SDF Quality for Round Trips

- Problem: A model converted to SDF and back (i.e. making a round trip) will differ substantially from the original if no additional measures are taken.
- Why? Conversion between SDF and other formats does not always work in an injective, one-to-one manner.
- Solution: a new SDF quality

SDF Quality for Round Trips: Suggestion

- Statement `origin` in `sdfinfo` specifies original format
- `commonqualities` are extended by `origin` statement containing a named set of `originqualities`
SDF Quality for Round Trips: Example

```yml
module example {
  namespace "...";
  prefix "...";
  
  typedef exampleTpdf {
    type union {
      type string;
      type dec64;
    }
  }
}
```

YANG definition of a derived type based on the union built-in type

Conversion to SDF

```json
{
  "info": {
    "copyright": "...",
    "license": "...",
    "title": "...",
    "version": "...",
    "origin": {
      "formatname": "YANG",
      "formatref": "RFC 7950"
    }
  },
  "sdfData": {
    "exampleTpdf": {
      "sdfChoice": {
        "string": { "type": "string" }
      },
      "dec64": { "type": "number" }
    },
    "origin": {
      "typedef": {
        "statement": "typedef"
      },
      "type": {
        "statement": "type",
        "argument": "union"
      }
    }
  }
}
```