

**Average Priority of Issues Fixed in multi-programming-language commits
(MPLCs) of The Selected Projects**

Project	Name	MPLC		Non-MPLC		<i>p-value</i>
		AveIssuePriority	#Issue	AveIssuePriority	#Issue	
P1	Airavata	2.94	51	3.00	688	0.440
P2	Ambari	3.33	1280	3.35	15793	0.156
P3	Arrow	2.93	1026	2.87	3333	<0.001
P4	Avro	2.98	43	2.83	1263	0.109
P5	Beam	2.82	120	2.79	2971	0.608
P6	Carbondata	2.72	859	2.62	943	<0.001
P7	Cloudstack	3.12	266	3.43	3987	<0.001
P8	Couchdb	3.11	114	2.93	244	0.447
P9	Dispatch	2.96	231	2.94	827	0.312
P10	Ignite	3.10	440	3.10	4235	0.897
P11	Impala	3.35	1291	3.57	2881	<0.001
P12	Kafka	3.21	731	3.12	3244	0.001
P13	Kylin	2.85	60	2.80	1769	0.319
P14	Ranger	2.98	154	2.88	1464	0.013
P15	Reef	2.76	99	2.63	954	0.072
P16	Spark	2.91	2214	2.82	12261	<0.001
P17	Subversion	3.12	371	3.18	1328	0.188
P18	Thrift	2.77	334	2.65	2133	0.012
P19	Usergrid	3.00	2	2.97	227	0.889
P20	Zeppelin	2.92	272	2.88	1459	0.263

In JIRA, the priority of a bug can be one of the following five labels (from highest to lowest): blocker, critical, major, minor, and trivial. First, we assigned numbers to the five priority labels: blocker=5, critical=4, major=3, minor=2, and trivial=1. Then, we ran the Whitney-Mann U test on the priority numbers of issues resolved in MPLCs and non-MPLCs of each project. The results are shown in the table above, where AveIssuePriority denotes the average priority number of all issues in a selected project, and #Issue is the number of resolved issues. As shown in the table, there is a significant difference between the priority of issues resolved in MPLCs and the priority of issues resolved in non-MPLCs for 8 projects (i.e., $p\text{-value} < 0.05$); there is no significant difference between the priority of issues resolved in MPLCs and the priority of issues resolved in non-MPLCs for 12 projects.