

# Cloud Storage for Preservation

## NDSA Levels of Digital Preservation

### Vendor Comparison Grid



Provider	Service	Infrastructure	Cost	NDSA Category	Level 1	Level 2	Level 3	Level 4
Chronopolis	Deep Storage	Partnership	High	Storage	Green	Green	Green	Green
				Data Integrity	Green	Yellow	Yellow	Yellow
				Security	Green	Green	Green	Pink
Dternity	Deep Storage	Wholly Owned	High	Storage	Green	Pink	Pink	Pink
				Data Integrity	Yellow	Yellow	Yellow	Yellow
				Security	Green	Green	Green	Green
DuraCloud	Deep Storage, Streaming	Contracted	High	Storage	Green	Green	Green	Pink
				Data Integrity	Yellow	Yellow	Yellow	Green
				Security	Green	Green	Green	Green
EVault	Deep Storage, Production	Wholly Owned	Low	Storage	Green	Yellow	Yellow	Pink
				Data Integrity	Green	Yellow	Yellow	Green
				Security	Green	Green	Green	Green
Glacier	Deep Storage	Wholly Owned	Low	Storage	Green	Green	Yellow	Pink
				Data Integrity	Green	Yellow	Yellow	Yellow
				Security	Green	Green	Green	Green
Preservica	Deep Storage, Production, Streaming	Contracted	High	Storage	Green	Green	Yellow	Pink
				Data Integrity	Yellow	Green	Green	Green
				Security	Green	Green	Green	Green

Download full profiles on each cloud storage vendor listed here on our Papers & Presentations page at <http://www.avpreserve.com/avpsresources/papers-and-presentations/>.





	Level 1 (Protect)	Level 2 (Know)	Level 3 (Monitor)	Level 4 (Repair)
Storage	<ul style="list-style-type: none"> <li>Two complete copies that are not collocated</li> </ul>	<ul style="list-style-type: none"> <li>At least three complete copies</li> <li>At least one copy in a different geographic location</li> </ul>	<ul style="list-style-type: none"> <li>At least one copy in a geographic location with a different disaster threat</li> <li>Obsolescence monitoring for storage system(s)</li> </ul>	<ul style="list-style-type: none"> <li>At least three copies in geographic locations with different disaster threats</li> </ul>
Chronopolis				
Dternity				
DuraCloud				
EVault				
Glacier				
Preservica				

Data Integrity	<ul style="list-style-type: none"> <li>Check file fixity on ingest if it has been provided with content</li> <li>Create fixity info if it wasn't provided with the content</li> </ul>	<ul style="list-style-type: none"> <li>Check fixity on all ingests</li> <li>Virus-check high risk content</li> </ul>	<ul style="list-style-type: none"> <li>Check fixity of content at fixed intervals</li> <li>Maintain logs of fixity info; supply audit on demand</li> <li>Ability to detect corrupt data</li> <li>Virus-check all content</li> </ul>	<ul style="list-style-type: none"> <li>Check fixity of all content in response to specific events or activities</li> <li>Ability to replace/repair corrupted data</li> <li>Ensure no one person has write access to all copies</li> </ul>
Chronopolis				
Dternity				
DuraCloud				
EVault				
Glacier				
Preservica				

Security	<ul style="list-style-type: none"> <li>Identify who has read, write, move, and delete authorization to individual files</li> <li>Restrict who has those authorization to individual files</li> </ul>	<ul style="list-style-type: none"> <li>Document access restrictions for contents</li> </ul>	<ul style="list-style-type: none"> <li>Maintain logs of who performed what actions on files, including deletions and preservation actions</li> </ul>	<ul style="list-style-type: none"> <li>Perform audit of logs</li> </ul>
Chronopolis				
Dternity				
DuraCloud				
EVault				
Glacier				
Preservica				