## **Fixity Checking**

When you ingest a binary resource into Fedora, you have the option of providing any or all of the following digests for that resource: SHA-1, SHA-256, and /or MD5. If you provide any of these digests on-ingest, Fedora will internally calculate and verify a match with the provided digest(s). RESTful HTTP API - Providing alternate or multiple digests on ingest

The digest values you provide will be stored by Fedora as values on the "premis:hasMessageDigest" property. RESTful HTTP API - Changing the default fixity checking algorithm

- Note1: This property will always include, at least, the system-generated SHA-1 value

- Note2: This property is immutable and can only be populated by the system on resource ingest.

If you do not provide any digest on-ingest, Fedora will create and store the SHA-1 digest for the binary resource.

Subsequent to ingest, you can request that Fedora recalculate and verify the binary resource's digest against a stored value. By default, Fedora recalculates and compares the SHA-1 for this on-demand fixity checking. If, however, you would prefer that Fedora verify against one of the other digests that you provided at the time of ingest, you can configure Fedora to do that by creating the property "fedoraconfig:defaultDigestAlgorithm", and setting it to any of the following values: SHA-1, SHA-256, MD5