TABLE 1: Confusion matrix of all considered configurations and applications when detecting the CTH antipattern.

100-12	2 27 0 0	6 23 0 0	4 27 0 0	$\begin{array}{c c} 1 & 16 \\ \hline 0 & 0 \\ \end{array}$	0 13
100-6	2 27 0 0	6 23 0 0	4 27 0 0	1 16	0 13
100-3	2 27 0 0	5 23 0 1	4 27 0 0	1 16	0 13
75-12	2 27 0 0	6 23 0 0	4 27 0 0	1 16 0 0	$\begin{bmatrix} 0 & 13 \\ 0 & 0 \end{bmatrix}$
75-6	2 27 0 0	6 23 0 0	4 27 0 0	1 16	$\begin{array}{c c} 0 & 12 \\ \hline 1 & 0 \end{array}$
75-3	2 27 0 0	5 23	3 27	1 16 0 0	$\begin{array}{c c} 0 & 12 \\ \hline 1 & 0 \end{array}$
50-12	2 27 0 0	6 23	4 27 0 0	1 16	0 13
20-6	2 27 0 0	6 23	4 27 0 0	1 16	0 13
50-3	2 27 0 0	6 23	4 27	1 16 0 0	0 13
25-12	2 27 0 0	6 23	4 27 0 0	1 16	0 13
25-6	2 27 0 0	6 23	3 27	1 16 0 0	0 13
25-3	2 27 0 0	6 23	3 27	1 16	$\begin{bmatrix} 0 & 11 \\ 2 & 0 \end{bmatrix}$
	TP TN FP FN	TP TN FP FN	TP TN TP FN	TP TN FP FN	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 2: Confusion matrix of all considered configurations and applications when detecting the EP antipattern.

100-12	6 22 0 1	9 20 0	7 24 0 0	5 12 0 0	1 12 0 0
100-6	7 22 0 0	9 20 0	7 24 0 0	5 12 0 0	1 12 0 0
100-3	6 22 0 1	9 20 0	7 24 0 0	5 12	1 11 11 0
75-12	6 22 0 1	9 20 0	7 24 0 0	5 12 0	1 12 0 0
75-6	7 22 0 0	9 20 0	7 24 0 0	5 12 0	1 11 1
75-3	6 22 0 1	9 20	6 24 0 1	1 0 1	1 11 11 11 0
50-12	$\begin{array}{c c} 7 & 21 \\ \hline 1 & 0 \\ \end{array}$	9 20 0	7 24 0 0	5 12 0	1 12 0 0
9-09	6 22 0 1	9 20 0	7 24 0 0	4 12 0 1	1 12 0 0
50-3	7 21 1	9 20 0	7 24 0 0	4 12 0 1	1 12 0 0
25-12	$\begin{bmatrix} 6 & 22 \\ 0 & 1 \end{bmatrix}$	9 20 0	7 24 0 0	5 12 0	$\begin{array}{c c} 0 & 12 \\ \hline 0 & 1 \end{array}$
25-6	7 22 0 0	9 20	6 24	4 12 0 1	0 12 0 1
25-3	7 22 0 0	9 20	6 24 0 1	2 11 0	$ \begin{array}{c cccc} & 1 & 10 \\ \hline & 2 & 0 \end{array} $
	TP TN TH FIN TH	TP TN FN FN	TP TN TH FIN	T TT T	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 3: Confusion matrix of all considered configurations and applications when detecting the WCS antipattern.

100-12	0 27 2 0	$\begin{array}{c c} 0 & 29 \\ \hline 0 & 0 \\ \end{array}$	2 29 0 0	$\begin{array}{c c} 0 & 16 \\ \hline 0 & 1 \end{array}$	0 13
100-6	0 27 2 0	0 29	2 <u>29</u> 0 0	0 16	0 13
100-3	0 29 0	0 29 0	2 29 0	0 16	0 13
75-12	0 29	0 29	2 29 0	1 16	0 13
75-6	0 27 2	0 29	2 29	1 16	0 12
75-3	0 29	0 29	$\begin{array}{c cc} 1 & 29 \\ \hline 0 & 1 \end{array}$	1 16	0 12
50-12	0 29	0 29	2 29	1 16	0 13
20-6	0 29	0 29	$\begin{array}{c c} 1 & 29 \\ \hline 0 & 1 \end{array}$	$\begin{array}{c c} 0 & 16 \\ \hline 0 & 1 \end{array}$	0 13
50-3	0 29	0 29	2 29	0 16	0 13
25-12	0 29	0 29	0 29	1 15	0 12
25-6	0 29	0 29	0 29	1 15	0 13
25-3	0 29	0 29	0 29	1 16	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$
	TP TN FP FN	TP TN TN FP FN	T T T T T T T T T T T T T T T T T T T	T dT H	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 4: Confusion matrix of all considered configurations and applications when detecting the BLOB antipattern.

