

## 5.1.1.3

5.1.1.3 - The repository shall have effective mechanisms to detect bit corruption or loss.

Every file managed within the Storage service has an associated cryptographically-secure checksum that is periodically recalculated by the Merritt Fixity service to detect bit-level corruption. If damage is discovered, it can be repaired by copying the necessary data from a verified replica. The Fixity service runs across the entire repository and generates reports on its activities daily.

Version	Date last updated	Updated by
1	May 21, 2012	pw