

Box Diagrams – Main Ideas

A **work-box** (*wbox*) is a rectangular work area. It's used to guide positioning for things you're currently working on. A work-box is attached to both a diagram and to each of its blurbs. For brevity, a work-box is implemented as an array `[llx lly wd ht]`. The values are expressed as a percentage of its parent's dimensions. The origin of the CTM coords is temporarily translated to `(llx, lly)`. Both *wd* and *ht* are def'd into a temporary dictionary. A work-box is not a clipping region, but you can change it to one if desired.

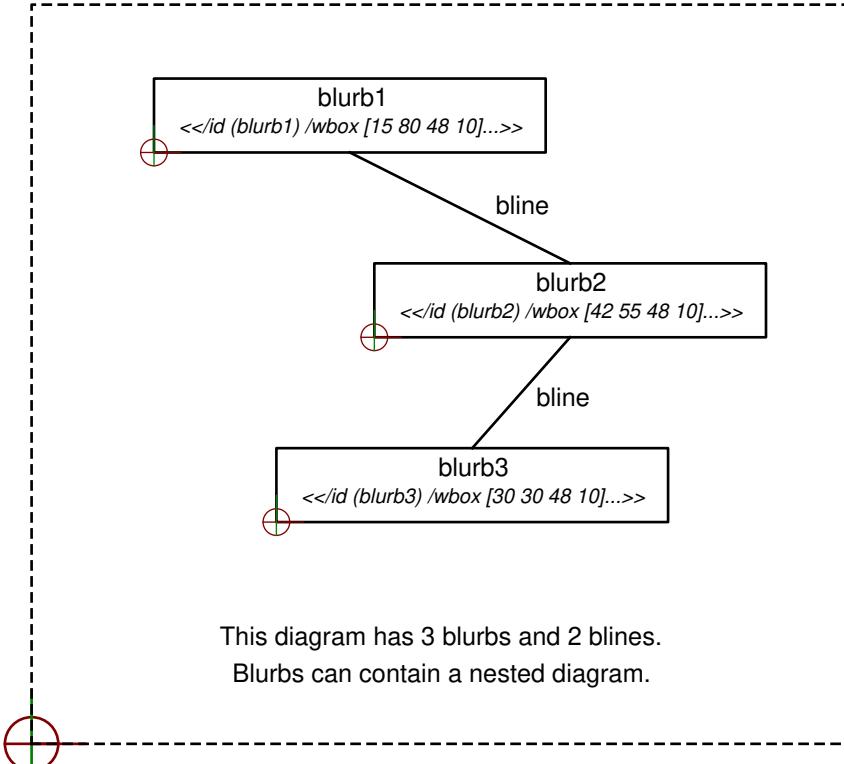
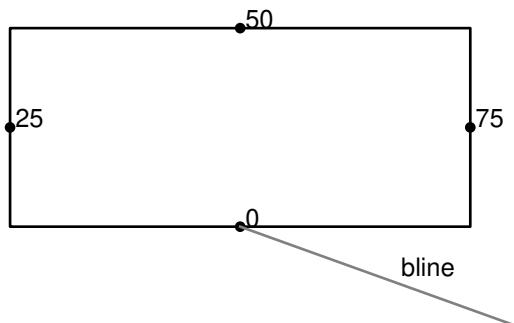


diagram: `<</blurbs [...] /blines [...]>>`

blurb: `<</id (blurb1) /wbox [15 80 48 10] ...>>`

bline: `<</from <</id (blurb1) /perim 0>> /to [<</id (blurb2) /perim 50>>] >>`

Blines are implemented with *perimeter-parameters* in the range $[0,100]$. The bottom-center corresponds to 0.



Blurbs and blines in the diagram get promoted to the top of the dict stack. The dict stack has multiple */wd* and */ht* entries. Higher */wd* */ht* entries temporarily "hide" the lower ones.

blurb dictionary

key	value
/wd	48
/ht	10
(other)	...

diagram dictionary

key	value
/diagram	-dict-
/wd	50
/ht	35

userdict
globaldict
systemdict