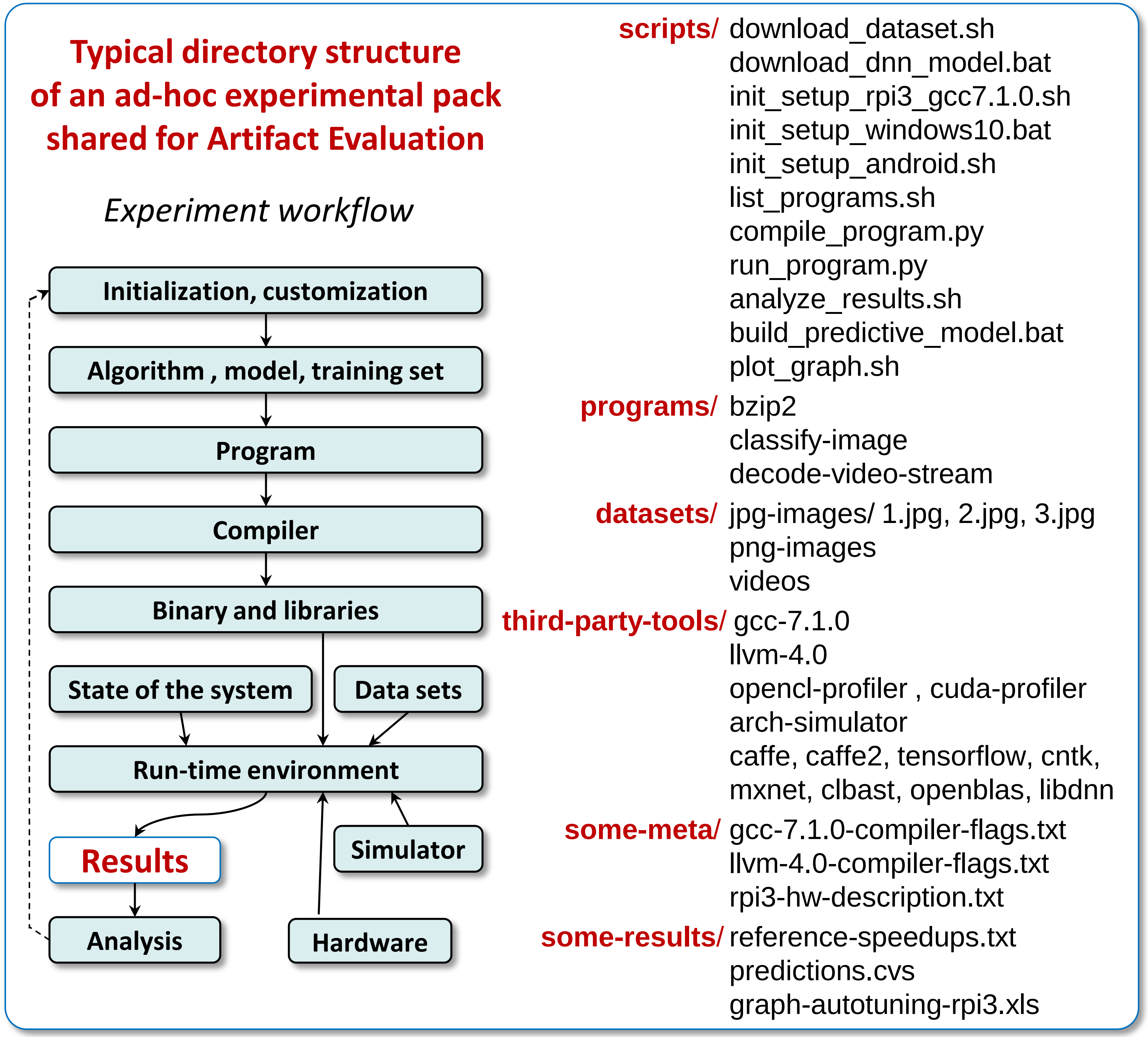
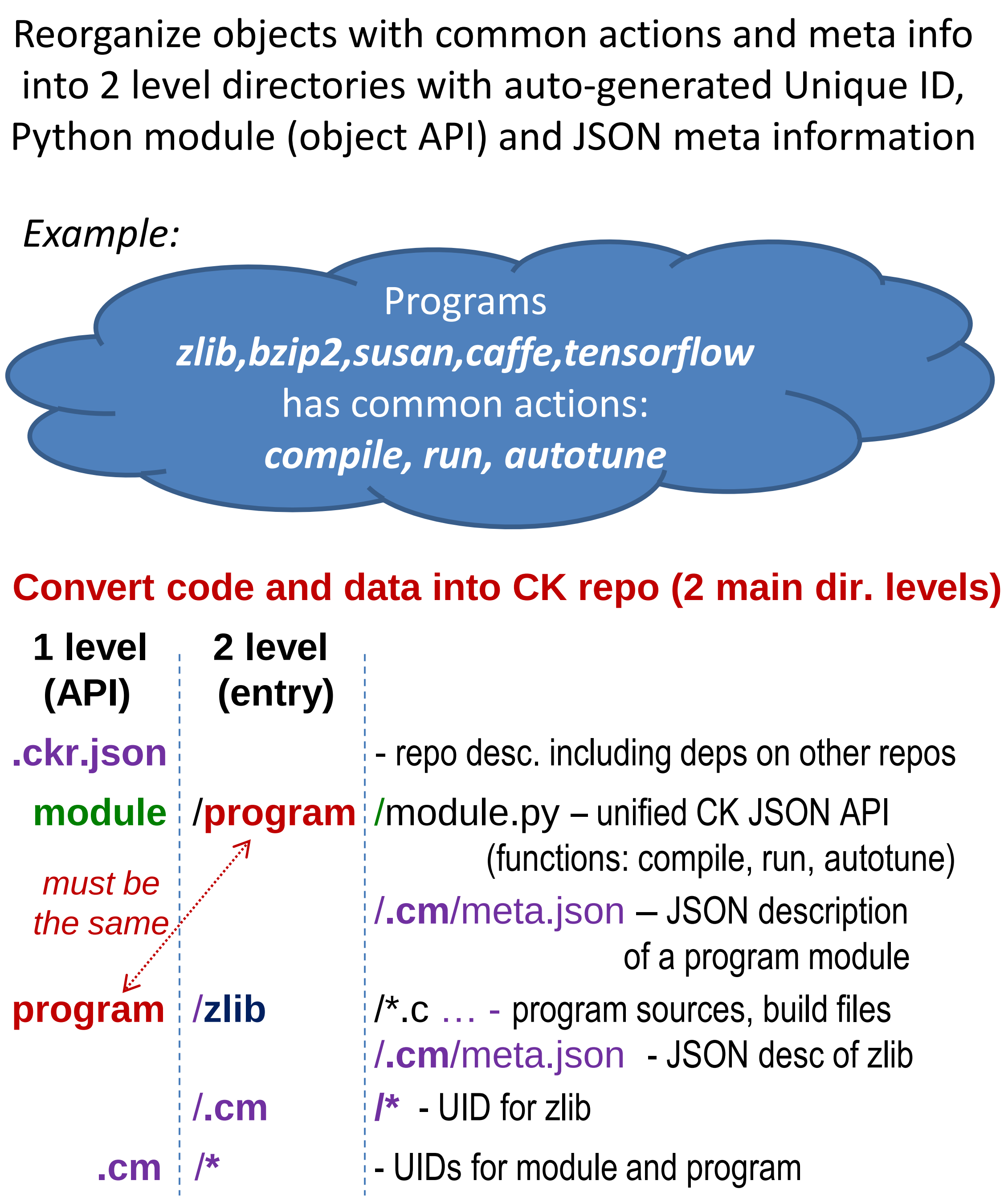

