

ROS 2 Humble CLI Cheat Sheet

ROS 2 Environment Setup

```
source /opt/ros/humble/setup.bash
```

Package Management

```
ros2 pkg list
```

```
ros2 pkg prefix <package_name>
```

```
ros2 pkg executables <package_name>
```

```
ros2 run <package> <executable>
```

Topic Commands

```
ros2 topic list
```

```
ros2 topic echo <topic>
```

```
ros2 topic info <topic>
```

```
ros2 topic type <topic>
```

```
ros2 topic pub <topic> <type> '{data: ...}'
```

```
ros2 topic hz <topic>
```

```
ros2 topic bw <topic>
```

Service Commands

```
ros2 service list
```

```
ros2 service type <service>
```

```
ros2 service call <service> <type> '{args}'
```

```
ros2 service find <type>
```

Action Commands

```
ros2 action list
```

```
ros2 action info <action>
```

```
ros2 action send_goal <action> <type> '{goal_data}'
```

Node Management

```
ros2 node list
```

```
ros2 node info <node_name>
```

```
ros2 node ping <node_name>
```

Parameter Commands

```
ros2 param list
```

ros2 param list -n <node_name>

ros2 param get <node> <param>

ros2 param set <node> <param> <value>

ros2 param describe <node> <param>

ros2 param dump <node> > params.yaml

ros2 param load <node> params.yaml

Launch System

ros2 launch <package> <file.launch.py>

Introspection / Debugging

ros2 interface show <type>

ros2 interface list

ros2 interface proto <type>

Build & Workspace

colcon build

colcon build --packages-select <pkg>

source install/setup.bash

Filesystem

ros2 pkg create --build-type ament_cmake <pkg_name>

ros2 pkg create --build-type ament_python <pkg_name>

Utilities

ros2 daemon start

ros2 daemon stop

ros2 daemon status