

Downloading Data from Saccharomyces Genome Database



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Data at the *Saccharomyces* Genome Database (SGD; http://www.yeastgenome.org) is accessed through a dynamic faceted search backed by Elasticsearch technology, a full-text search and analytics engine. Elasticsearch provides a powerful application programming interface (API) into SGD's complex data. Traditionally, SGD users used the File Transfer Protocol (FTP) server to download data files, but we are moving towards a more flexible approach by leveraging our search tool. File metadata has been loaded into the database and integrated into the greater SGD search. As a result, users can search for files the same way they might search for a gene or phenotype data. Results are matched based on metadata, including the file name, description, keywords, and the PMID if the file is associated with a published reference. The files themselves are stored using the AWS (Amazon Web Services) S3 storage service. Our new approach to downloading SGD data files provides our users with a more customized, end-to-end experience. SGD is funded by the NIH-NHGRI [U41HG001315].

