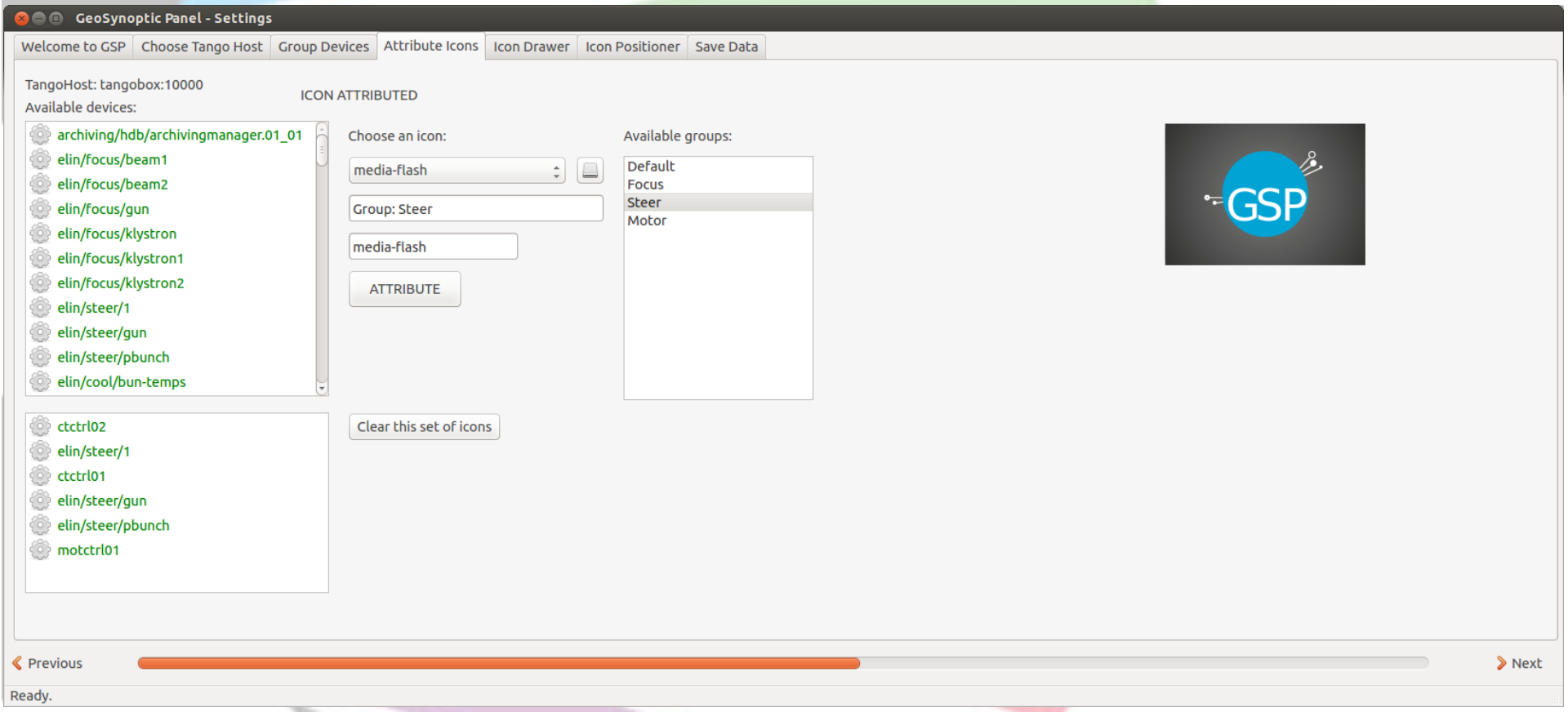
- Grouping devices & editing the groups.
- Independent from the classic Tango division.
- Layers for the Main Window.



GSP - Settings

Settings – Attribute Icons

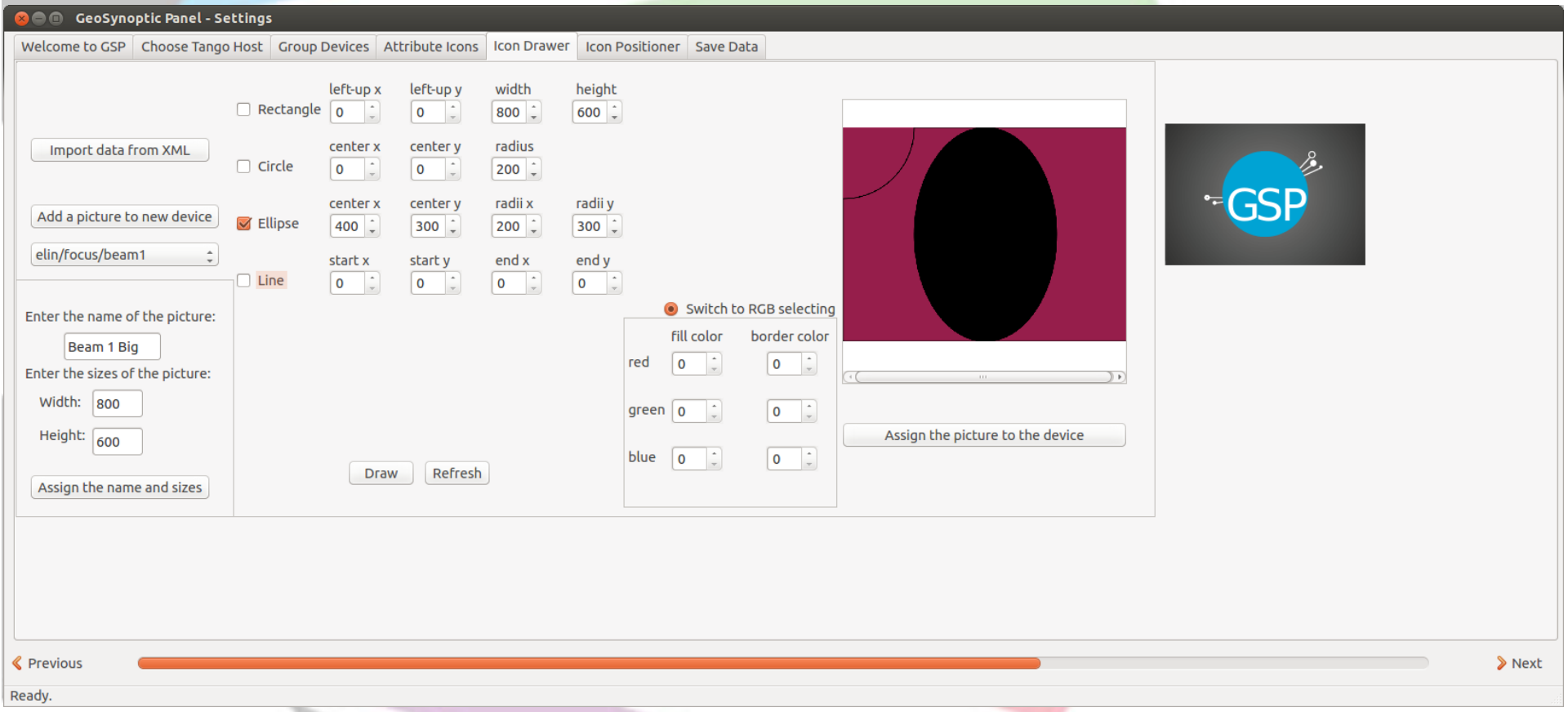
- Setting icons to devices or groups.
- Predefined icons.
- Import of custom icons.