Typical directory structure
of an ad-hoc experimental pack
shared for Artifact Evaluation
Experiment workflow
Initialization, customization
Algorithm , model, training set
Program
Compiler
Binary and libraries
State of the system
Data sets
Run-time environment
Results
Simulator
Analysis
Hardware

scripts/	download_dataset.sh download_dnn_model.bat init_setup_rpi3_gcc7.1.0.sh init_setup_windows10.bat init_setup_android.sh list_programs.sh compile_program.py run_program.py analyze_results.sh build_predictive_model.bat plot_graph.sh
programs/	bzip2 classify-image decode-video-stream
datasets/	jpg-images/ 1.jpg, 2.jpg, 3.jpg png-images videos
third-party-tools/	gcc-7.1.0 llvm-4.0 opencl-profiler , cuda-profiler arch-simulator caffe, caffe2, tensorflow, cntk, mxnet, clbast, openblas, libdnn
some-meta/	gcc-7.1.0-compiler-flags.txt llvm-4.0-compiler-flags.txt rpi3-hw-description.txt
some-results/	reference-speedups.txt predictions.cvs graph-autotuning-rpi3.xls

(a)



Reorganize objects with common actions and meta info into 2 level directories with auto-generated Unique ID, Python module (object API) and JSON meta information

Example:

Convert code and data into CK repo (2 main dir. levels)

1 level (API)	2 level (entry)	
.ckr.json		- repo desc. including deps on other repos
module	/program	/module.py – unified CK JSON API (functions: compile, run, autotune)
		/.cm/meta.json – JSON description of a program module
program	/zlib	/*.c … - program sources, build files
		/.cm/meta.json - JSON desc of zlib
	/.cm	/* - UID for zlib
.cm	/*	- UIDs for module and program

(b)