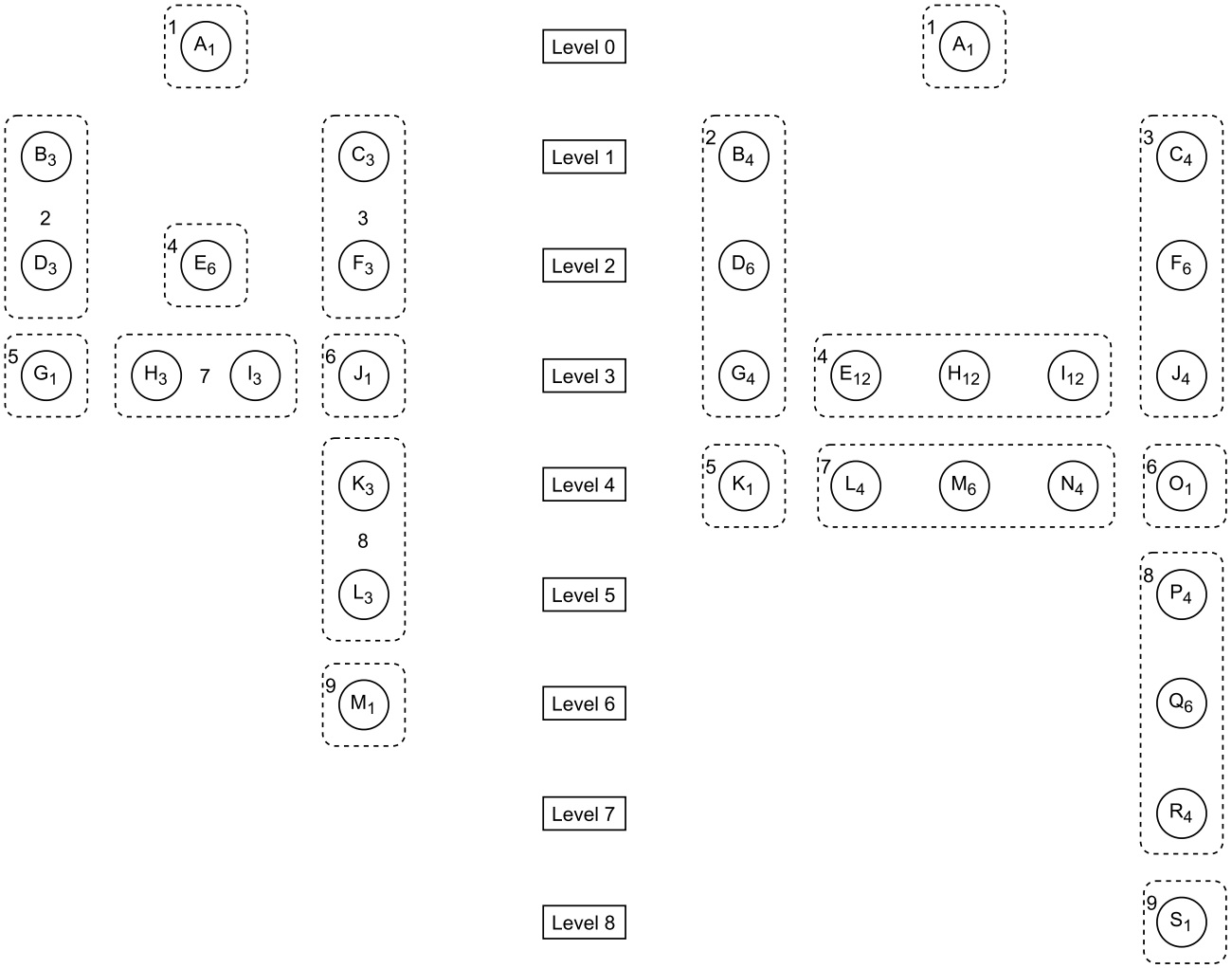
Transaction-Commit Classes and Configurations

Classes are circles annotated with alphabetic labels indexed by class size.
Configurations are disjoint sets of classes and are numbered from 1 to 9.



RM3: |R| = 34

RM4: |R| = 96

Configurations Predicates Based on RM4

Config1 =	$\forall R.\, working(R) \wedge \neg aborted(R) \wedge \neg committed(R) \wedge \neg pending(R)$
Config2 =	$\exists R.\, working(R) \wedge \neg working(R)$
	$\forall R.\, aborted(R) \oplus working(R)$
	$\forall R.\, \neg committed(R) \wedge \neg pending(R)$
Config3 =	$\exists R.\, working(R) \wedge \neg working(R)$
	$\forall R.\, pending(R) \oplus working(R)$
	$\forall R.\, \neg aborted(R) \wedge \neg committed(R)$
Config4 =	$\exists R.\, working(R) \wedge pending(R) \wedge aborted(R)$
	$\forall R.\, aborted(R) \rightarrow \neg working(R)$
	$\forall R.\, working(R) \rightarrow \neg pending(R)$
	$\forall R.\, pending(R) \rightarrow \neg aborted(R)$
	$\forall R.\, \neg committed(R)$
Config5 =	$\forall R.\, aborted(R) \wedge \neg committed(R) \wedge \neg pending(R) \wedge \neg working(R)$
Config6 =	$\forall R.\, pending(R) \wedge \neg aborted(R) \wedge -committed(R) \wedge \neg working(R)$
Config7 =	$\exists R.\, pending(R) \wedge \neg pending(R)$
	$\forall R.\, aborted(R) \oplus pending(R)$
	$\forall R.\, \neg committed(R) \wedge \neg working(R)$
Config8 =	$\exists R.\, pending(R) \wedge \neg pending(R)$
	$\forall R.\, committed(R) \oplus pending(R)$
	$\forall R.\, \neg aborted(R) \wedge \neg working(R)$
Config9 =	$\forall R.\, committed(R) \wedge \neg aborted(R) \wedge \neg pending(R) \wedge \neg working(R)$