GSP - Settings

Settings – Icon Drawer

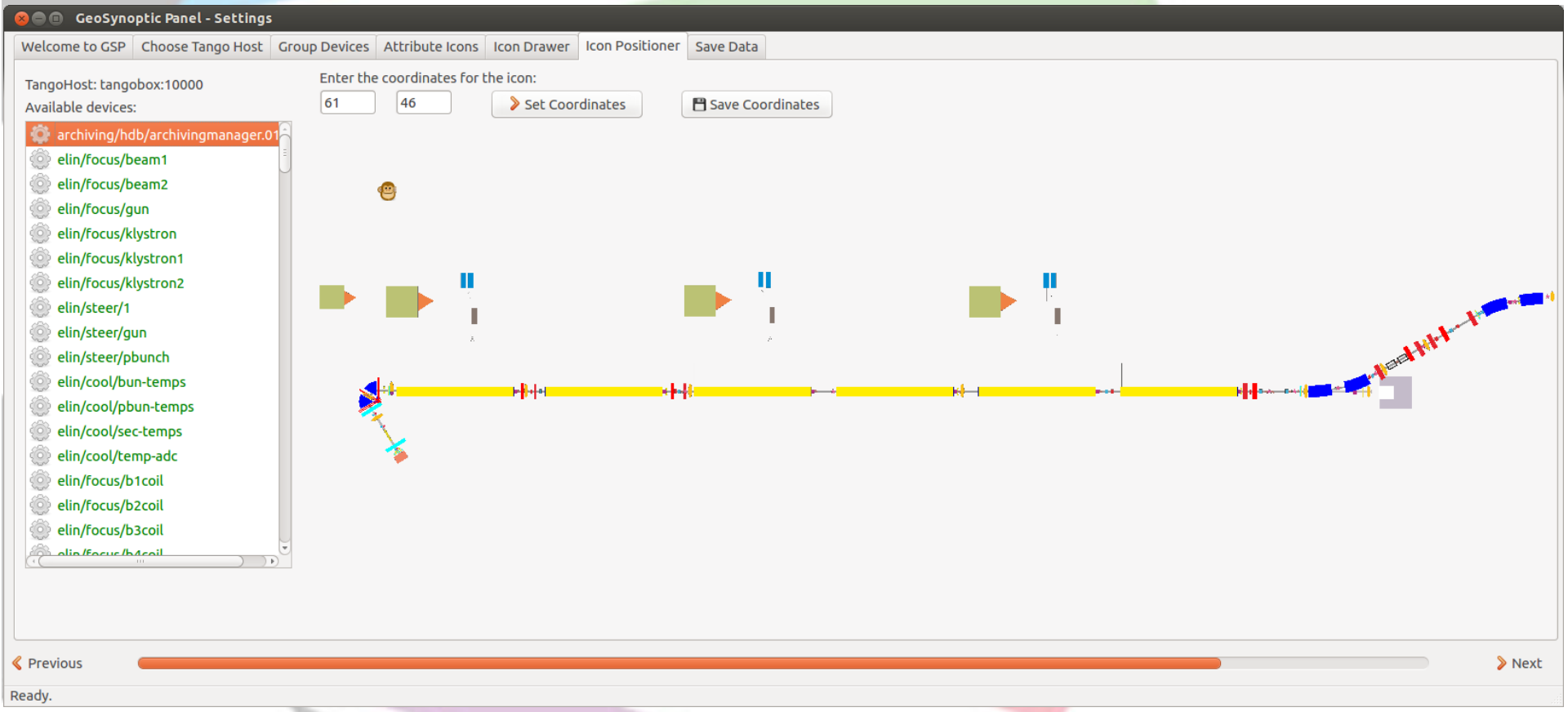
- Drawing icons using simple shapes & colours.
- Saving as SVG files.
- Scroll to change size.



GSP - Settings

Settings – Icon Positioner

- **Positioning the devices:**
  - **drag & drop,**
  - **coordinates.**
- **Uses previously attributed icons.**



