

Devicetree Dynamic Resolver Notes

This document describes the implementation of the in-kernel DeviceTree resolver, residing in `drivers/of/resolver.c`

How the resolver works

The resolver is given as an input an arbitrary tree compiled with the proper `dtc` option and having a `/plugin/` tag. This generates the appropriate `__fixups__` & `__local_fixups__` nodes.

In sequence the resolver works by the following steps:

1. Get the maximum device tree phandle value from the live tree + 1.
2. Adjust all the local phandles of the tree to resolve by that amount.
3. Using the `__local_fixups__` node information adjust all local references by the same amount.
4. For each property in the `__fixups__` node locate the node it references in the live tree. This is the label used to tag the node.
5. Retrieve the phandle of the target of the fixup.
6. For each fixup in the property locate the `node:property:offset` location and replace it with the phandle value.