

# **CUOPT RELEASE NOTES**

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Release Notes 22.12



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# 1.0 BREAKING CHANGES

► The add\_cost\_matrix endpoint in the microserver is changed to set\_cost\_matrix.

## 2.0 BUG FIXES

- ▶ The cloud scripts are reverted to use Ansible 6.0.0 in the cloud-native-stack installation to work-around the CNS install failure in Ansible 7.0.0.
- ▶ A bug is fixed in the update\_task\_location endpoint's validation on the microserver side.

### 3.0 NEW FEATURES

- ▶ Vehicle-dependent service times.
- ▶ Provision for limiting the amount of time a vehicle can work, including its travel time. This is analogous to maximum cost per vehicle.
- ▶ Enhanced objective functions minimize variance of route sizes and route service times.
- ▶ Task IDs for identifying tasks on the microserver.

### 4.0 IMPROVEMENTS

- ▶ Allow infeasible solutions in local search and make them feasible through enhanced heuristics.
- ▶ Cycle finder ported to the GPU.
- ► Enhance validation for checking conflicts between break time windows and vehicle time windows.
- ▶ Improved heuristics for PDP use cases.
- ▶ New version check applied to cuOpt microserver.
- ▶ New tests for validating the cloud scripts.
- ▶ New microserver performance tests.

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