

What is the general overview of the project?

- There are many ocean sensors that collect all sorts of raw data such as temperature with time stamps and for moving sensors gps location?
- Video data has annotations.
- The data is collected to several DB's (more than 10)

What are the main problems?

- Visualizing data requires knowing which DB it is stored in.
- The general public (non-technical people) does not have access to Daintree data.

Constraints

- People should not be allowed to download raw data, read only by choosing visualizations.
- Should work on desktop.

In Scope

- Should be able to add new database/instruments.

Out of scope

- Allowing user access to raw data.
- Allowing complex custom user visualizations that aggregate over multiple data sets. Ocean temp AND Ocean salinity over time.
- Interface working on mobile, tablet.

How is the data stored?

- Stream of data with timestamps (2x table)
- Video files (in the database?)
- Real-time data streaming.

How is the data given to users?

- Big HTML dump (but this was never mentioned again?)

How do the current users request data (Full access?)?

- Dev API
- Create widgets for the data clients want, A lot of effort is required for creating the widget to access the data (**Probably want to ask more questions about the widgets**)
- Deploy widget to the Daintree system

More on the widgets:

- Each widget is unique to users, and the information it collects
- Some people make their own widgets, Daintree also makes some widgets for users on a case per case basis

How do users currently access the system? (ie, through an API, remote access to a machine, is the DB port open to the public? Etc)

- TBD

How much data is there?

- Approx 500TB?
- Data is always increasing (constant stream from each sensor)
- Data growth rate increases as sensors are added

Who are the users of the system?

- Free users (general public, kids for school projects, public displays in aquariums/museums etc)
 - Limited access to data (Limited sensors, data goes back limited time)
- Premium users (Scientists, academic research etc)
 - Full access to data but no download
 - Pay to view. (subscription?)
- Administrators (People at Daintree)
 - People modifying which data is free and which is premium

How do you want to visualize the data?

- Variables: Time, location, individual sensors.
- General case is graphs of things like temperature against time
- Want to be able to search and filter by temperature ranges, time ranges, location etc
- Possibly want to compare multiple graphs side by side
- Possibly want to visualize multiple data sets on top of one another (ie temperature and acidity over time on the same graph)