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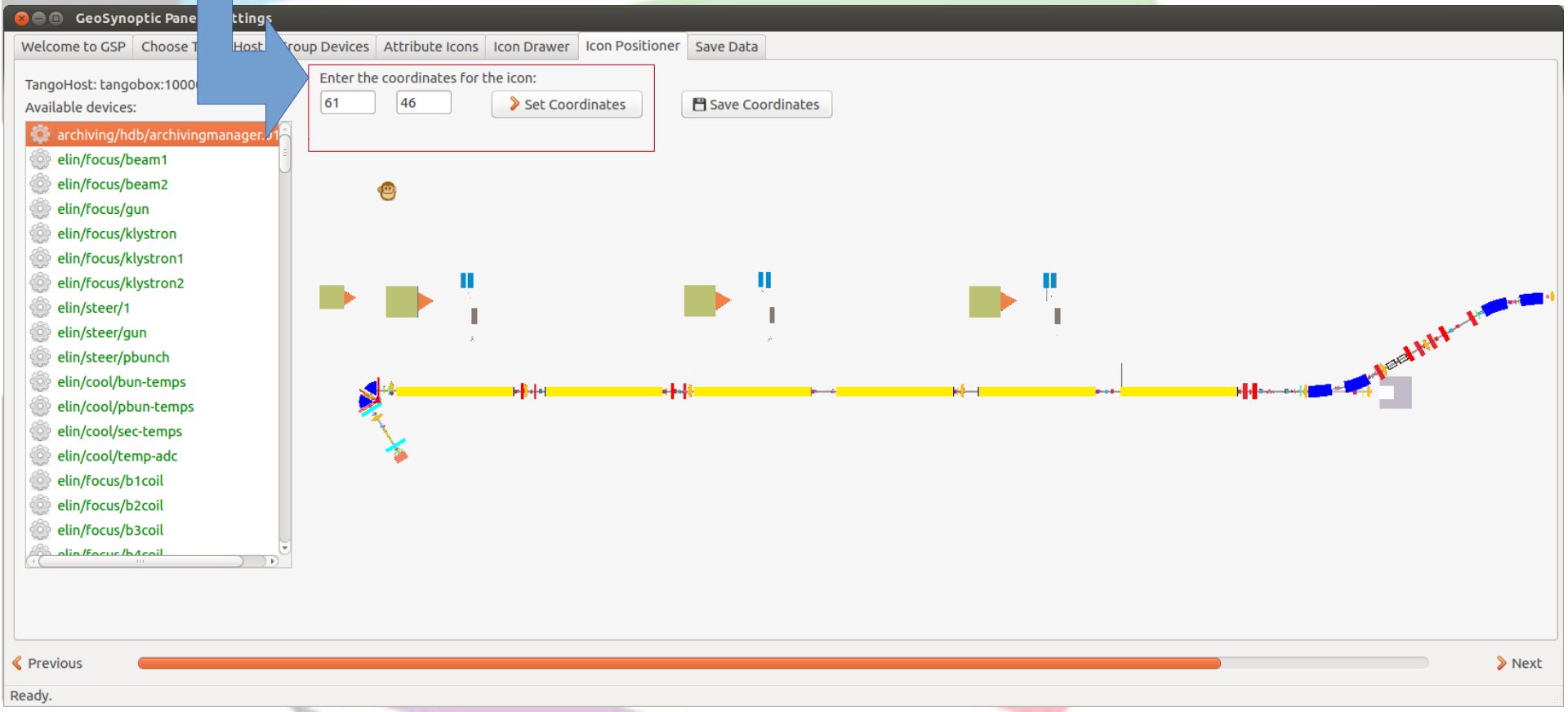
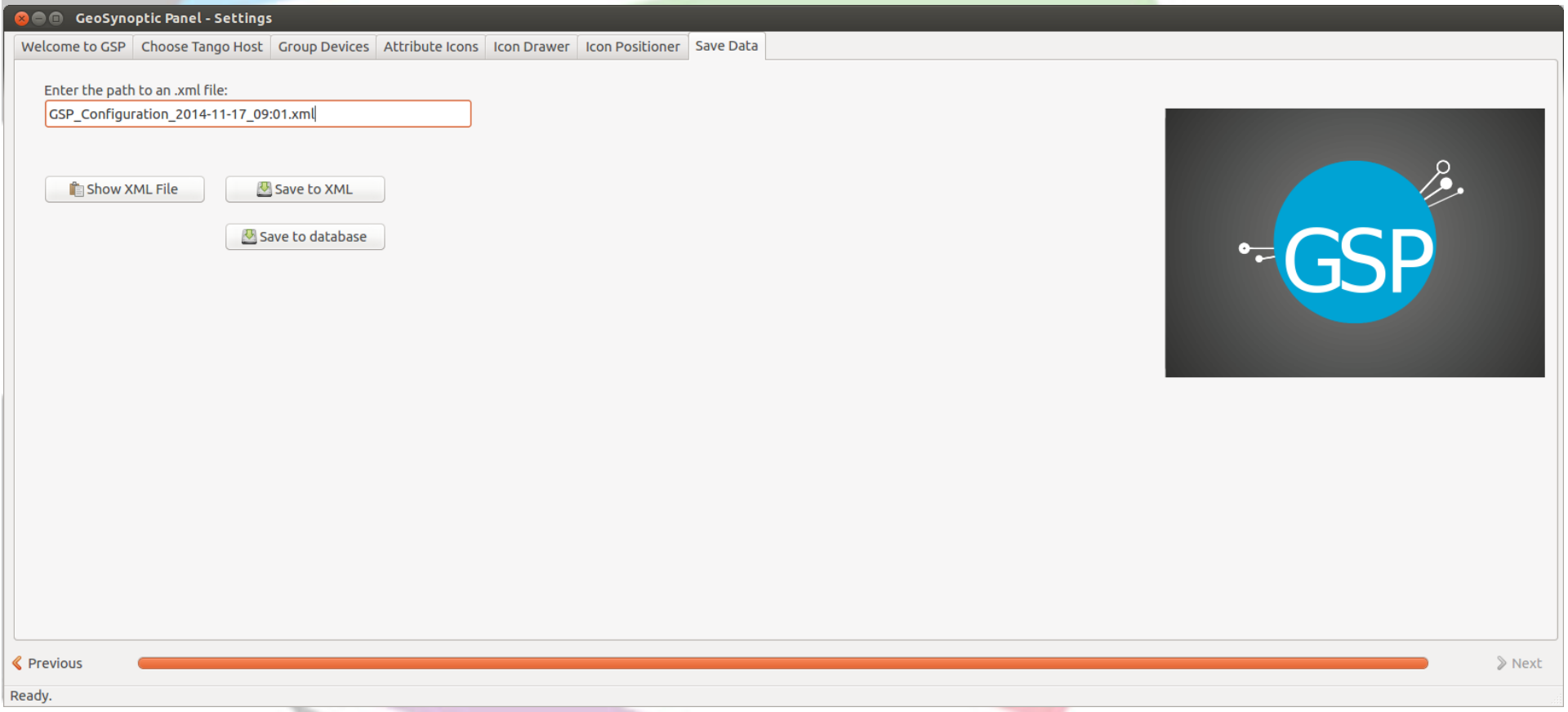


