REDUCING DATA STORAGE EMISSIONS

Adopting the following practices can help reduce data storage - saving on emissions and cost!

Avoid duplication

- Wherever possible only hold one copy of the data/document. Use online tools such as SharePoint so that documents are centrally available to all who need them.
- When sending information via email consider using a link to the document rather than sending copies to all recipients.

A document shared via email with 5 people and held for three years in the mailbox of all parties generates around 1.8g of CO2e. Sending a link generates just 0.36g in the same period.

It seems small but this can add up to a big saving across Government.

Data under pressure

- Compress data that's not used often to reduce storage space.
- Compressing and decompressing data is more work for the server - so don't compress documents that are read or updated frequently.

Use encryption sparingly

Encrypting and de-encrypting data causes the server to carry out more work and consume more power. Only encrypt data that requires it for security reasons.

Use modern file extensions

Saving using the modern .docx (etc.) rather than the older version .doc can save storage space - in tests, this method reduced files size by almost a quarter!

Size matters

- Keep the number of images in a document to a minimum and reduce the resolution when possible.
- Use a consistent formatting style.
- Limit the amount of “white space” on the page eg. choose narrow margins
- When sending emails, if you don't need images or hyperlinks - choose 'plain text'.

Don't hold on too long!

Have sensible retention periods and ensure that data is kept for no longer than it is needed.

Access all hours?

If you don’t need access to the data 24/7 consider whether the servers can be turned off outside of your working hours?

System failure!

Most Government data is held in an ACTIVE/ACTIVE/PASSIVE configuration. This means that there are two active copies of each document on two servers in two separate locations, as well as a backup.
This is so that, in the event of a failure of one of the data locations, access to the data can be maintained or restored within minutes.
If the document/data is not critical, consider if you need this level of security. Would a single copy that can be restored from a backup at a longer timescale be enough?
This can halve the carbon footprint of the document!

Government Departments, if you have any queries about data storage, please contact GTS.
Other public bodies, please contact your IT provider.