

BlinkGenPropertyTrees

# BlinkGenPropertyTrees

Change the blink → cc interface from a **layer tree** to a **layer list + property trees**.

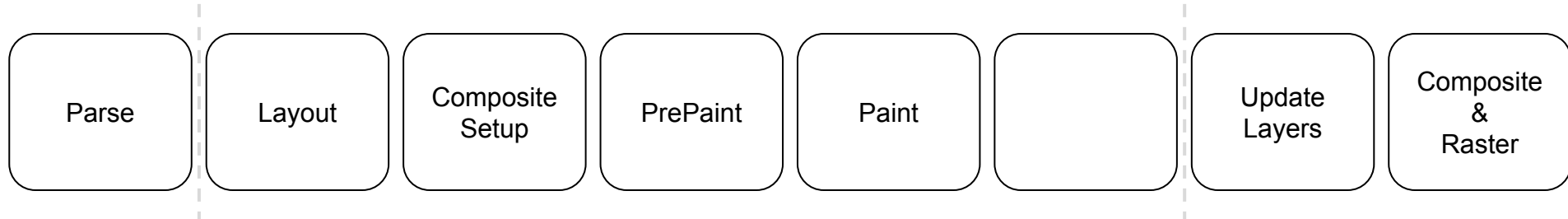
Clean API: layer list is just drawable layers. All hierarchy in property trees.

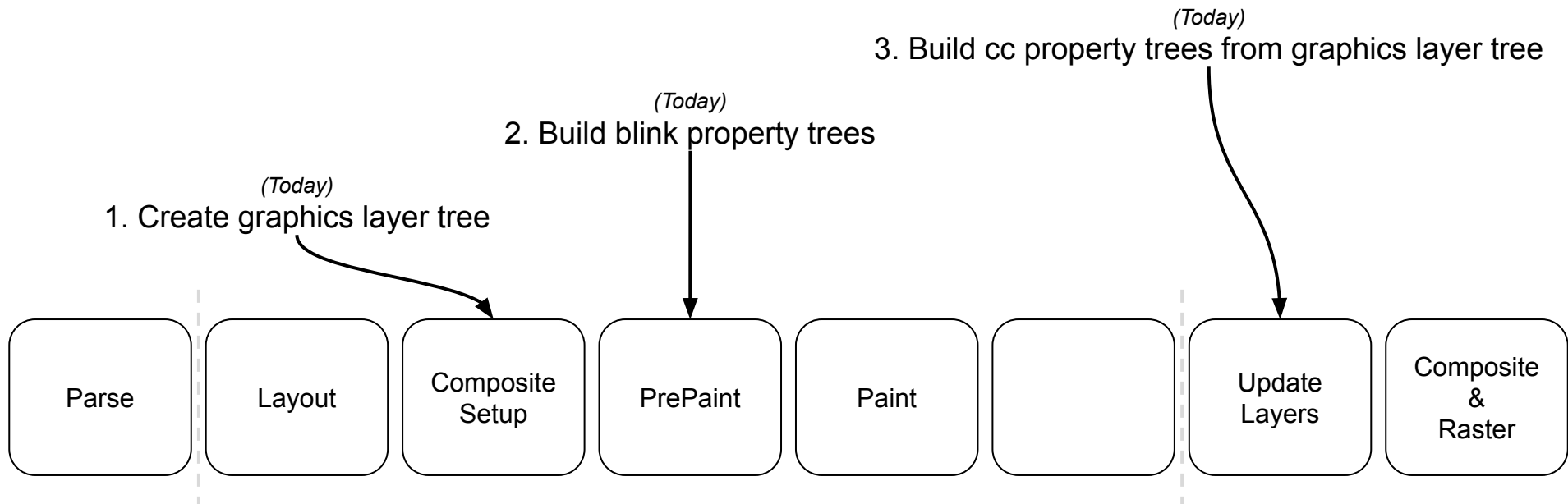
Can stop building property trees twice.

