ISPyB status report,
Proposal for an SSX data model for ispyb

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ISPyB status report

- Running the “old” backend and frontend ispyb (version 5.25).
- EXI is available at exi.embl-hamburg.de.
- Synchweb for testing is internally available at synchweb.embl-hamburg.de

- Focus on developing py-ispyb and data model for serial crystallography.

Microservices and py-ispyb

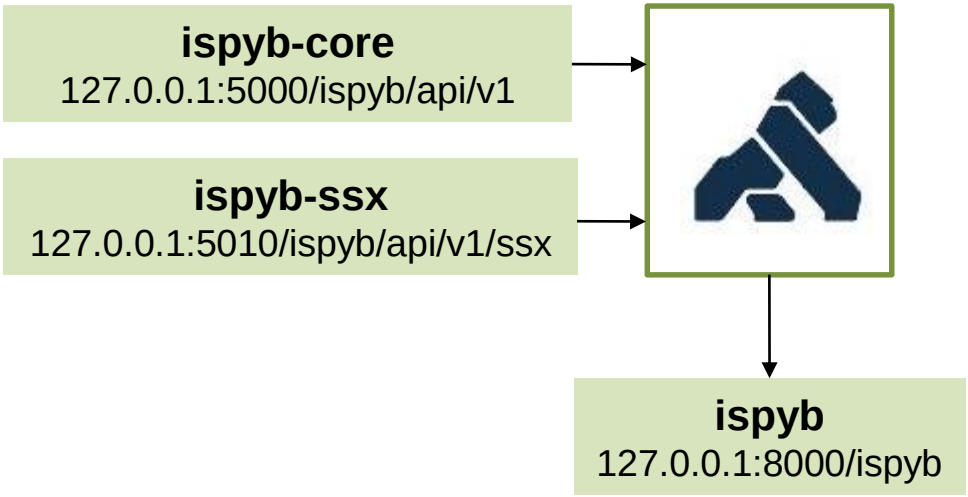
Nuclear bomb strategy

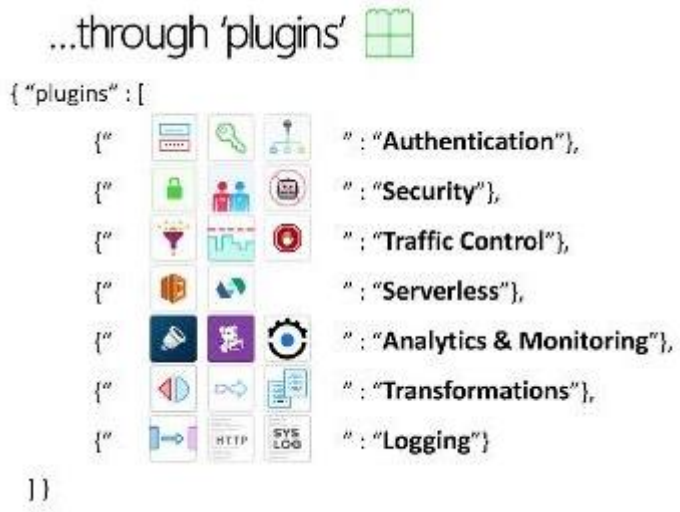
Ice cream scoop strategy

Lego strategy

Microservices and py-ispyb

- py-ispyb is designed to run as a microservice(s).
- Not the code, but the configuration defines the microservice. Code is reusable.
- Service connector allows to communicate between microservices.
- Kong api gateway joins the microservices and provides a single endpoint.
- Script to configure, run, stop and etc is available in the scripts directory.

