



## **Class AsyncPingRxOp**

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- Defined in [File async\\_ping\\_rx.hpp](#)

## Inheritance Relationships

### Base Type

- `public holoscan::Operator` ([Class Operator](#))

## Class Documentation

class AsyncPingRxOp : public holoscan::[Operator](#)

Simple asynchronous receiver operator.

**==Named Inputs==**

- **in** : any
  - A received value.

**==Parameters==**

- **delay**: Ping delay in ms. Optional (default: `10L`)
- **async\_condition**: [AsynchronousCondition](#) adding async support to the operator. Optional (default: `nullptr`)

Public Functions

`HOLOSCAN_OPERATOR_FORWARD_ARGS (AsyncPingRxOp)`  
`AsyncPingRxOp()=default`

`virtual void setup(OperatorSpec &spec) override`

Define the operator specification.

Parameters

**spec** – The reference to the operator specification.

```
virtual void initialize() override
```

Initialize the operator.

This function is called when the fragment is initialized by [Executor::initialize\\_fragment\(\)](#).

```
virtual void start() override
```

Implement the startup logic of the operator.

This method is called multiple times over the lifecycle of the operator according to the order defined in the lifecycle, and used for heavy initialization tasks such as allocating memory resources.

```
virtual void compute(InputContext&, OutputContext &op\_output,  
ExecutionContext&) override
```

Implement the compute method.

This method is called by the runtime multiple times. The runtime calls this method until the operator is stopped.

Parameters

- **op\_input** – The input context of the operator.
- **op\_output** – The output context of the operator.
- **context** – The execution context of the operator.

```
virtual void stop() override
```

Implement the shutdown logic of the operator.

This method is called multiple times over the lifecycle of the operator according to the order defined in the lifecycle, and used for heavy deinitialization tasks such as deallocation of all resources previously assigned in start.

```
void async_ping()
```