

# Elastic Agent

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 4)**

Unknown directive type "automodule".

```
.. automodule:: torch.distributed.elastic.agent
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 5)**

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.distributed.elastic.agent
```

## Server

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 10)**

Unknown directive type "automodule".

```
.. automodule:: torch.distributed.elastic.agent.server
```

Below is a diagram of an agent that manages a local group of workers.



## Concepts

This section describes the high-level classes and concepts that are relevant to understanding the role of the `agent` in `torchelastic`.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 22)**

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.distributed.elastic.agent.server
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 24)**

Unknown directive type "autoclass".

```
.. autoclass:: ElasticAgent
   :members:
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 27)**

Unknown directive type "autoclass".

```
.. autoclass:: WorkerSpec
   :members:
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 30)**

Unknown directive type "autoclass".

```
.. autoclass:: WorkerState
   :members:
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 33)**

Unknown directive type "autoclass".

```
.. autoclass:: Worker
   :members:
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 36)**

Unknown directive type "autoclass".

```
.. autoclass:: WorkerGroup
   :members:
```

## Implementations

Below are the agent implementations provided by torchelastic.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 44)**

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.distributed.elastic.agent.server.local_elastic_agent
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 45)**

Unknown directive type "autoclass".

```
.. autoclass:: LocalElasticAgent
```

## Extending the Agent

To extend the agent you can implement `ElasticAgent` directly, however we recommend you extend `SimpleElasticAgent` instead, which provides most of the scaffolding and leaves you with a few specific abstract methods to implement.

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 56)**

Unknown directive type "currentmodule".

```
.. currentmodule:: torch.distributed.elastic.agent.server
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 57)**

Unknown directive type "autoclass".

```
.. autoclass:: SimpleElasticAgent
   :members:
   :private-members:
```

**System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\pytorch-master\docs\source\elastic\pytorch-master) (docs) (source) (elastic) agent.rst, line 61)**

Unknown directive type "autoclass".

```
.. autoclass:: torch.distributed.elastic.agent.server.api.RunResult
```