**INDEX\_DESCRIPTOR:**

**As-Is**

INDEX\_SG string (4) - signature

ID long

NAME string (24)

PREV long

NEXT long

ROOT\_NODE long

**New:**

UNIQUE string (“y”/”n”)

DELIM string(1) (delimiter: 1 char or “”-no delimiter)

STATE string(1) (“u” – undefined; “a” - active; “p” – pending (created and space is not empty); “r” – recreation pending (fields are modified)

FIELDS (1..n – concatenation)

FIELD string (8) (“@id”; “@int\_id”; “@uid”; @title; “@type”; xpath)

@id, @int\_id – ToString(“D12”)

MAX\_LENGTH int – truncate if exceeds

CASE\_SENSITIVE string (1) (“y”/”n”)

**APPLICATION IMPACT:**

**Create New Object** – create indexes that includes base fields (“@id”; “@int\_id”; “@uid”; @title; “@type”)

**Delete Object** – delete indexes that includes base fields (“@id”; “@int\_id”; “@uid”; @title; “@type”) + if *xpath* exists in object tree and not empty(?).

**Update Object Fields** –

1. Update base fields: re-create indexes that includes base fields (“@id”; “@int\_id”; “@uid”; @title; “@type”)
2. Delete node – if this node in *xpath* – delete index
3. Add node (set for fields) – create index if node in *xpath* and not empty
4. Change field (node in *xpath*)

If old value is not empty – delete old index

If new value is not empty – create new index

**Update approach**: save xpath, old and new values to use in S3Object.Save for indexes (special node in object XML, will be purged after indexes update in Save.