**NDSA Levels of Digital Preservation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Level One (Protect Your Data)** | **Level Two (Know Your Data)** | **Level Three (Monitor Your Data)** | **Level Four (Repair Your Data)** |
| Storage and Geographic Location | - Two complete copies that are not collocated  - For data on heterogeneous media (optical discs, hard drives, etc.) get the content off the medium and into your storage system | - At least three complete copies  - At least one copy in a different geographic location  - Document your storage system(s) and storage media and what you need to use them | - At least one copy in a geographic location with a different disaster threat  - Obsolescence monitoring process for your storage system(s) and media | - At least three copies in geographic locations with different disaster threats  - Have a comprehensive plan in place that will keep files and metadata on currently accessible media or systems |
| File Fixity and Data Integrity | - Check file fixity on ingest if it has been provided with the content  - Create fixity info if it wasn’t provided with the content | - Check fixity on all ingests  - Use write blockers when working with original media  - Virus-check high risk content | - Check fixity of content at fixed intervals  - Maintain logs of fixity info; supply audit on demand  - Ability to detect corrupt data  - Virus-check all content | - Check fixity of all content in response to specific events or activities  - Ability to replace/repair corrupted data  - Ensure no one person has write access to all copies |
| Information Security | - Identify who has read, write, move and delete authorization to individual files  - Restrict who has those authorizations to individual files | - Document access restrictions for content | - Maintain logs of who performed what actions on files, including deletions and preservation actions | - Perform audit of logs |
| Metadata | - Inventory of content and its storage location  - Ensure backup and non-collocation of inventory | - Store administrative metadata  - Store transformative metadata and log events | - Store standard technical and descriptive metadata | - Store standard preservation metadata |
| File Formats | - When you can give input into the creation of digital files encourage use of a limited set of known open formats and codecs | - Inventory of file formats in use | - Monitor file format obsolescence issues | - Perform format migrations, emulation and similar activities as needed |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Current Level** | **Description of Current Practice/Evidence** | **Target Level** | **Actions Required to Achieve New Level** |
| Storage and Geographic Location |  |  |  |  |
| File Fixity and Data Integrity |  |  |  |  |
| Information Security |  |  |  |  |
| Metadata |  |  |  |  |
| File Formats |  |  |  |  |