

Updating your Klipper config for Tap

There are a few changes you'll need to make in order to get Tap working properly.

1. Update your Z endstop

Under the `[stepper_z]` block, you'll want to comment out your `position_endstop` and change your `endstop_pin` so that it uses the virtual Z endstop for Tap.

```
endstop_pin: probe:z_virtual_endstop
```

2. Update your Z homing position

If you use `[safe_z_home]`, change the location to the center of the bed. If you have a `[homing_override]` make sure that it moves the toolhead to the center of the bed before calling G28 Z.

3. Update your probe's offsets

Remember, with Tap, your nozzle IS the probe, so your `[probe]` `x_offset` and `[probe]` `y_offset` values should be 0 now. You'll need to manually calibrate the probe's Z offset by using

```
PROBE_CALIBRATE.
```

4. Add Tap's `activate_gcode`:

This G-code will allow you to probe cold, but will also prevent you from probing with a nozzle at printing temperature (to try to preserve your build surface). This goes in the `[probe]` section of your config.

```
activate_gcode:
    {% set PROBE_TEMP = 150 %}
    {% set MAX_TEMP = PROBE_TEMP + 5 %}
    {% set ACTUAL_TEMP = printer.extruder.temperature %}
    {% set TARGET_TEMP = printer.extruder.target %}

    {% if TARGET_TEMP > PROBE_TEMP %}
        { action_respond_info('Extruder temperature target of %.1fC is too
high, lowering to %.1fC' % (TARGET_TEMP, PROBE_TEMP)) }
        M109 S{ PROBE_TEMP }
    {% else %}
        # Temperature target is already low enough, but nozzle may still
be too hot.
        {% if ACTUAL_TEMP > MAX_TEMP %}
            { action_respond_info('Extruder temperature %.1fC is still too
high, waiting until below %.1fC' % (ACTUAL_TEMP, MAX_TEMP)) }
            TEMPERATURE_WAIT SENSOR=extruder MAXIMUM={ MAX_TEMP }
```

```
{% endif %}  
{% endif %}
```