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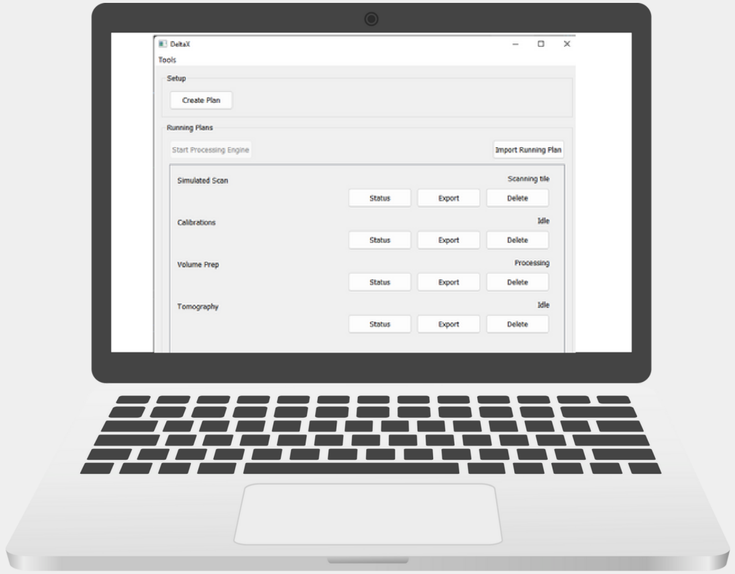
DeltaX

Modular Machine Learning Framework



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Founder & CEO

12 February 2023

Alexandria, Virginia

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Executive Summary

01 DeltaX is an open and modular software framework that provides an easy-to-use configurable pipeline for processing terabytes of data for AI test and training, as used in the X-ray image processing application shown in the following

02 Pipeline modules run concurrently (in parallel) and can easily be swapped out for other similar modules, so different processing algorithms or external tools can be used, compared, and deployed

03 Supports integration of different tools to avoid vendor lock-in

04 Check point and restart capabilities to avoid losing progress in case of hardware failures, power outages, etc

05 Full traceability of the processing chain for tracking, evaluation, and archival of results

06 GUI defined as module, allowing easy swapping of the front-end for different hardware systems and use cases

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Positioning

Current ML/AI batching systems are... annoying.

Whether it is failed runs/connections without restart capability or traceability, or a lack of model comparisons with parameter adjustment built-in, current batching systems do not fulfill current needs.

DeltaX is... better

DeltaX not only allows complete traceability and transparency, but has the ability to plug in the algorithms you need - or even whole systems. In short, DeltaX provides a much more modern and modular system for AI/ML analysis at scale.

From Imagination to Evaluation

DeltaX provides support for your data needs from model inception to test and evaluation. Batch processing with tracing, break protection, and parameter adjustments meet your needs not just for development, but through production release.

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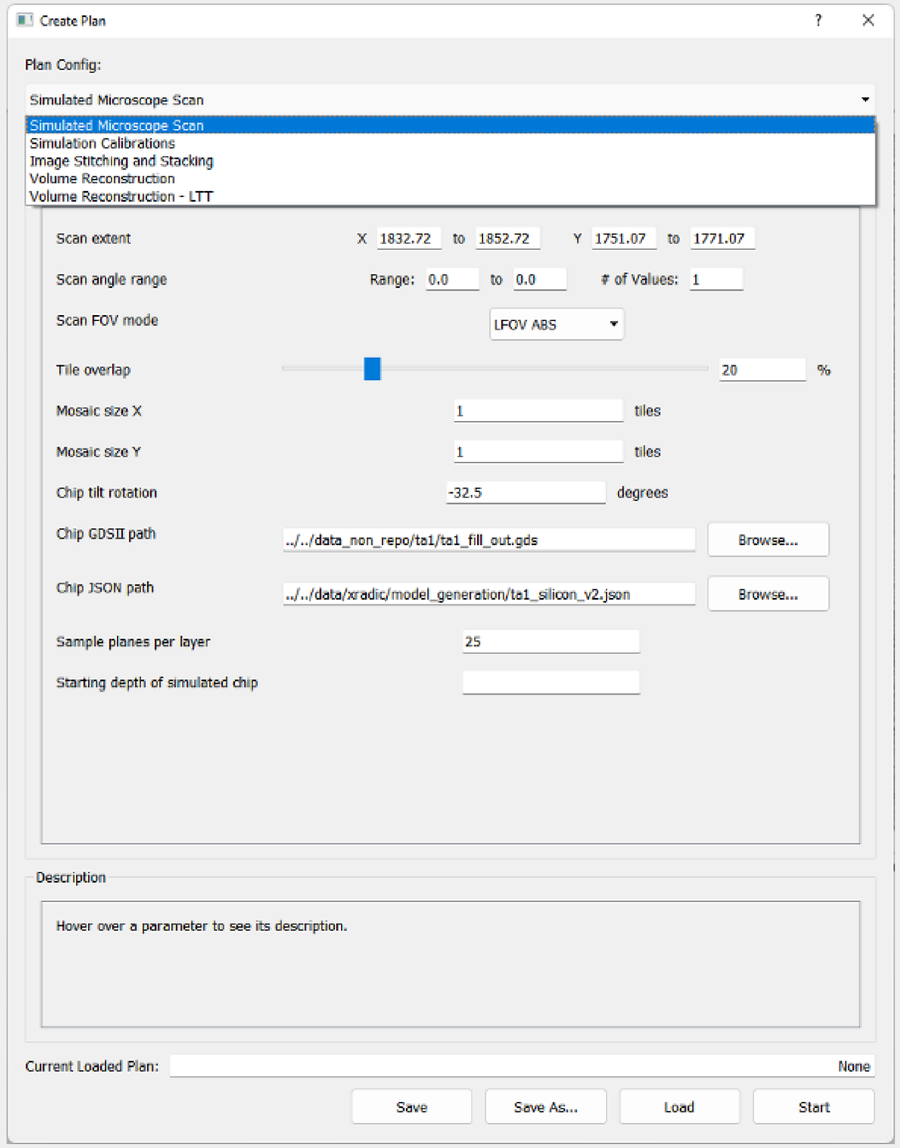
Easy Plan Configuration

