



Dropbox Pioneers Future of Cloud Infrastructure with SMR Technology Deployment

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Company will be first to deploy SMR at exabyte scale; to provide open-source software enabling other enterprises to follow suit

SAN FRANCISCO--(BUSINESS WIRE)--Jun. 12, 2018-- [Dropbox](#), a leading global collaboration platform, today announced a new chapter in the evolution of Magic Pocket, its custom-built storage infrastructure. The company is successfully deploying Shingled Magnetic Recording (SMR) drive technology, which will increase overall storage density, reduce the company's physical data center footprint, and provide significant cost savings —without sacrificing performance or reliability. Dropbox will be the first company to test and deploy SMR technology at this scale.

Dropbox anticipates approximately a quarter of its Magic Pocket infrastructure will be on SMR drive capacity by 2019. In the coming months, the company also plans to open source the test software it created in the process, which will let other companies qualify SMR technology for their own enterprise storage environments.

"Creating our own storage infrastructure was a huge technological challenge, but it's already paid dividends for our customers and our business," said Quentin Clark, SVP of Engineering, Product, and Design at Dropbox. "As more teams adopt Dropbox, SMR technology will help us scale our infrastructure by providing greater flexibility, efficiency, and cost savings. We're also excited to make this technology open-source so other companies can benefit from it."

The move to SMR technology has been a significant undertaking: Dropbox sourced SMR disk drives from third-party suppliers, designed a bespoke hardware and component ecosystem around it, and created new software to ensure its compatibility with existing Magic Pocket architecture. The company ultimately chose SMR technology for its unique ability to expand storage capacity from 8TB to 14TB per disk, while still delivering the performance and reliability the company expects.

This process is another example of the company's engineering expertise in building large distributed systems. By the end of 2018, Dropbox will have an infrastructure footprint spanning 29 facilities in twelve countries and four continents, including storage for users inside and outside the U.S.

Expanding the impact of Magic Pocket

In 2016, Magic Pocket set a new standard in the industry by introducing an exabyte-scale storage infrastructure that was exceptionally reliable and secure, and could meet the dynamic workloads of more than 500 million registered users. The system was designed to provide annual data durability of over 99.999999999%, and availability of over 99.99%. This move to SMR technology is the next phase in the company's development of its cutting edge, custom-built infrastructure.

For more information on how Dropbox engineering is successfully deploying SMR disk drives at scale in Magic Pocket, please visit our [SMR technology blog](#).

To read more about how Dropbox created Magic Pocket please visit our [original blog post](#).

About Dropbox

Dropbox is a leading global collaboration platform that's transforming the way people and teams work together. With more than 500 million registered users across 180 countries, we're on a mission to unleash the world's creative energy by designing a more enlightened way of working. Dropbox is headquartered in San Francisco, CA, and has 12 offices around the world. For more information on our mission and products, visit [dropbox.com](#).

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