

Mailtrain is a self-hosted open-source newsletter application built on Node.js which provides features such as subscriber lists management, list segmentation, custom fields, e-mail templates, triggered and RSS campaigns, etc. One of the main shortcomings of Mailtrain is the inability to scale horizontally, which results in performance limits when delivering campaigns to very large mailing lists. The main goal of this work is to extend Mailtrain to allow it to handle the delivery of campaigns (including attachments, linked images, and user tracking) in distributed and horizontally scalable manner. The thesis should include the design of the extension, its implementation, and performance evaluation to compare the extension with the existing performance of Mailtrain.