
Example: Using a Per-Instance Hyperparameter Schedule by Population Based Bandits (Parker-Holder et al., 2020)

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Method. For this example, we use the Population-Based Bandits (PB2) method to find a hyperparameter schedule for each environment separately. Ideally this will be much easier for PB2 than to switch to another environment during a run. PB2 maintains a population of agents (in our example 8) which are tuned during a single run. After every environment step, PB2's internal model perturbs the hyperparameter settings of the agents in order to find a dynamic schedule.

Limitations. Our configuration space is comparatively large for the number of agents feasible on our computing budget. Additionally, we have to run PB2 for each instances separately, making this less feasible in a practical setting than a single PB2 run on all environments.

Reproducibility. We provide the code and command to reproduce the model in `README.md`.