Example: Using a 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 and submit the best found one. 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. As we want to cover all environments, we repeat this process for five episodes.

Limitations. PB2 has not been tested across multiple environments before, so it is an open questions whether the method generalizes. Furthermore, our configuration space is comparatively large for the number of agents feasible on our computing budget.

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

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