

Submitting Devicetree (DT) binding patches

I. For patch submitters

0. Normal patch submission rules from Documentation/process/submitting-patches.rst applies.
1. The Documentation/ and include/dt-bindings/ portion of the patch should be a separate patch. The preferred subject prefix for binding patches is:

```
"dt-bindings: <binding dir>: ..."
```

The 80 characters of the subject are precious. It is recommended to not use "Documentation" or "doc" because that is implied. All bindings are docs. Repeating "binding" again should also be avoided.

2. DT binding files are written in DT schema format using json-schema vocabulary and YAML file format. The DT binding files must pass validation by running:

```
make dt_binding_check
```

See Documentation/devicetree/bindings/writing-schema.rst for more details about schema and tools setup.

3. DT binding files should be dual licensed. The preferred license tag is (GPL-2.0-only OR BSD-2-Clause).
4. Submit the entire series to the devicetree mailinglist at

devicetree@vger.kernel.org

and Cc: the DT maintainers. Use scripts/get_maintainer.pl to identify all of the DT maintainers.

5. The Documentation/ portion of the patch should come in the series before the code implementing the binding.
6. Any compatible strings used in a chip or board DTS file must be previously documented in the corresponding DT binding text file in Documentation/devicetree/bindings. This rule applies even if the Linux device driver does not yet match on the compatible string. [checkpatch will emit warnings if this step is not followed as of commit bff5da4335256513497cc8c79f9a9d1665e09864 ("checkpatch: add DT compatible string documentation checks").]
7. The wildcard "<chip>" may be used in compatible strings, as in the following example:

- compatible: Must contain "nvidia,<chip>-pcie", "nvidia,tegra20-pcie" where <chip> is tegra30, tegra132, ...

As in the above example, the known values of "<chip>" should be documented if it is used.

8. If a documented compatible string is not yet matched by the driver, the documentation should also include a compatible string that is matched by the driver (as in the "nvidia,tegra20-pcie" example above).
9. Bindings are actively used by multiple projects other than the Linux Kernel, extra care and consideration may need to be taken when making changes to existing bindings.

II. For kernel maintainers

1. If you aren't comfortable reviewing a given binding, reply to it and ask the devicetree maintainers for guidance. This will help them prioritize which ones to review and which ones are ok to let go.
2. For driver (not subsystem) bindings: If you are comfortable with the binding, and it hasn't received an Acked-by from the devicetree maintainers after a few weeks, go ahead and take it.
For subsystem bindings (anything affecting more than a single device), getting a devicetree maintainer to review it is required.
3. For a series going through multiple trees, the binding patch should be kept with the driver using the binding.

III. Notes

0. Please see Documentation/devicetree/bindings/ABI.rst for details regarding devicetree ABI.
1. This document is intended as a general familiarization with the process as decided at the 2013 Kernel Summit. When in doubt, the current word of the devicetree maintainers overrules this document. In that situation, a patch updating this document would be appreciated.