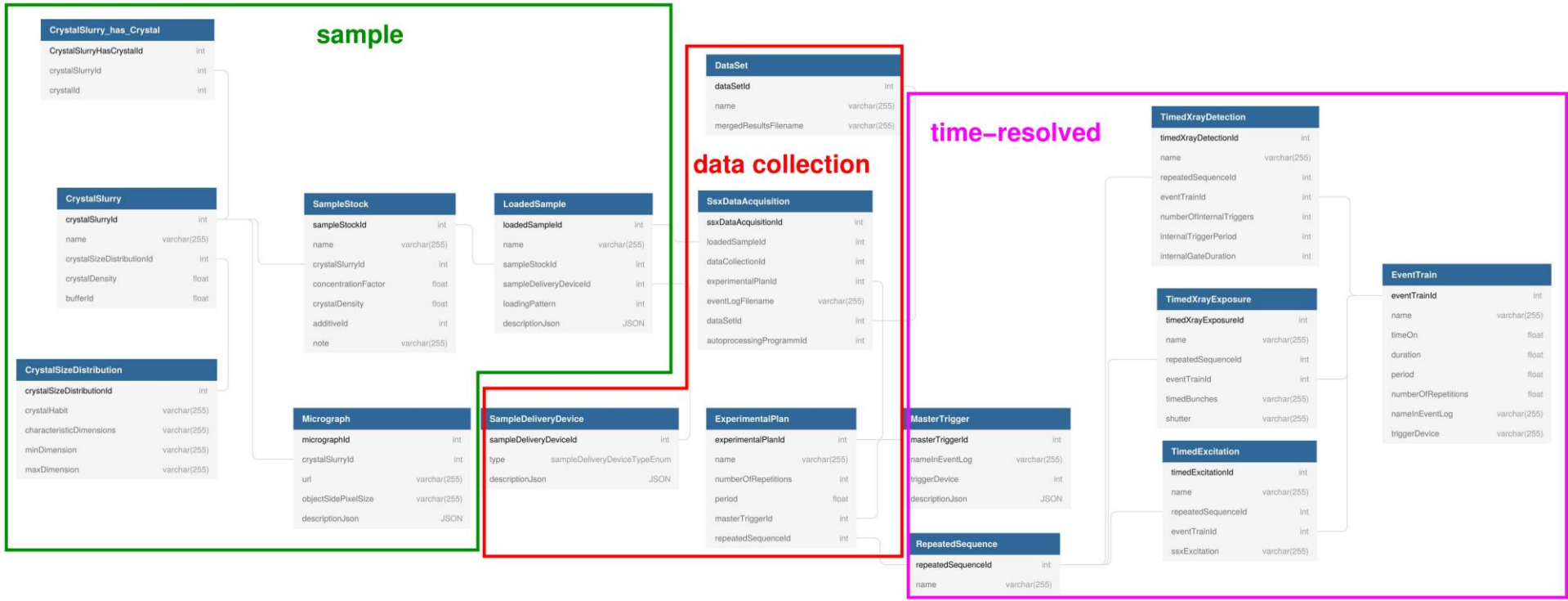




Classic vs. (time-resolved) serial crystallography

	classic MX	**TR-SSX**
shipment	*n* SPINE pins	crystal slurry
sample	1 SPINE pin on goniometer	thousands of crystals, prepared at beamline, various delivery devices
excitation		laser(s), droplet(s),...
collected data	3600 frames at 0.1°/s	complex timing patterns
processed data	1 dataset	*n* datasets, typically need merging

