

Configuring modern enterprise software can be extremely difficult, because its behavior often depends on large numbers of configuration parameters. We argue that vendors can simplify the configuration process for new users of their software by collecting and using configuration information from the existing user community. Our proposed approach is based on the observations that (1) a “good” configuration may work well for many different users, and (2) multiple good configurations may work well for each user. We demonstrate our idea by designing MassConf, a system that collects and uses existing configurations to automatically configure new software installations. To evaluate MassConf, we use it to configure the Apache Web server to achieve a response-time target. Our results confirm our observations and show that MassConf successfully reaches the targets of many more new installations than an existing efficient optimization algorithm. Even when we consider only the installations that can be configured with this efficient algorithm, our results show that MassConf reaches the desired targets running many fewer experiments on average.