

Deep Learning Workbench



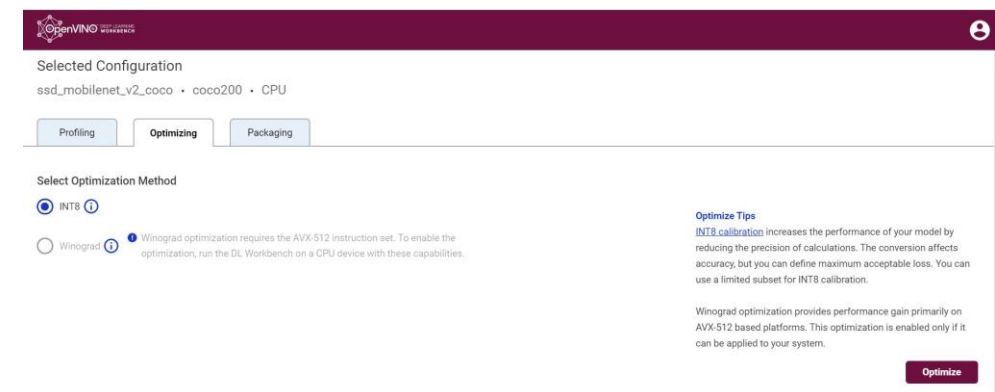
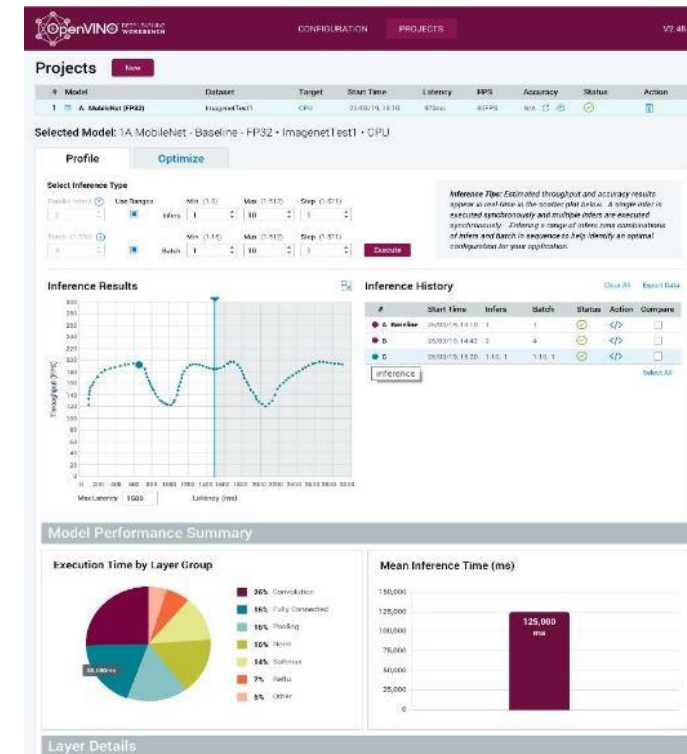
Deep Learning Workbench



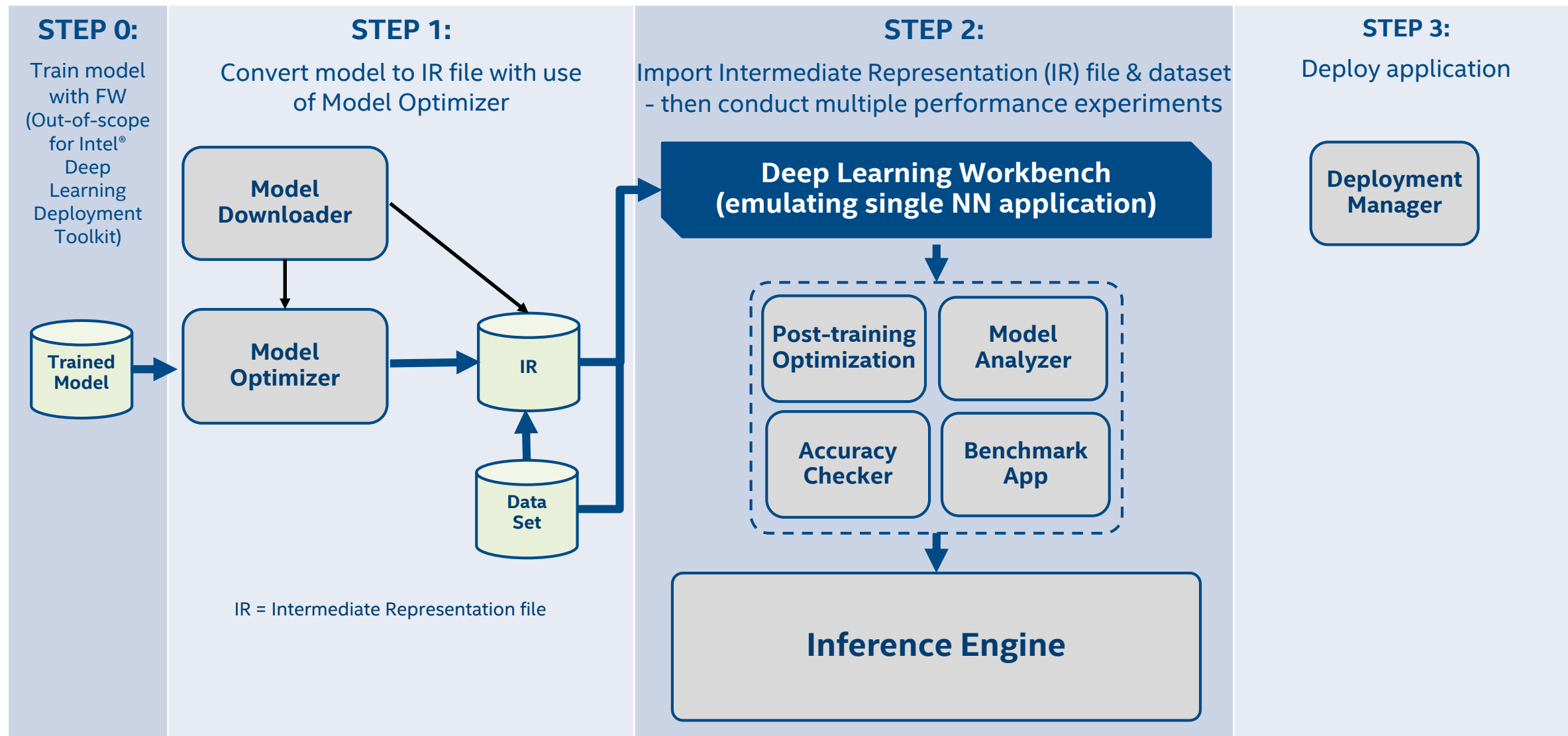
- Web-based, UI extension tool of the Intel® Distribution of OpenVINO™ toolkit
- Visualizes performance data for topologies and layers to aid in model analysis
- Automates analysis for optimal performance configuration (streams, batches, latency)
- Experiment with INT8 or Winograd calibration for optimal tuning using the Post Training Optimization Tool
- Provide accuracy information through accuracy checker
- Direct access to models from public set of Open Model Zoo
- Enables remote profiling, allowing the collection of performance data from multiple different machines without any additional set-up.