100-12	7 21 0 1	5 23 0 1	5 26 0	$\begin{array}{c c} 1 & 16 \\ \hline 0 & 0 \\ \end{array}$	$\begin{array}{c c} 1 & 12 \\ 0 & 0 \end{array}$
100-6	8 21 0 0	5 23 0 1	5 26	1 16	$\begin{array}{c c} 1 & 12 \\ 0 & 0 \end{array}$
100-3	$\begin{array}{c cc} 7 & 21 \\ \hline 0 & 1 \end{array}$	6 23 0 0	5 26 0	1 16	1 10 2 0
75-12	7 21 0 1	5 23 0 1	5 26	1 16	1 12 0 0
75-6	8 21 0 0	6 23	5 26	1 16	1 10 2 0
75-3	$\begin{array}{c cc} 7 & 21 \\ \hline 0 & 1 \end{array}$	5 23	4 25	1 16	1 10 2 0
50-12	8 20	6 23	5 26	1 16	$\begin{array}{c c} 1 & 12 \\ \hline 0 & 0 \end{array}$
9-09	7 21 0 1	6 23 0 0	5 26	1 16	1 12 0 0
50-3	8 21 0 0	6 23	5 26	1 16	1 12 0 0
25-12	7 21 0 1	6 23 0 0	5 25	1 16	1 12 0 0
25-6	8 21 0 0	6 23 0 0	4 25	1 16	1 12 0 0
25-3	8 21 0 0	6 23	4 25	1 16	1 11 1
	TP TN FP FN	TP TN FP FN	TP TN FP FN	TP TN TN FP FN	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 5: Confusion matrix of all considered configurations and applications when detecting the TOB antipattern.

100-12	0 29 0 0	0 29 0 0	4 27 0 0	0 17 0 0	0 13
100-6	0 29	0 29	4 27 0 0	0 17	0 13
100-3	0 29	0 29	4 27 0 0	0 17	0 13
75-12	0 29 0	0 29 0	4 27 0 0	$\begin{array}{c c} 0 & 17 \\ \hline 0 & 0 \end{array}$	0 13
75-6	0 29	0 29	4 27 0 0	0 17	0 13
75-3	0 29	0 29	4 27 0 0	0 17	0 13
50-12	0 29	0 29	4 27 0 0	0 17	0 13
20-6	0 29	0 29	4 27 0 0	0 17	0 13
50-3	0 29	0 29	4 27 0 0	0 17	0 13
25-12	0 29	0 29	4 27 0 0	0 17	0 13
25-6	0 29	0 29	4 27	0 17	0 13
25-3	0 29	0 29	4 27 0 0	0 17 0 0	0 13
	TP TN TN FP FN	TP TN FN FN	TP TN FN FN FN	T TT T	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 6: Confusion matrix of all considered configurations and applications when detecting the EST antipattern.

100-12	0 29	0 29	0 30	1 16	0 13
100-6	0 29 0	0 28 1 0	0 31	1 16	0 13
100-3	0 29	0 29 0	$\begin{bmatrix} 0 & 31 \\ 0 & 0 \end{bmatrix}$	1 16	0 13
75-12	0 29	0 29 0	$\begin{bmatrix} 0 & 31 \\ 0 & 0 \end{bmatrix}$	1 16	0 13
75-6	0 29 0	0 29 0	$\begin{array}{c c} 0 & 31 \\ \hline 0 & 0 \end{array}$	1 16	0 13
75-3	0 29	0 29	0 31	1 16	0 13
50-12	0 29	0 29	0 31	1 15	0 13
20-6	0 29	0 29	$\begin{array}{c c} 0 & 30 \\ \hline 1 & 0 \end{array}$	1 16	0 13
50-3	0 29	0 29	$\begin{array}{c c} 0 & 30 \\ \hline 1 & 0 \end{array}$	$\begin{array}{c c} 1 & 16 \\ \hline 0 & 0 \end{array}$	0 13
25-12	0 29	0 29	0 31	$\begin{array}{c c} 1 & 16 \\ \hline 0 & 0 \\ \end{array}$	0 13
25-6	0 29	0 29	0 31	$\begin{array}{c c} 1 & 16 \\ \hline 0 & 0 \end{array}$	0 13
25-3	0 29	0 29	0 31	1 16	0 13
	TP TN FP FN	TP TN FP FN	TP TN TH FP FN	TP TN FP FN	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS

TABLE 7: Confusion matrix of all considered configurations and applications when detecting the EDA antipattern.

100-12	0 27 2 0	2 27 0 0	4 27 0 0	0 17 0 0	0 13
100-6	0 27 2 0	2 27 0 0	4 27 0 0	0 17 0 0	0 13
100-3	0 27 2 0	2 27 0 0	4 27 0 0	$\begin{array}{c c} 0 & 17 \\ \hline 0 & 0 \end{array}$	0 12 1 0
75-12	0 29	2 27 0 0	4 27 0 0	$\begin{array}{c c} 0 & 17 \\ \hline 0 & 0 \end{array}$	$\begin{bmatrix} 0 & 13 \\ 0 & 0 \end{bmatrix}$
75-6	0 29	2 27 0 0	4 27 0 0	0 17	$\begin{array}{c c} 0 & 12 \\ \hline 1 & 0 \end{array}$
75-3	0 29	2 27 0 0	3 27	0 17	$\begin{array}{c c} 0 & 12 \\ \hline 1 & 0 \end{array}$
50-12	0 29	2 27 0 0	4 27 0 0	0 17	0 13
20-6	0 29	2 27 0 0	4 27 0 0	0 17	0 13
50-3	0 29	2 27 0 0	4 27	0 17	0 13
25-12	0 27 2 0	2 27 0 0	4 27 0 0	0 17 0 0	$\begin{array}{c c} 0 & 12 \\ \hline 1 & 0 \\ \end{array}$
25-6	0 27 2 0	2 27 0 0	3 27	0 17 0 0	0 12 1 0
25-3	0 29	$ \begin{bmatrix} 2 & 27 \\ 0 & 0 \end{bmatrix} $	3 27	0 17	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
	TP TN FP FN	TP TN FP FN	TP TN FN FN	TP TN FN FN	TP TN FP FN
	CloudStore	TeaStore	WebGoat	TrainTicket	OpenMRS