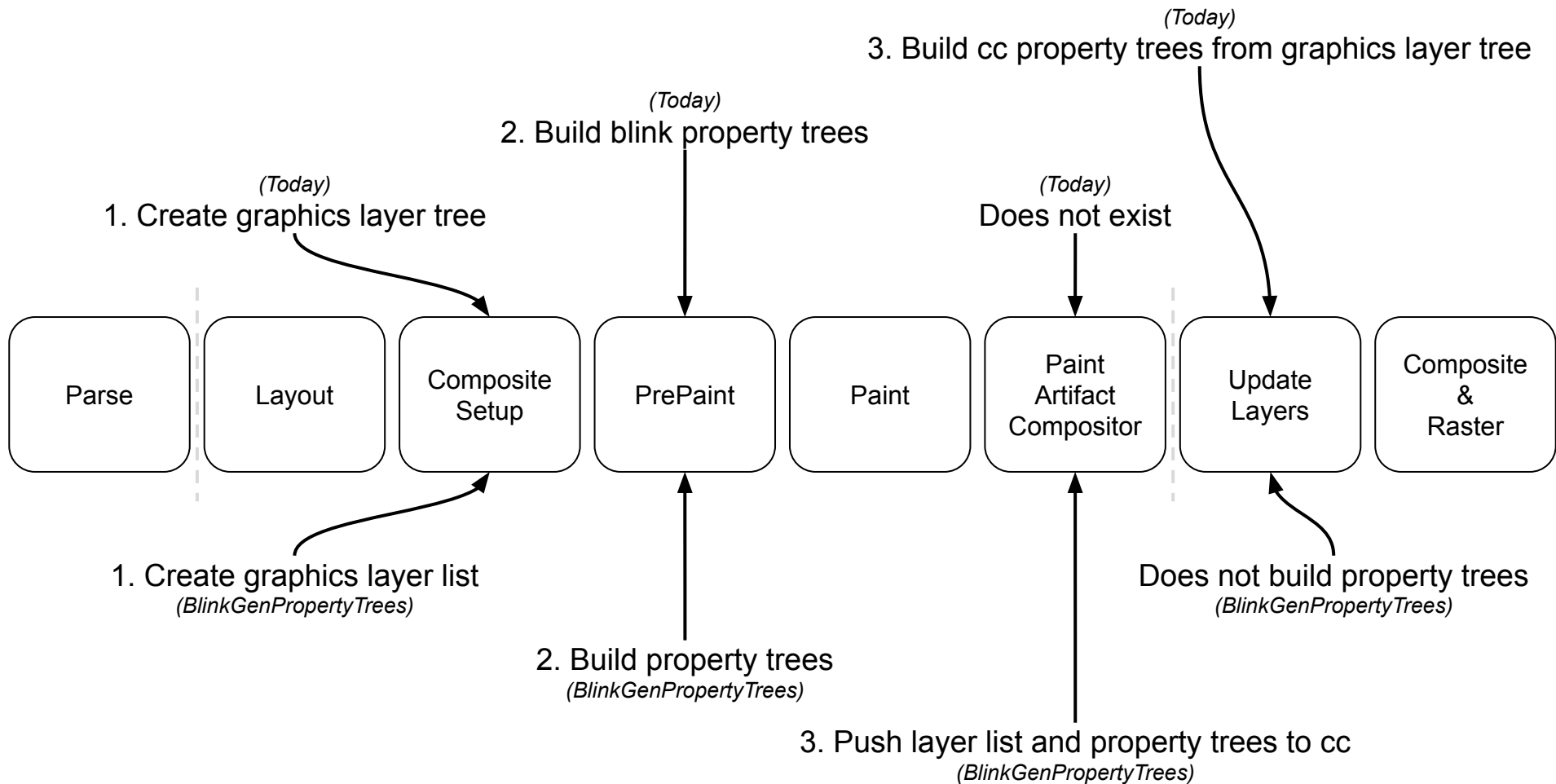
Stepping stone towards halving composited effect logic.

