<table>
<thead>
<tr>
<th>Level 1 (Protect your data)</th>
<th>Level 2 (Know your data)</th>
<th>Level 3 (Monitor your data)</th>
<th>Level 4 (Repair your data)</th>
</tr>
</thead>
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| **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 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 ingest  
- 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 | - 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 |
| **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 | - Perform format migrations, emulation and similar activities as needed |