Choose parameters for configuration and saving out models easily



01 Select the plan type to configure

02 Parameters for configuration; these change based on the plan type selected

03 Shows description and valid values for a parameter when the mouse hovers over it

04 If a plan configuration was loaded in (as opposed to being a new one), the file path appears here

05 Saves the plan configuration to a file for running it later

06 Load a plan configuration to edit or start it

07 Starts the plan configuration and closes the dialog box, returning to the main window

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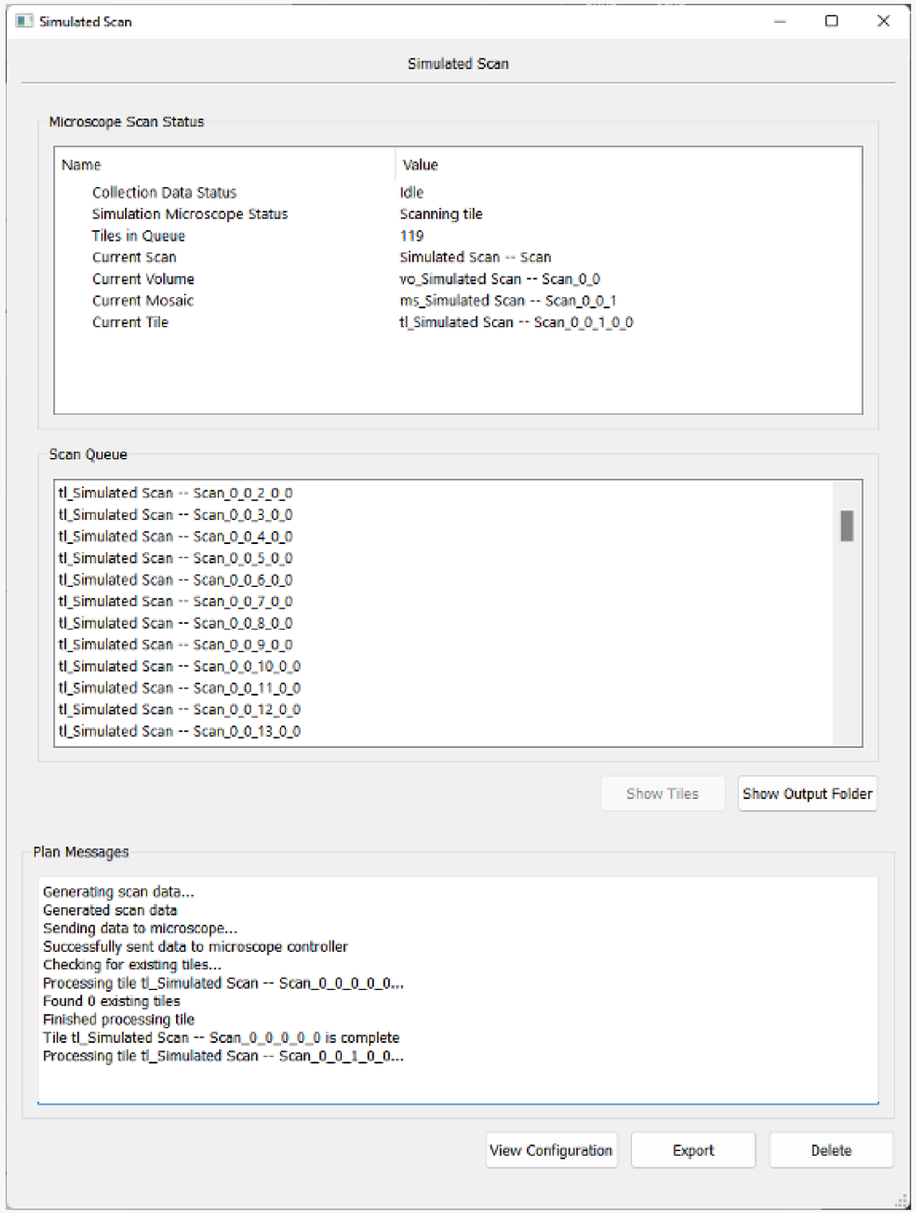
Plan Status Updates