Proposal for an SSX data model for ispyb



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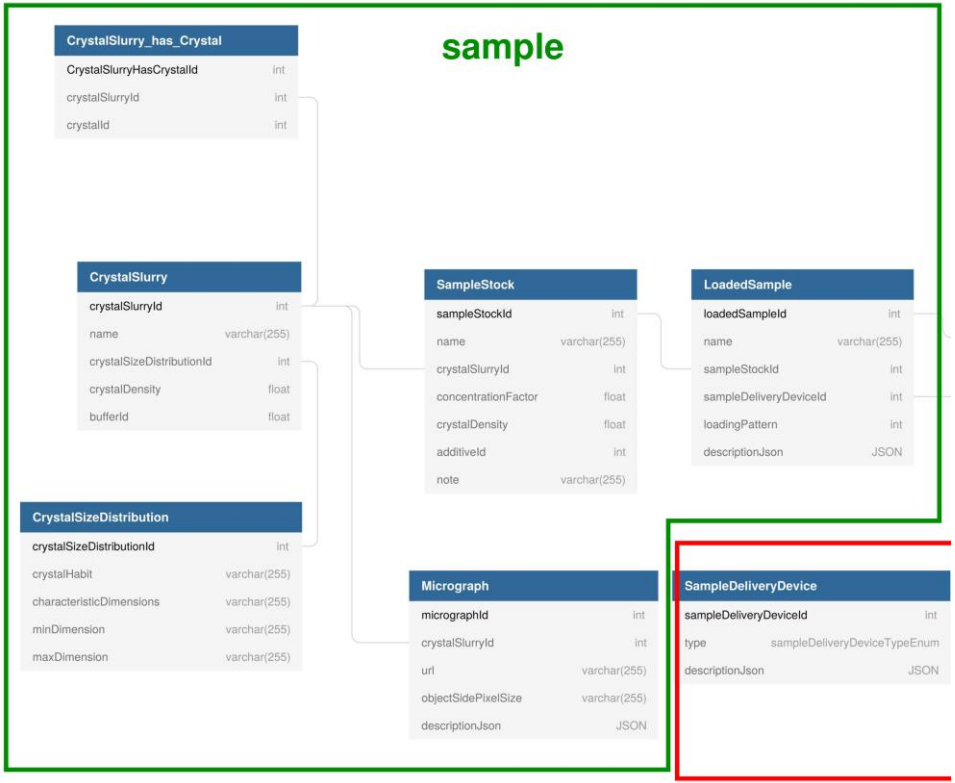
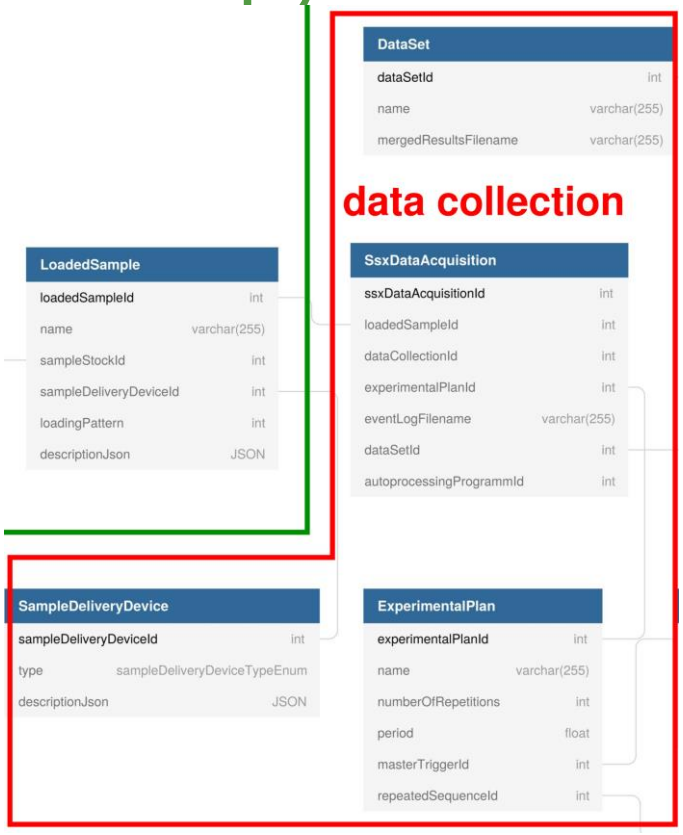
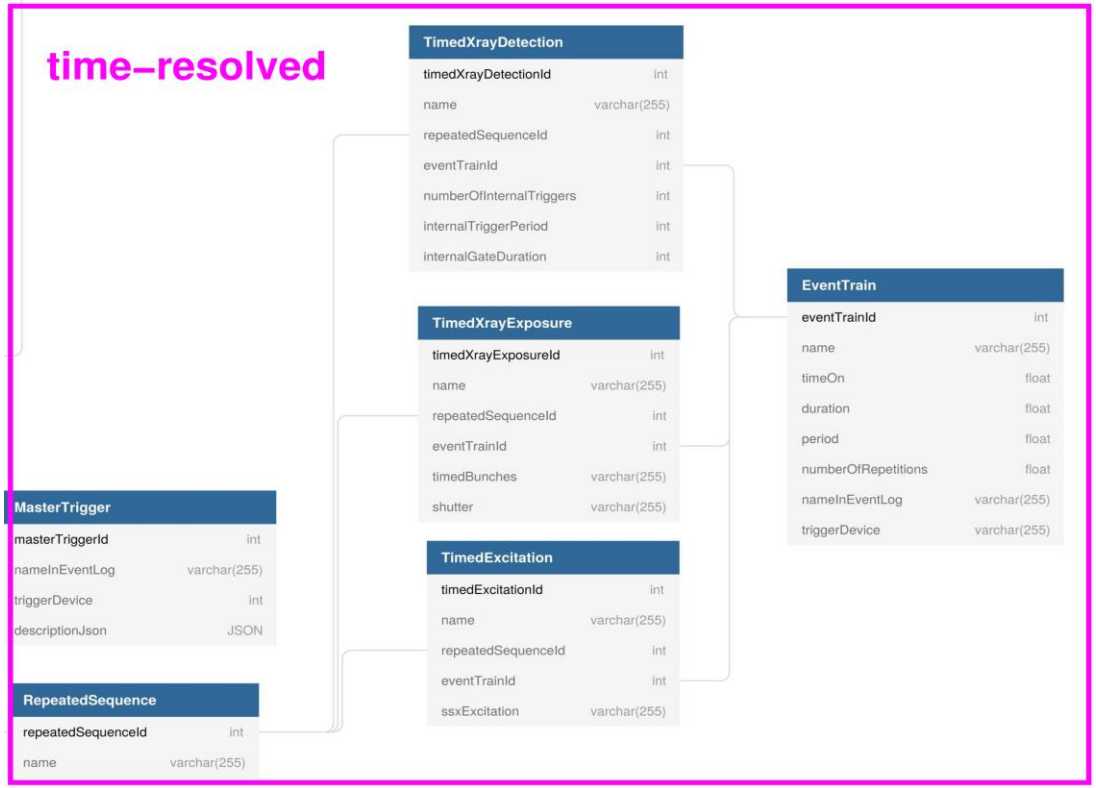
SSX data model for ispyb: samples

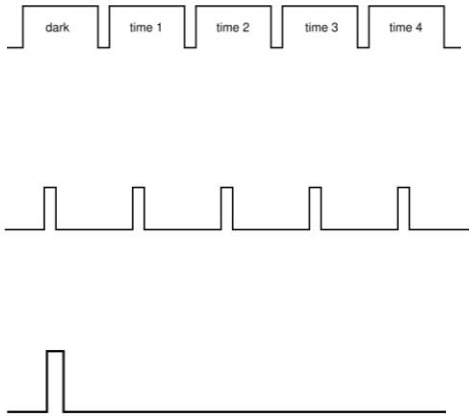


SSX data model for ispyb: data collection



SSX data model for ispyb: time-resolved aspects





Thank you for your attention