GSP - Settings

Settings – Save Data

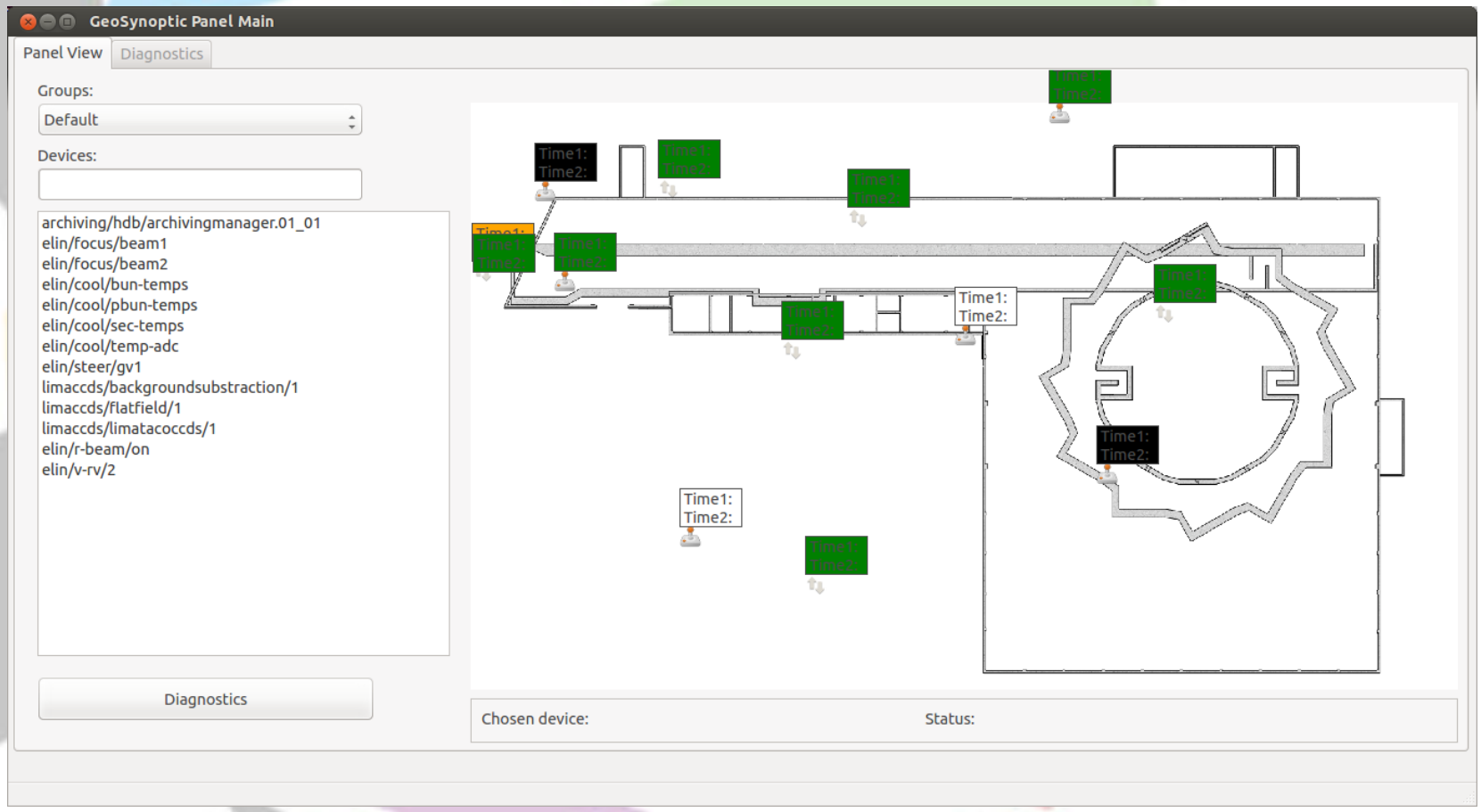
- Saving the configuration:
  - to database (device properties),
  - XML file.
- Preview of the XML file.



GSP – Main

Second part – the Main Window

- Map of devices.
- Icons & locations.
- State colours.



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- Map of devices.
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- Filter list of devices:
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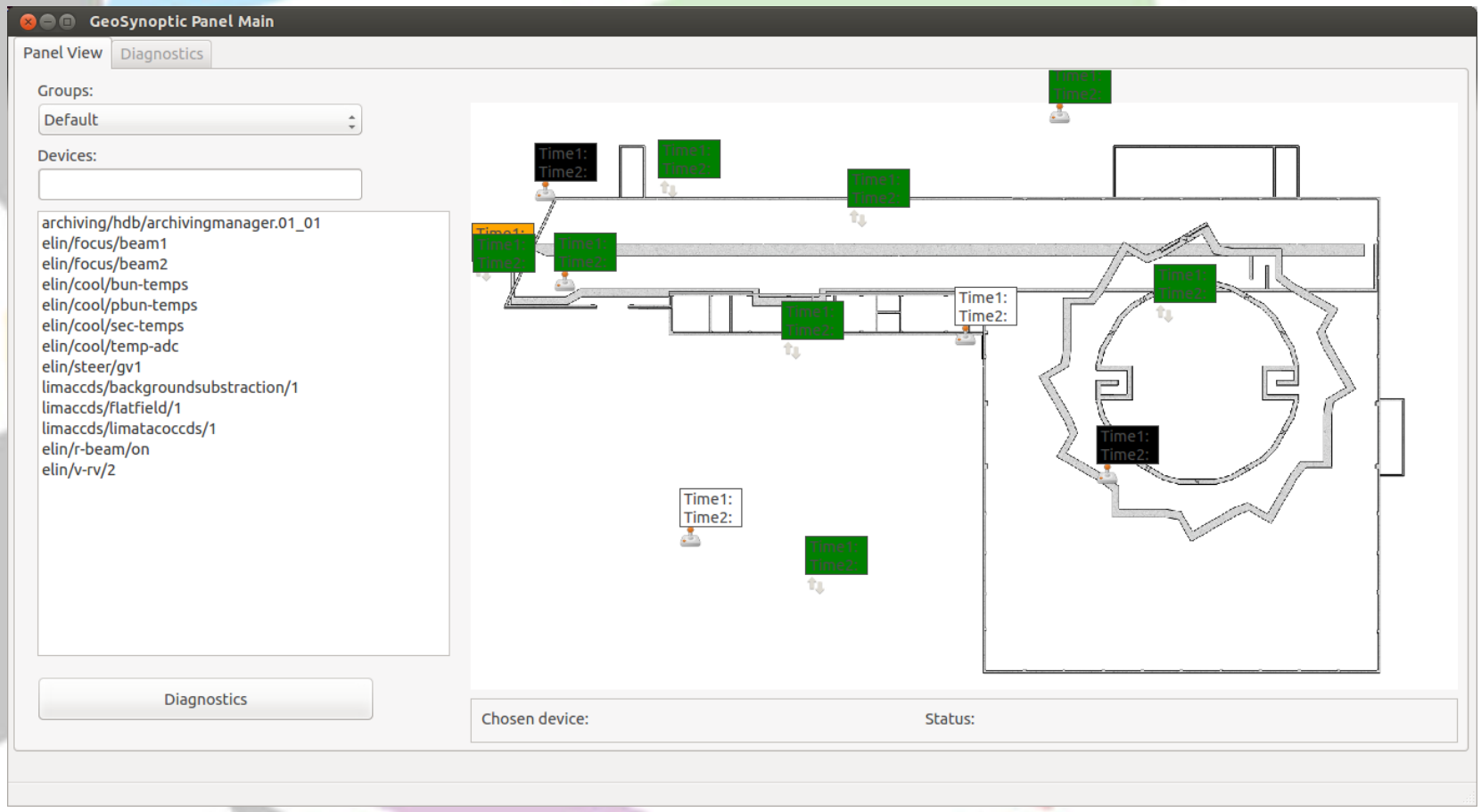

