

In this paper, we first introduce a novel blackhat SEO infrastructure, i.e., Spider Pool, a different operational model towards SEO campaigns. In comparisons with traditional blackhat infrastructure, e.g., PBN, link exchange, SEO botnet, spider pool shows flexibility and low cost since cheaper new or expiring domains are recruited.

Second, we infiltrate a super spider pool which sells SEO service to customers publicly by adding URL to its SEO pages after payment. When we explore this infrastructure, several features can be concluded: 1)labyrinth by wildcard DNS; 2)ever-changing Content; 3)long Tail Keywords; 4)free riding of reputable sites.

Then, we develop a classifier to differentiate spider pool domains automatically and launch large-scale DNS scanning to identify wildcard DNS domains and crawled their sitemaps. DNS scanning is implemented to probe all domains(13.5 million), and as a result 17.8% of all scanned domains are obtained. The number of wildcard DNS domains and SEO domains distributes unevenly across TLDs and SLDs.

Finally, we discuss statistics of spider pool campaigns and detailed impact on search engines.