

GoBench Artifact Evaluation

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Table IV. Blocking bugs reported in GoBench ("Pre" stands for precision and "Rec" stands for recall).

Suite	Bug type	<i>goleak</i>					<i>go-deadlock</i>					<i>dingo-hunter</i>				
		#TP	#FN	#FP	Pre (%)	Rec (%)	#TP	#FN	#FP	Pre (%)	Rec (%)	#TP	#FN	#FP	Pre (%)	Rec (%)
GoReal	Resource deadlock	1	7	1	50.0	12.5	7	2	0	100.0	77.8	-	-	-	-	-
	Communication deadlock	8	13	0	100.0	38.1	1	17	3	25.0	5.6	-	-	-	-	-
	Mixed deadlock	3	6	1	75.0	33.3	3	4	3	50.0	42.9	-	-	-	-	-
	Total	12	26	2	85.7	31.6	11	23	6	64.7	32.4	-	-	-	-	-
GoKer	Resource deadlock	13	10	0	100.0	56.5	23	0	0	100.0	100.0	0	23	0	-	0.0
	Communication deadlock	20	9	0	100.0	69.0	0	29	0	-	0.0	1	28	0	100.0	3.4
	Mixed deadlock	9	7	0	100.0	56.2	5	11	0	100.0	31.2	0	16	0	-	0.0
	Total	42	26	0	100.0	61.8	28	40	0	100.0	41.2	1	67	0	100.0	1.5

Table V. Non-blocking bugs reported in GoBench.

Suite	Bug type	<i>Go-rd</i>				
		#TP	#FN	#FP	Pre (%)	Rec (%)
GoReal	Traditional	24	0	0	100.0	100.0
	Go-Specific	14	4	0	100.0	77.8
	Total	38	4	0	100.0	90.5
GoKer	Traditional	21	0	0	100.0	100.0
	Go-Specific	11	3	0	100.0	78.6
	Total	32	3	0	100.0	91.4

Fig.10 Percentage distribution for the (average) number of runs falling into each of the four given intervals that is needed by a tool in finding a bug

