

# Decrypting AWA's Apocalyptic Vault: The 'Doomsday Sanctuary' Of The World!

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Deep in the Arctic mountains on the Svalbard archipelago, Norway, lies the data repository of the world, popularly known as the 'Arctic code vault'. This long-term archival facility stores data of historical and cultural interest, that are valuable digital artefacts from more than 15 countries. Run by a for-profit company Piql and the state-owned coal mining company Store Norske Spitsbergen Kulkompani (SNSK), the Arctic World Archive (AWA) aims to preserve the digital data of the world for thousands of years. Let's find out the when, what, and how of it all:

## When

Launched in March 2017, SNSK and Piql commissioned the project of constructing a vault buried 300 metres inside the decommissioned Mine 3 (Gruve 3) mineshaft of an abandoned coal mine. Situated in the Svalbard archipelago on the island of Spitsbergen, Norway, the vault is renowned as one of the most geopolitically secure places in the world. It is claimed by the makers of the vault that the temperature inside the vault will remain below freezing point even in the absence of any power supply, thanks to the constant permafrost. Furthermore, the extreme climate guarantees the preservation and safety of data for over 500 years, making it strong enough to withstand nuclear and Electromagnetic Pulse weapons.

## What

This zero-emission repository stores data

# Popular deposits in AWA

**India:** High-resolution pictures of the Ajanta caves, Taj Mahal, etc. and the Bhagavad Gita.

Brazil: Historical documents of national archives.

Kosovo: The oral history of Kosovo in a video format. Norway: The registry of their national health data.

using nanotechnology and converts data into a photo-sensitive 35mm film, called the piqlFilm. These films are designed to endure all future technological advancements. The film is then safeguarded by a box known as the piqlBox which enables secure storage of the data. Users can easily register and upload their data in any file format on the piglFilm, which is then stored in the form of QR codes to enhance security. The security is such that the naked eye cannot see the QR code without using a microscope. With no requirement of servers, migration, or electricity to keep the data alive for centuries, this vault now hosts more than twenty-one terabytes of open-source code by GitHub.

#### How

Once a client has registered themselves, it is very easy to access the cloud storage provided by the company to make their own piqlFilm. The clients send their data both digitally and physically and can retrieve it back any time they want. Following are the steps to process the data on a piqlFilm:

#### Step 1 Free user registration

Registration at arcticworldarchive.org is absolutely free of cost for any user. The data can be shared for their future use or for the generations to come.

## Step 2 Transfer of user data

The users can upload unlimited data in AWA on multiple piqlFilms. However, the data capacity of each individual piqlFilm is capped at 120 GB. The data is shared through a secure HTTPS file transfer with TLS 1.2, 256bit AES encryption and SHA384.

## Step 3 Structuring and editing data

The user can easily access, structure, and edit their data anytime they like until the uploading is finalised. The unlimited access membership to the cloud storage is free for 45 days. Post it, three different packages are made available to the users, ranging from 9 to 49 pounds every month.

#### Step 4 Payment for storage facility

Once the user is done uploading the data, the user must pay for the storage facility before the data is converted into a piqlFilm. The storage pricing is divided into two different packages, namely, Dedicated piqlFilm and Shared piqlFilm. Both the packages are priced differently at 8900 pounds and 99 pounds respectively.

## Step 5 Preparation of data

**Big Story** 

As soon as the payment is made, the data uploaded by the user is then prepared in a unique format to be uploaded on piqlFilm.

## Step 6 Uploading data on piqlFilm

The data is uploaded and preserved on piqlFilm as a one-of-a-kind and extremely durable data storage that is exceptionally secure, non-hackable, and unalterable.

# Step 7 Sending piqlFilm to Svalbard

The piqlFilm is then physically sent to the secure vault in Svalbard, where it is stored for the duration of the user's package.

## Step 8 Storing of data in the vault

Once the data reaches Svalbard, it's stored in the vault. But, since the data at AWA is a repository for World Memory, built to be shared with future generations, the data is an open source. Howbeit, they also have a secret vault at for storing the confidential data.

## Step 9 Data deposit ceremony

When the data is successfully stored, the users of AWA can attend a public, private or even an online deposit ceremony.

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