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sustainable data management to-do list

If you want to do something good for the environment, your data is a good place to start. Anything you can do to reduce the amount of data your company is storing (and transferring) ultimately reduces energy usage and overall environmental impact, as well as costs. These data management tactics can help.

1. Find Your Data

Gain a thorough, up-to-date view of your organization's data, both structured and unstructured, as well as on-premises, at the edge and in the cloud.

There are numerous technology solutions available to help you locate any and all data across data silos anywhere it could possibly reside, including any network-attached storage (NAS), endpoints, servers, and the cloud.

2. Know Your Data

Categorize your data to start determining what you may not need. For example, use data categories such as:

+ ROT data

  + Redundant data - Data that has copies kept in several

    locations, whether on a separate system or inside the system.

+ Obsolete data - Information that is no longer accurate or useful and has been replaced by newer information.

+ Trivial data - Information that has no use.

+ Hot and cold data. Hot data is data that's frequently accessed, while cold data is data that's rarely accessed. (It could include ROT data, as well as data that's required to be retained for a certain period of time but isn't typically used.)

3. Get Rid of ROT Data

Take advantage of the various technology solutions that can help you identify and delete ROT data or move it to lower-cost, less energy-intensive object storage. For example, you can use a data deduplication solution to automatically scan your repositories for duplicate data.

4. Evaluate How You Handle Cold Data

If you're not already doing so, archive cold data to highly efficient secondary storage solutions such as object storage. These secondary storage solutions offer varying degrees of energy efficiency because they're designed for data that doesn't need fast retrieval times. That means they can be powered off or offline as needed to conserve power usage.

5. Assess Your Retention Policies

Do you have a policy for data retention and deletion? Review it and determine if it's working and if it needs to be more aggressive. Does the policy incorporate best practices for data backups? Backing up all data and keeping it for as long as possible can result in huge storage bills, greater energy usage (and environmental impact), and potentially compliance violations.

6. Move Your Data

Migrate to more environmentally friendly cloud services and/or colocation. It's been estimated that on-premise to the public cloud can achieve significant carbon reduction in the form of nearly 60 million tons of CO_2 globally per year. That's the equivalent of taking 22 million cars off the road.

And if you choose a data center provider that incorporates sustainability practices — such as pursuing renewable energy for its operations — all the better.

7. Plan Your Migrations Carefully

If you're going to migrate data, plan the move carefully. Move only what you need. Any time data is transferred, it requires energy. The less data moved, the less energy consumed. That's why makes #3 so important.

Another consideration: if the move will entail getting rid of hardware, make sure you have a recycling plan in place. If you'll be investing in new hardware to move to a colocation data center, make sure you're purchasing equipment that is third-party certified to be energy efficient.

8. Choose a More Sustainable Data Center

Whether you choose colocation, the cloud or a combination of the two, you're going to be using a data center. Data centers, by nature, tend to consume massive amounts of energy. They're also under increasing pressure to do something about it. When considering a colocation or cloud provider, inquire about their sustainable technologies and practices.

creating more sustainable data storage

US Signal's Michigan data centers are part of our environmentally friendly initiative, featuring the latest power-efficient technologies, including in-row cooling systems and high-density servers, that reduce power consumption and carbon emissions. The data centers also use renewable energy sources and responsibly dispose of electronic waste.

For more information on reducing the environmental impact of your data – and your IT operations – contact US!

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