

### 5.6.2 RIF-BLD

The RIF Basic Logic Dialect basically corresponds to Horn logic with equality plus

- data types and built ins, and
- frames.

RIF-BLD, like all other RIF variants, is expected to support a uniform set of commonly used datatypes, predicates, and functions. This set includes data types (such as *integer*, *boolean*, *string*, *date*), “built-in” predicates (such as *numeric-greater-than*, *starts-with*, *date-less-than*), and functions (such as *numeric-subtract*, *replace*, *hours-from-time*) ranging over these data types.

As an example, suppose we wish to express a rule stating that an actor is a movie star if he has starred in more than three successful movies, produced in a span of at least five years. And a film is considered successful if it has received critical acclaim (say, a rating higher than 8 out of 10) or was financially successful (produced more than \$100 million in ticket sales). These rules should be evaluated against the DBpedia data set.

These rules can be expressed in RIF-BLD as follows:

```
Document(
  Prefix(func <http://www.w3.org/2007/rif-builtin-function#>
  Prefix(pred <http://www.w3.org/2007/rif-builtin-predicate#>
  Prefix(rdfs <http://www.w3.org/2000/01/rdf-schema#>
  Prefix(imdbrel <http://example.com/imdbrelation#>
  Prefix(dbpedia <http://dbpedia.org/ontology/>
  Prefix(ibdbrel <http://example.com/ibdbrelation#>
Group(
  Forall ?Actor ?Film ?Year (
    If And( dbpedia:starring(?Film ?Actor)
           dbpedia:dateOfFilm(?Film ?Year)
```