View plan status, logs, and settings from a single panel



01

02

03

04

05

01 Status of plan values

02 Queue of items (e.g. images) needing to be processed

03 Opens the folder where output data is stored for this plan

04 Plan log messages

05 View configuration settings that were used for this plan

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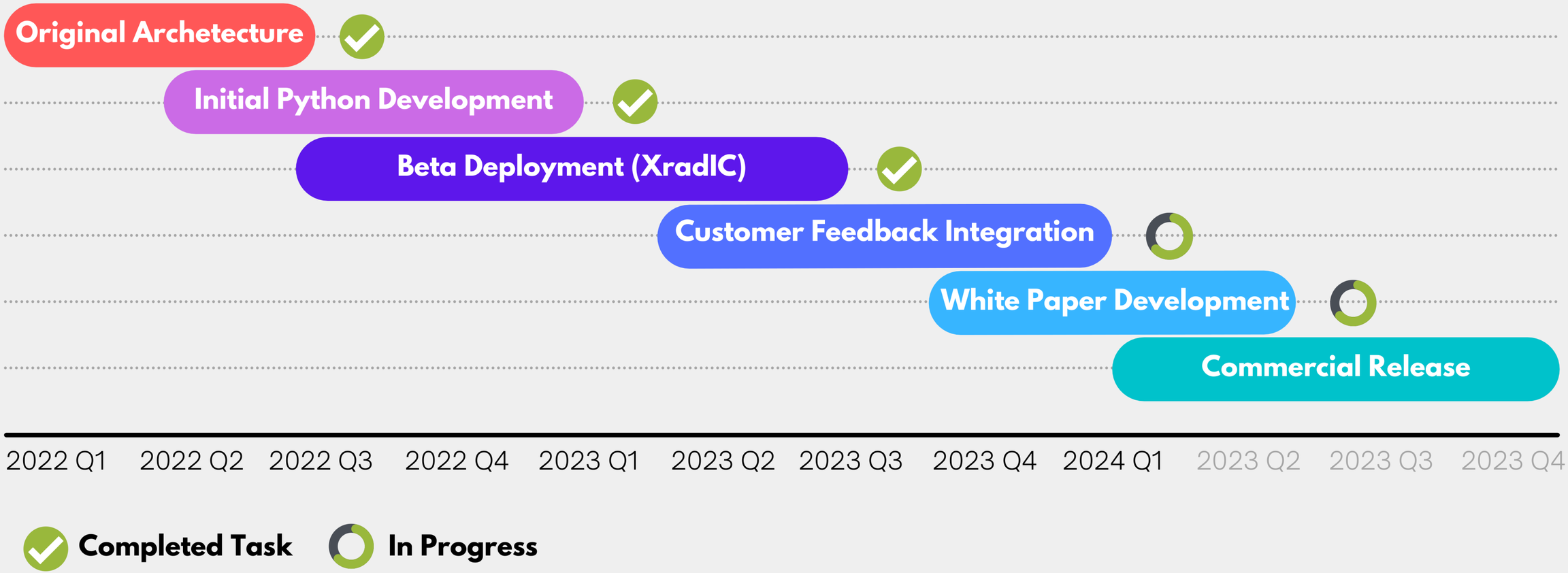
DeltaX Product Path



Completed Task In Progress

Subject to Change

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Contact us to learn more

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