

Email Marketing Performance 9.3.4

The purpose of this document is to provide relevant performance data for the Dynamicweb Email Marketing tool.

Email Marketing performance in general – whether on a Dynamicweb environment or not – can be split into two separate tasks:

- Generating email content
- Sending email content

Both tasks are possible performance bottlenecks – but they are entirely separate for all other purposes; Dynamicweb handles the generation of email content, and the email server handles the send process (and is outside our control and the scope of this document).

By default, Dynamicweb handles the generation of EML-files based on the content of the CMS page. This process is influenced by two factors:

- The **complexity** and the **size** of the content being rendered
- The **hardware** doing the rendering

Rendering time is also dependent on whether or not content is **personalized**, and if **tertiary features** such as *split testing* are enabled.

In this test, we will test how the generation of EML files performs when generating a **newsletter** consisting of a standard page with 2 items – one with text-based content, and one displaying 5 products. The size of the email is 102kb.

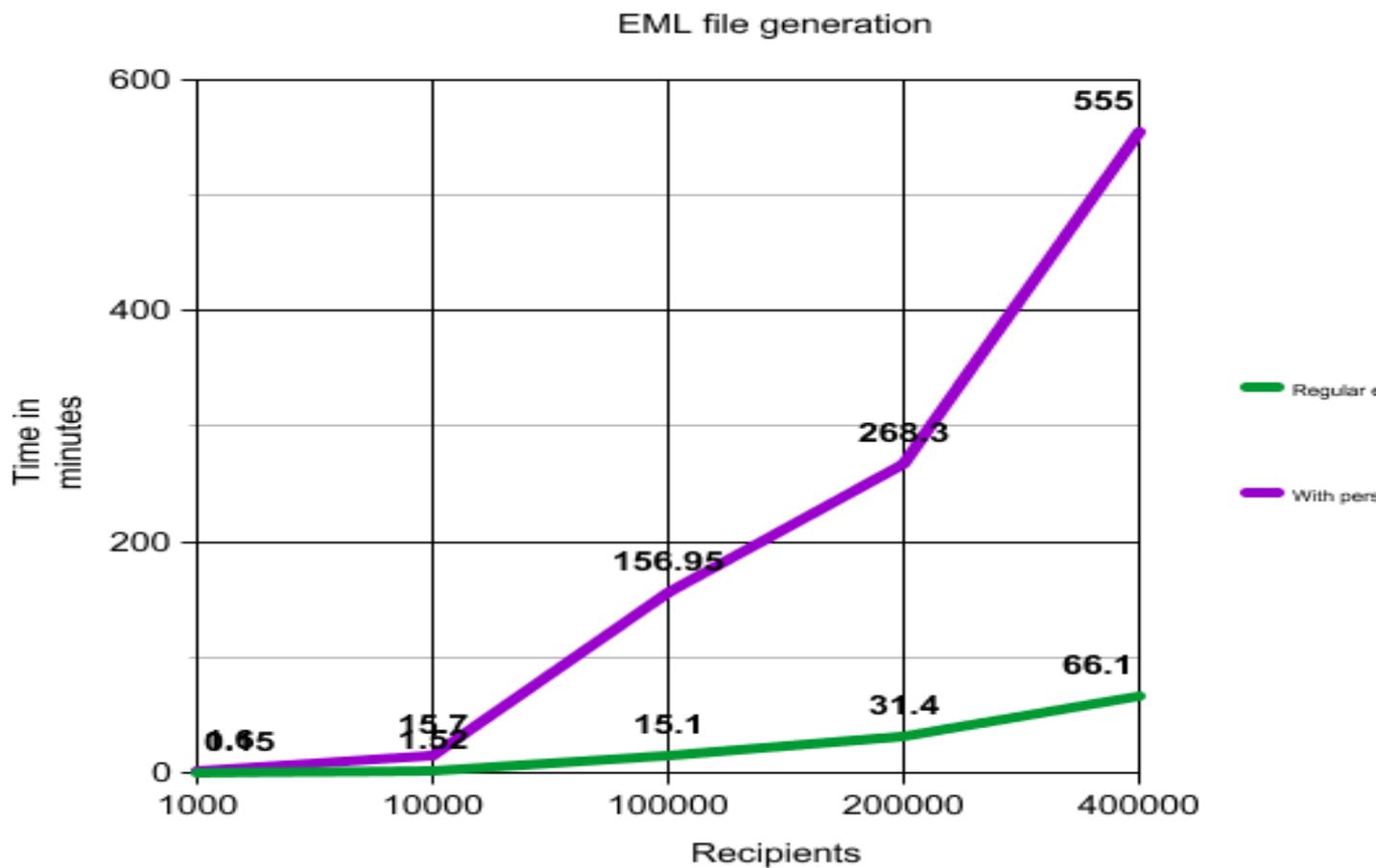
We will test generation times with and without the flag *Render content for each recipient* enabled – this flag is most commonly used when personalizing content or the contents of a cart for e.g. *abandoned cart emails*.

Our hardware setup is follows:

- The hardware used in this test is a **quad core Xeon E3-1230v2** server with **16 GB RAM** running on **Windows Server 2012 and MSSQL 2012**
- The Dynamicweb version is **9.3.4** running **Rapido 1.0 BETA**

Test Results

These are the results of the performance test of EML file generation using the environment described above:



Conclusions

The results reveal that EML file generation scales pretty well, up and until 200,000 recipients, after which we see a small performance hit.

However, generating EML files with personalized content is almost **10 times as resource intensive** – and 100,000 emails with personalized content will take a little over 2½ hours to generate using our setup. So, if you plan to send a lot of personalized emails we recommend that you target smaller batches of users at a time.

Furthermore with such render times you run increased risks of the server getting interrupted (e.g. a pool recycle) leading to send failure. Finally while the rendering process isn't particularly heavy it does put increased stress on the server, so in a shared environment you may see decreased performance on other sites.