

Writing a simple publisher & Subscriber (C++)

roscpp { ROS Client Library C++ }

```
# class MinimalPublisher : public roscpp::Node
```

↙ Creates the node class
MinimalPublisher.

Public:

```
MinimalPublisher()
```

```
: Node("minimal_publisher"), count(0)
```

```
{
```

```
    Publisher_ = this->create_publisher<std_msgs::msg::String>("topic", 10);
```

```
    timer_ = this->create_wall_timer(500ms, std::bind(&MinimalPublisher::timer_callback, this));
```

Private:

```
void timer_callback()
```

```
{ ... }
```

```
roscpp::TimerBase::SharedPtr timer_;
```

```
roscpp::Publisher<std_msgs::msg::String>::SharedPtr publisher_;
```

```
...
```

```
int main(int argc, char *argv[])
```

```
{
```

```
    roscpp::init(argc, argv);
```

```
    roscpp::spin(std::make_shared<MinimalPublisher>());
```

```
    roscpp::shutdown();
```

```
    return 0;
```

```
}
```