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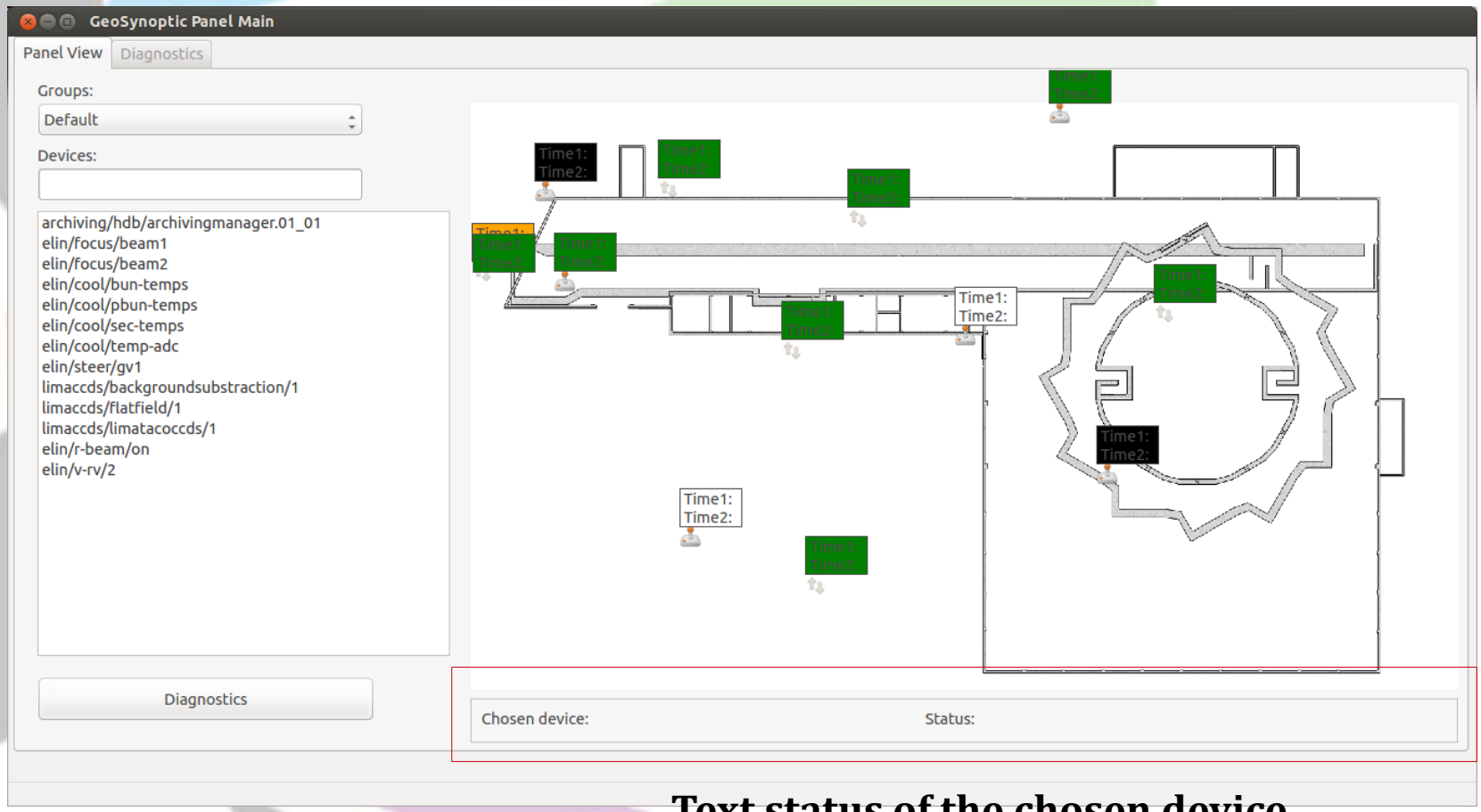

Text status of the chosen device.