Development Guide ►

https://docs.openvino toolkit.org/latest/docs/Workbench_DG_Introduction.html



Deep Learning Workbench Data Flow



Work with Models and Sample Datasets

Active Configurations

Create

i No data available. Create a configuration by importing a model and a dataset to profile with.

#Model

Create Configuration

i Select a model, dataset, and environment. Then click Create to perform an inference.

Configuration Details

X Model: Selection required

X Target: Selection required

X Environment: Selection required

X Dataset: Selection required

Model ^ Import

Configuration Tips

Environment depends on the model you select. Different targets support different model precisions.

Model Name	Date ↓	Usage	Precisions	Size	Status	Actions
i To continue working, import a model.						

DEEP LEARNING WORKBENCH : FEATURES

- Convert model to Int8 using 2 new calibration algorithms
- Import dataset in COCO format to use with model
- Improved per-layer data visualization and comparison mode

Select optimization method:

☐ Optimization method: Default
Uncontrollable minor drop of model accuracy
Significant increase of model speed

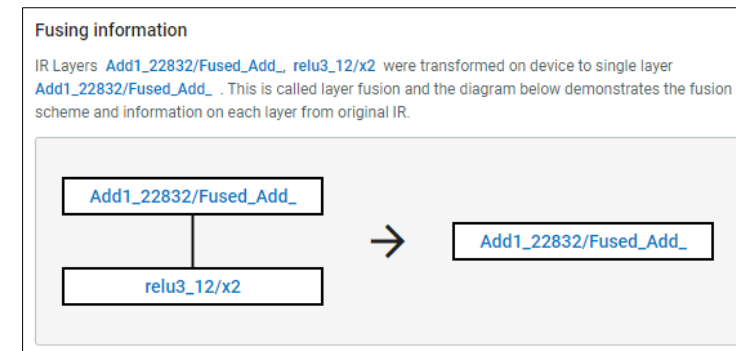
☒ **Optimization method: AccuracyAware**
Optimization method: AccuracyAware
Controllable drop of model accuracy
Increase of model speed

Max Accuracy Drop: %

Import a Dataset formatted in the [ImageNet](#), [VOC](#) or [COCO](#) formats (tar.gz or .zip file). ?

Dataset File:

Dataset Name:



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Remote profiling support

Add Remote Target

Hostname: ⓘ

Port: ⓘ

Target Name: ⓘ

User: ⓘ

SSH Key: ⓘ

Use Proxy: ⓘ ☐

Support for Segmentation use cases

Configure Accuracy

instance_coco • coco200 • Local Workstation • CPU
Model Framework: OpenVINO IR

Usage: ⓘ

Default values are configured here for checking accuracy

Adapter Configuration:	Preprocessing Configuration:	Metric Configuration:	Annotation C
Input Info Layer: ⓘ <input type="text" value="image_info"/>	Resize Type: ⓘ <input type="text" value="Auto"/>	Metric: ⓘ <input type="text" value="COCO DRIO SEGM ..."/>	Separate Bac
Output Layers	<input type="checkbox"/> Use Normalization	Thresholds	
Masks: ⓘ <input type="text" value="masks"/>		Start: ⓘ <input type="text" value="0.5"/>	
Detection: ⓘ <input type="text" value="reshape_do_2d"/>		Step: ⓘ <input type="text" value="0.05"/>	
		End: ⓘ <input type="text" value="0.95"/>	