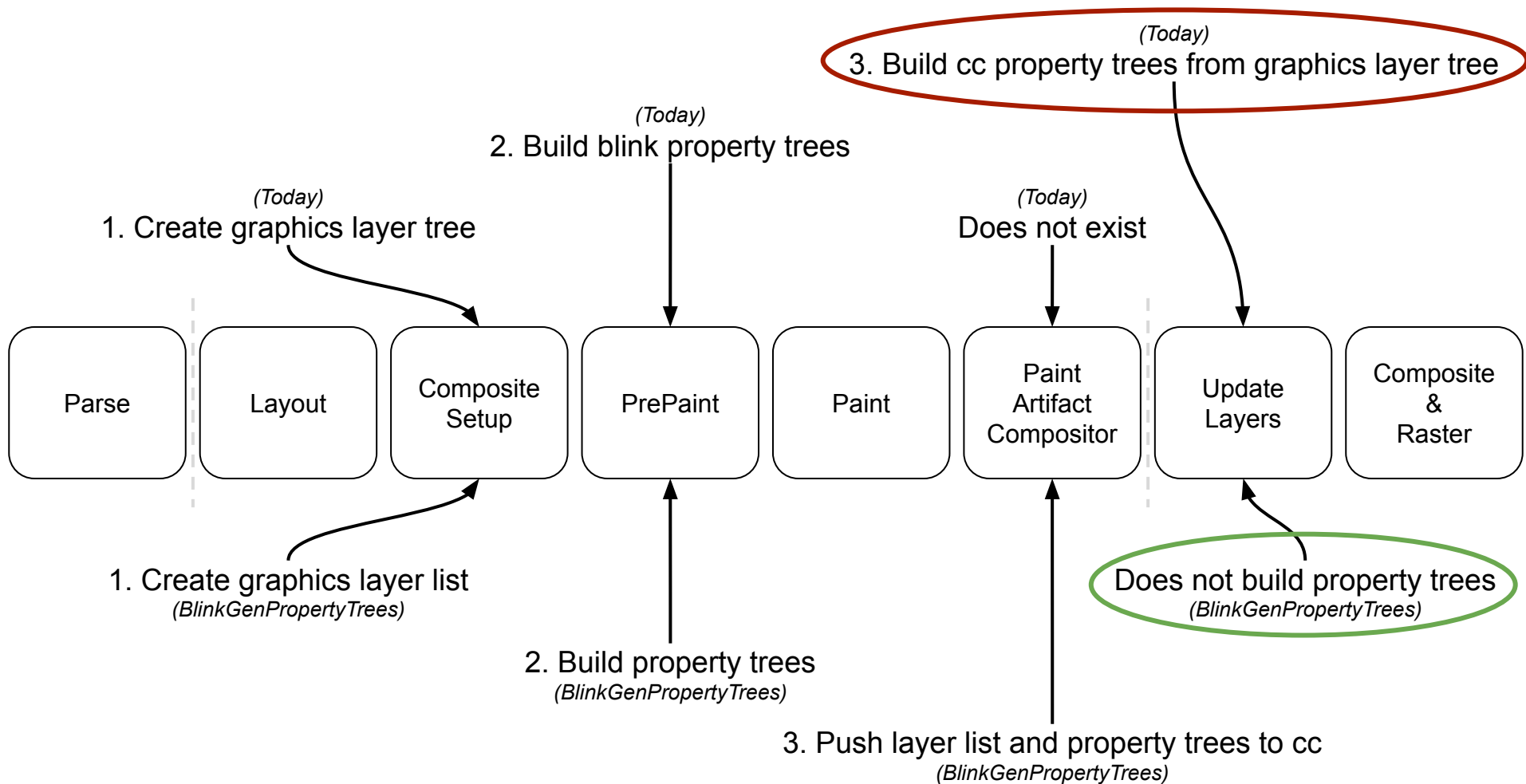
Stepping stone towards making compositing decisions in the compositor.

# Pipeline









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## Changes

- Create **complete** property trees in blink (pre-paint step).
- Send blink property trees to the compositor (PaintArtifactCompositor).
- Stop running compositor property tree builder.

# Current status

- Close to turning on by default in M70
  - Likely 100% tests passing by M70.
    - 46 failures right now.
  - Performance needs investigation.
- Interesting problems
  - Blink's property trees were not complete.
  - Hit testing.
  - Found layer management outside blink.
  - Compositor viewport code was still using layers.
  - Animations system needed work to use element ids.
  - RTL scrolling and scrollbars.
  - Tests.



# BlinkGenPropertyTrees

Flag	--enable-blink-gen-property-trees
CQ Bot	linux-blink-gen-property-trees
Spreadsheet	<a href="https://docs.google.com/spreadsheets/d/1In71SVZwXjY2MKojz1-3OCf7SLBq5xUMp8NWC9Vrc-Q/view">https://docs.google.com/spreadsheets/d/1In71SVZwXjY2MKojz1-3OCf7SLBq5xUMp8NWC9Vrc-Q/view</a>
Tracking bug	<a href="https://crbug.com/836884">https://crbug.com/836884</a>
Passing tests	All but 46
Awesome people	bokan, chaopeng, flackr, pdr, petermayo, sahel, smcgruer, sunxd, trchen, wangxianzhu, xidachen