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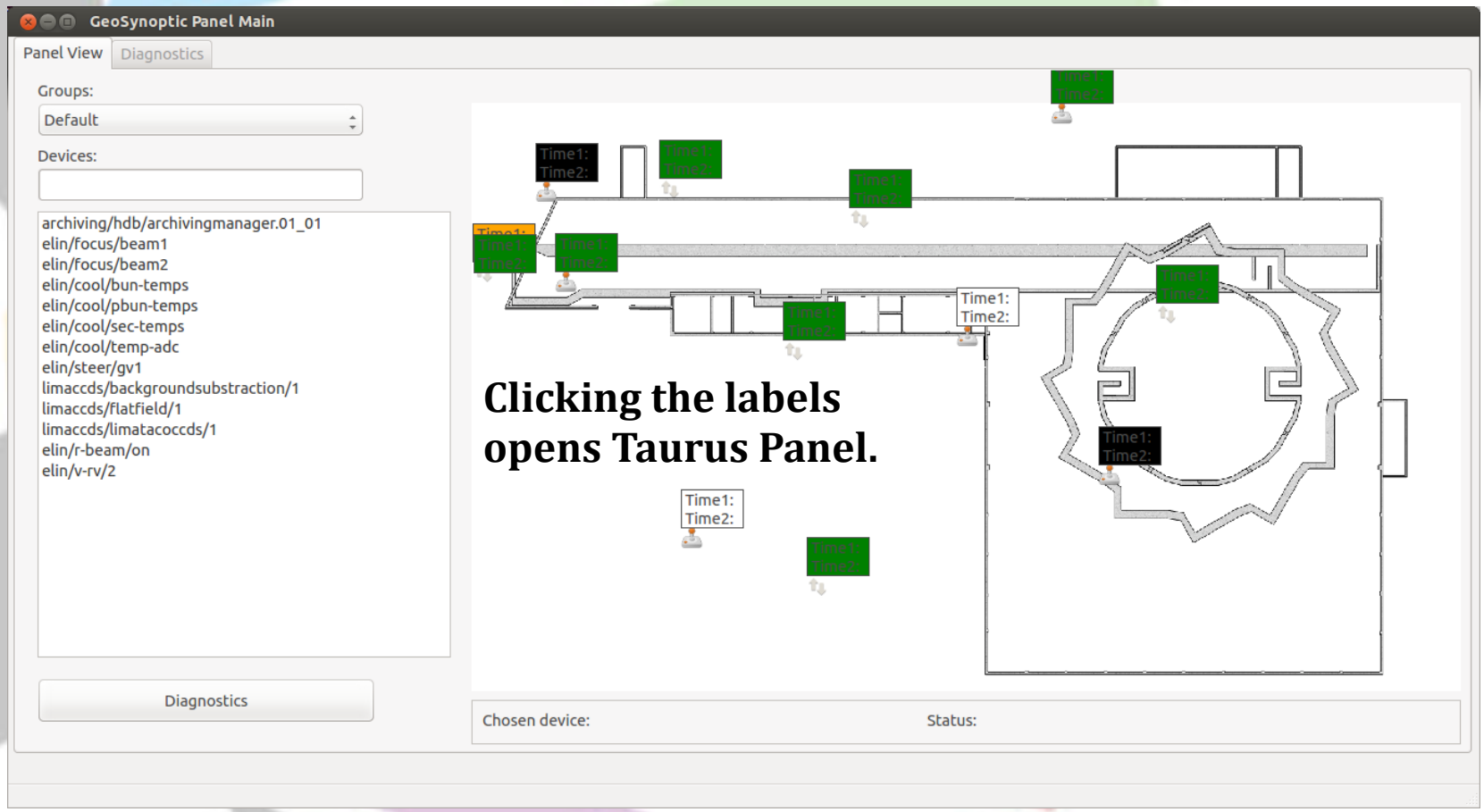
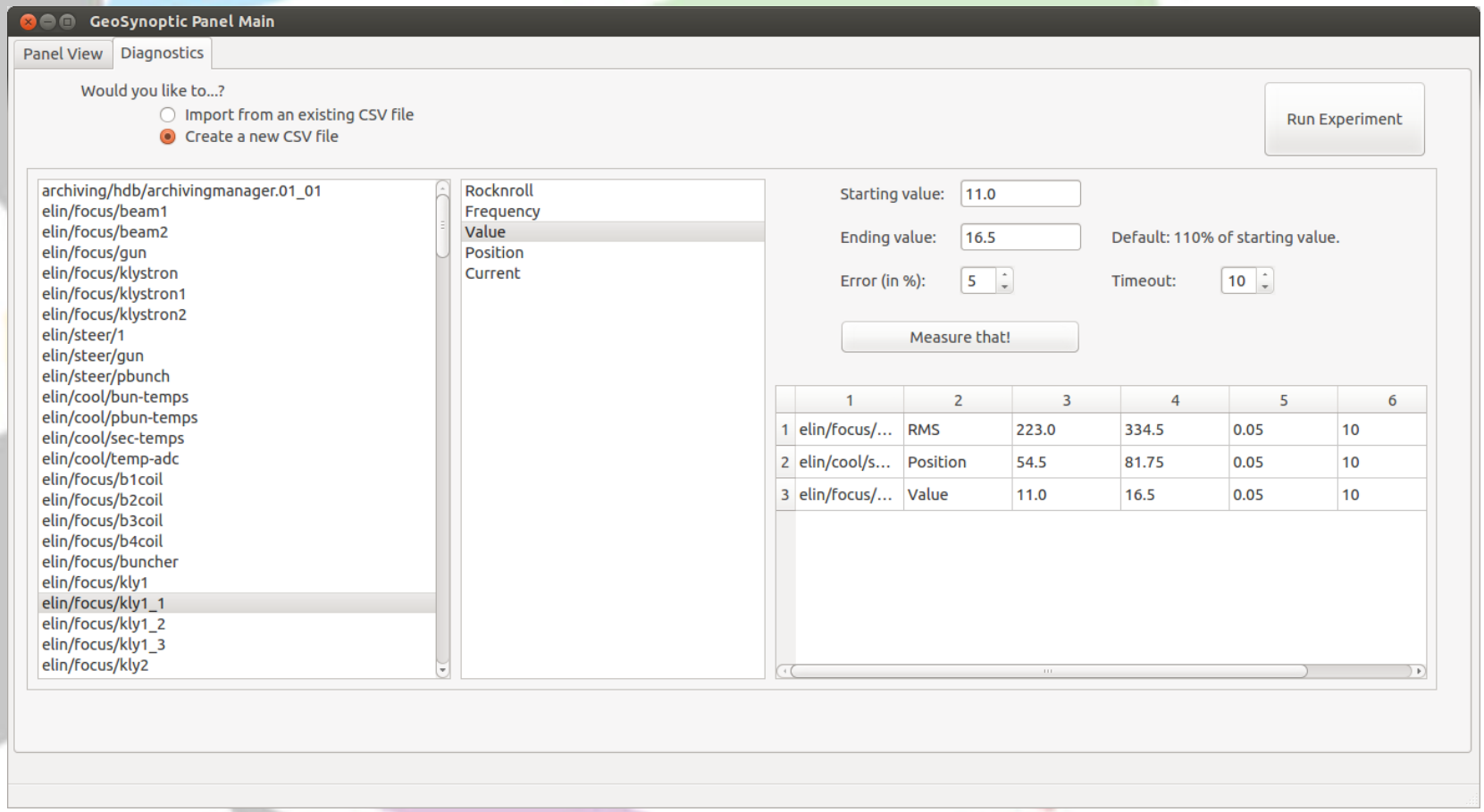


GSP – Main

Main Window – Diagnostics.

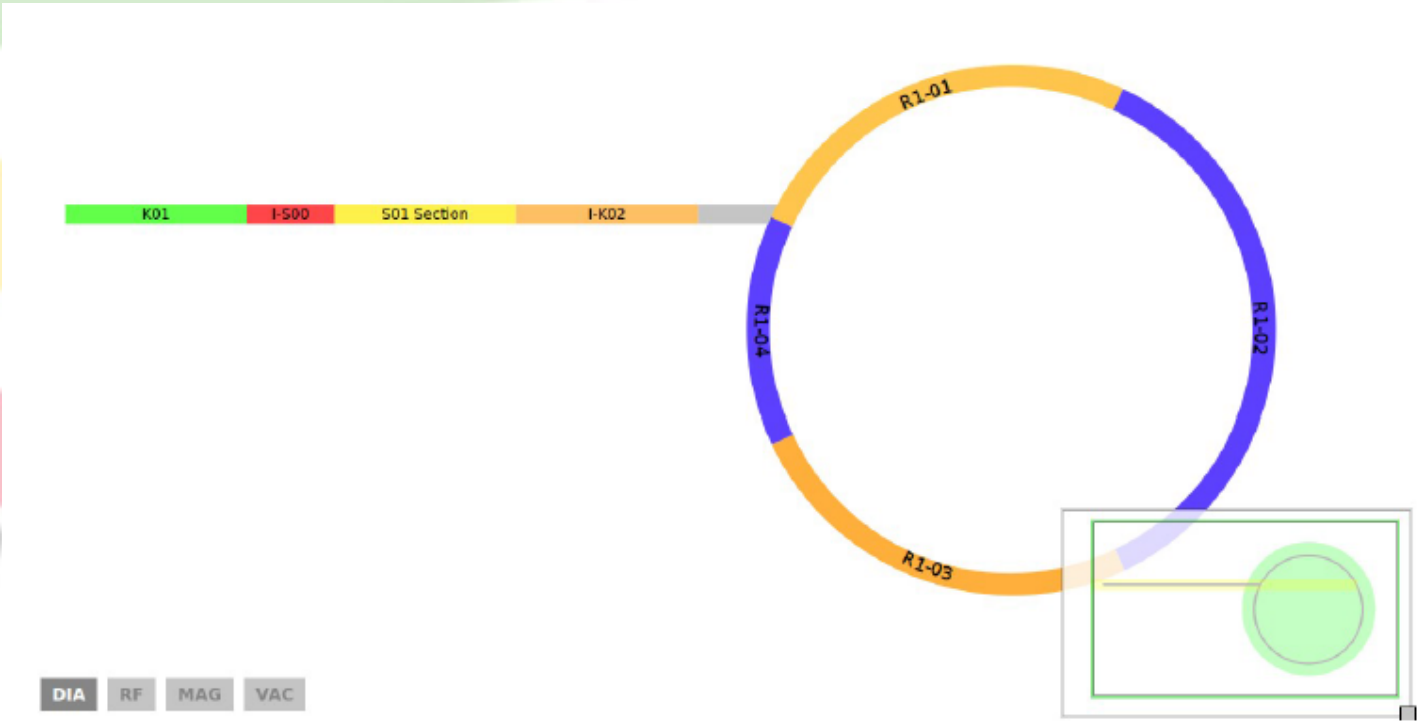
- Simple procedure.
- Test any numerical attribute.
- Save & import CSV settings files.



