

Jon's thoughts on DRC taxonomy

- Clearance
 - Distances between items (including diff pair gap)
 - Board edge violations (if handled separately)
- Collision
 - Overlapping courtyards (2D collision checking)
 - 3D collision checking
- Connectivity
 - Unrouted nets
 - Net antennas (dangling tracks/vias)
 - Copper with no net assigned
- Footprint
 - Courtyard checks
 - Other footprint validity issues
- Keepout
 - Violations of keepout restrictions
- Length
 - Max/min net length
 - Matched lengths
- Width
 - Track width checks
- Padstack
 - Drill sizes
 - Antipad sizes
 - Allowed layers for certain padstacks (blind/buried vias, etc)
 - Other padstack properties checking
- Electrical
 - Signal integrity rules
 - Power integrity rules
- Other (for future expansion)
 - Testpoint checking?

Notes

1. Some of these things don't exist in KiCad yet, but they might in the future!
2. If we're trying to conserve categories:
 - a. Length and Width could be combined ("Geometry" maybe?)
 - b. Other isn't needed today; if we add testpoint rules they could be shoehorned into Connectivity and Clearance.
 - c. Keepout violations could be handled under Collisions