GSP – Main

Synoptic Panel.

- New approach based on the MAX IV Synoptic.
- SVG panel with layers.
- Generated view based on the content of the database.



GSP – Main

Synoptic Panel.

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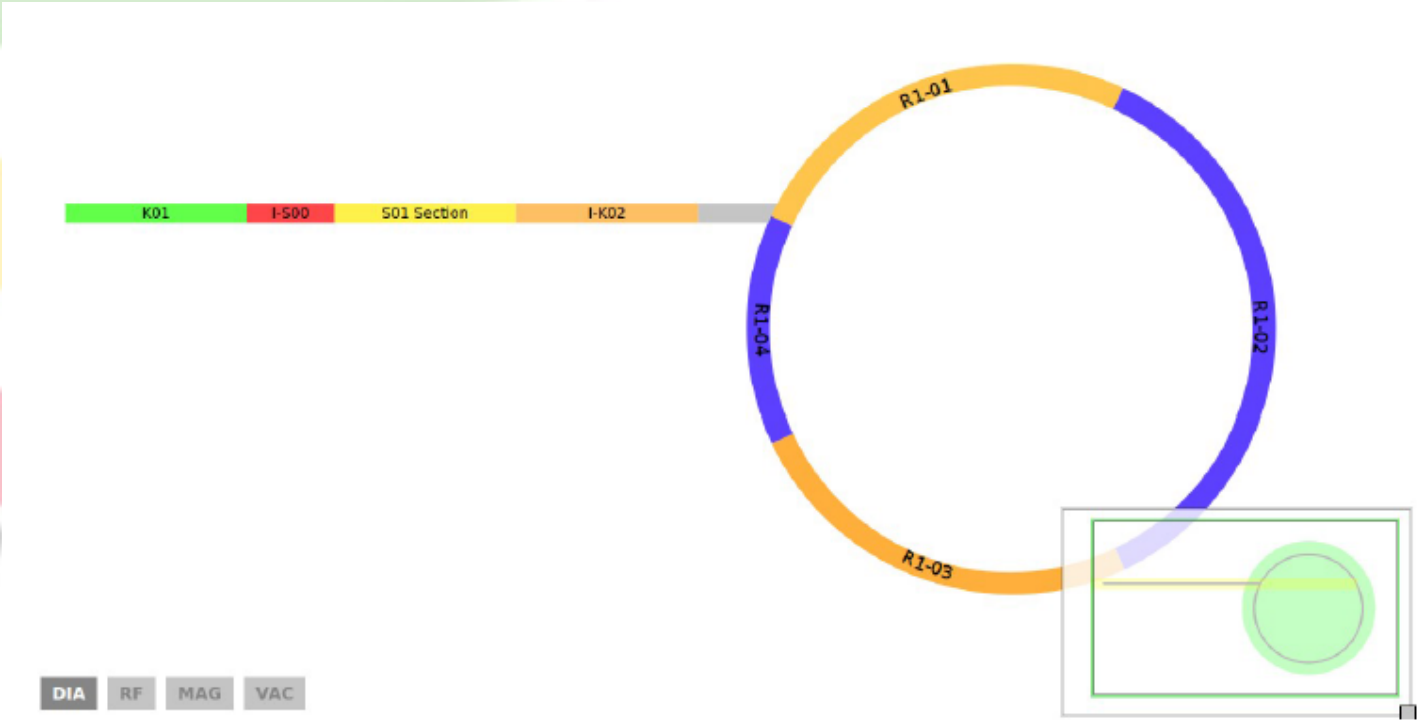
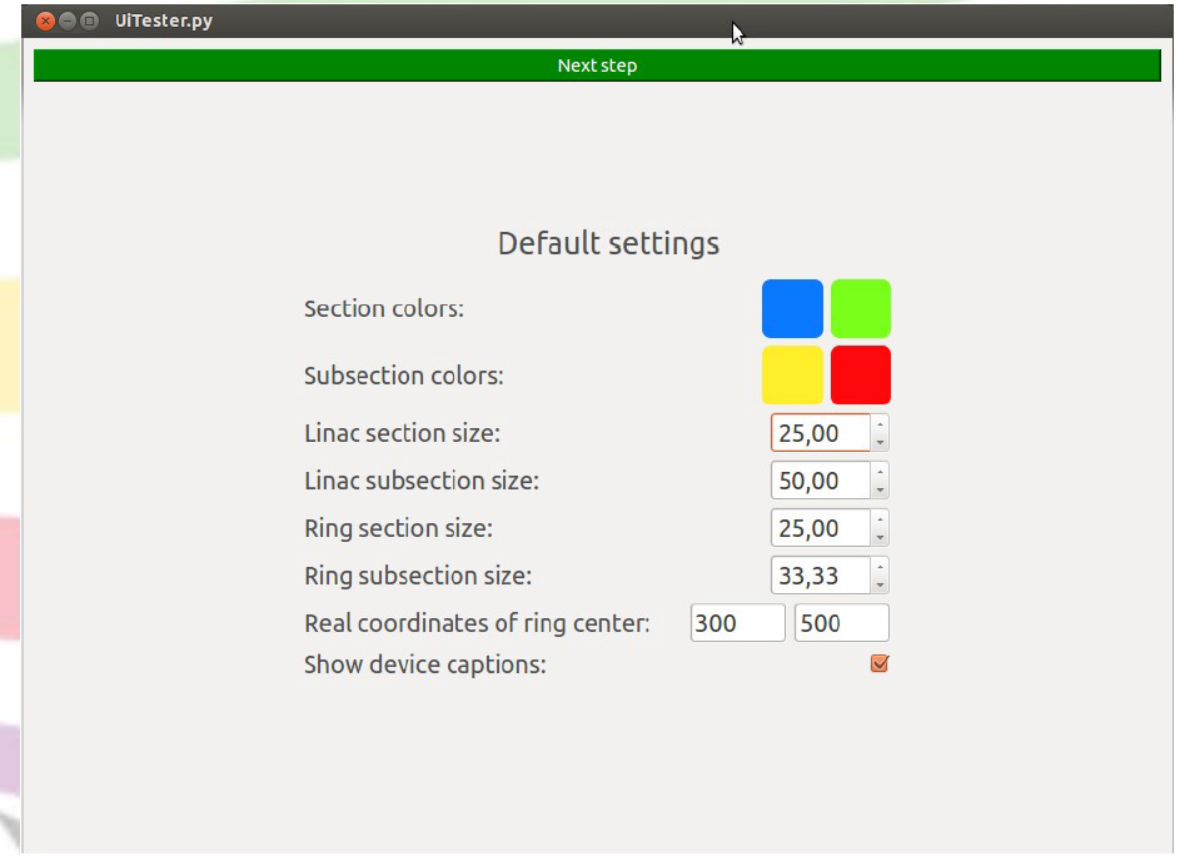
- SVG panel with layers.
- Generated view based on the content of the database.
- Division of devices:
  - according to the Tango family,
  - based on the groups from the GSP configuration.



GSP – Main

Synoptic Panel - customisation.

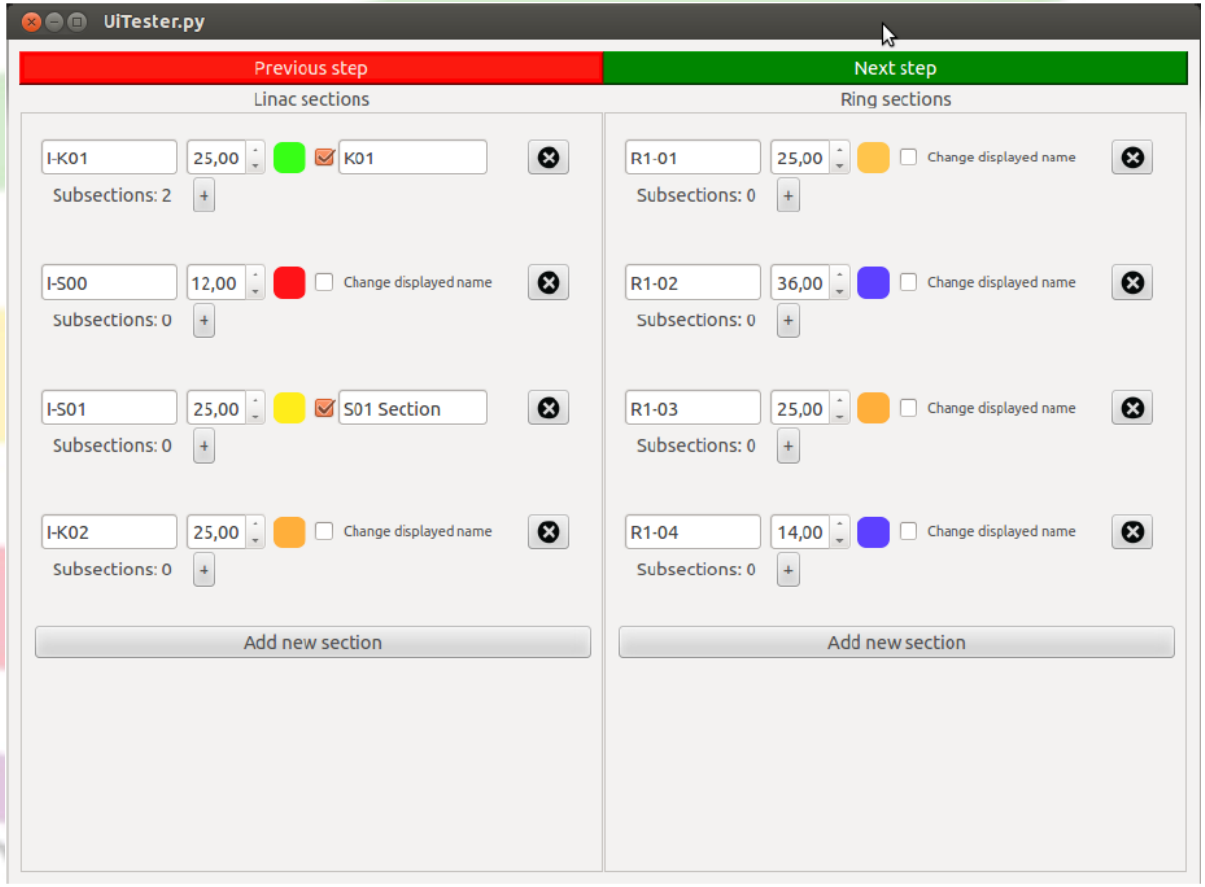
- Sections & subsections colours.
- Sizes (in percent).
- Toggle the device captions (a label always appear when hovering the mouse over an icon).



GSP – Main

Synoptic Panel - customisation.

- Sections & subsections definition.
- Size change (in percent).
- The section names will be used to look up the devices in the database.



Prospects

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- Reworking the Settings.
- New implementation of the Main Window & integration with the Settings.

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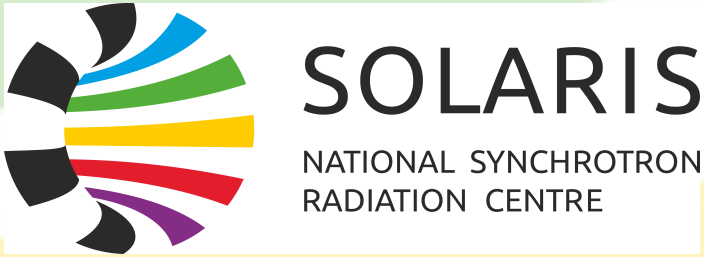
Long term:

- Introduction to the whole Tango Community.
- Integration with the Control Program.

Thank you, Tango dancers!
Questions? Suggestions?