Typing

```
document hotelrecord {
    required string hotelID;
    required group hotel;
            required string name;
            optional group address {
                    required string city;
            }
            optional group roomprice {
                    optional integer single;
                    optional integer double;
            }
    repeated group staff {
            repeated string language;
    }
}
```

Key-value pairs

hotelID : 'h1',
hotel.name : 'Palace Hotel',
hotel.roomprice.single : null,
hotel.roomprice.double :
null,
staff.language : 'English',
staff.language : 'German',
staff.language : 'English',
staff.language : 'Spanish',
staff.language : 'English,',

hotelID : 'h2',
hotel.name : 'Eden Hotel',
hotel.address.city : 'Oldtown',
hotel.roomprice.single : 85,
hotel.roomprice.double : 120,
staff.language : null,

hotelID : 'h3',
hotel.name : 'Leonardo
Hotel',
hotel.address.city :
'Newtown',
hotel.roomprice.single : null,
hotel.roomprice.double :
100,
staff.language : 'English',
staff.language : 'French'

r-level, d-level 'h1'

hotelID : 'h1' (rep: 0, def: 0),
hotel.name : 'Palace Hotel' (rep: 0, def: 0),
hotel.roomprice.single : null (rep : 0, def : 0),
hotel.roomprice.double : null (rep : 0, def : 0),
staff.language : 'English' (rep: 0, def : 2),
staff.language : 'German' (rep: 1, def : 2),
staff.language : 'English' (rep 2, def : 2),
staff.language : 'Spanish' (rep : 1, def : 2),
staff.language : 'English,' (rep : 2, def : 2),

r-level, d-level 'h2'

hotelID : 'h2' (rep : 0, def : 0),
hotel.name : 'Eden Hotel' (rep : 0, def : 0),
hotel.address.city : 'Oldtown' (rep : 0, def : 1),
hotel.roomprice.single : 85 (rep : 0, def : 2),
hotel.roomprice.double : 120 (rep : 0, def : 2),
staff.language : null (rep : 0, def : 0),

r-level, d-level 'h3'

hotelID : 'h3' (rep : 0, def : 0),

hotel.name : 'Leonardo Hotel' (rep : 0, def : 0),

hotel.address.city : 'Newtown' (rep : 0, def : 1),

hotel.roomprice.single : null (rep : 0, def : 1),

hotel.roomprice.double : 100 (rep : 0, def : 2) ,

staff.language : 'English' (rep : 0, def : 2),

staff.language : 'French' (rep : 1, def : 2)

Striped representation

hotelID

value	rep	def
'h1'	0	0
'h2'	0	0
'h3'	0	0

hotel.name

value	rep	def
'Palace Hotel'	0	0
'Edan Hotel'	0	0
'Leonardo Hotel'	0	0

staff.languages

value	rep	def
'English'	0	2
'German'	1	2
'English'	2	2
'Spanish'	1	2
'English'	2	2
null	0	0
'English'	0	2
'French'	1	2

Hotel.roomprice.single

value	rep	def
null	0	0
85	0	2
null	0	1

Hotel.roomprice.double

value	rep	def
null	0	0
120	0	2
100	0	2

hotel.address.city

value	rep	def
null	0	0
'Oldtown'	0	1
'Newtown'	0	1

Triple store

Subject	Predicate	Object
…country/AL/	rdf:type	:Country
…country/AL/	:name	'Germany'
…country/AL/	:localName	Bundesrepublik Deutschland (die)
…country/AL/	:carCode	'D'
…country/AL/	:area	28750
…country/AL/	:capital	/D/province/Berlin/city/Berlin/
…		

Wide property table

Subject	rdf:type	:name	:carCode	:area	:capital	:localname
…country/AL/	:Country	'Albania'	'AL'	28750	…/Tirana	Null
…country/GR/	:Country	'Greece'	Null	131940	…/Athina	Null
…country/D/	:Country	'Germany'	'D'	Null	…/Berlin	'Bundesrepublik Deutschland (die)'

Vertical partitioning

Type

Subject	Object
…country/AL/	:Country
…country/GR/	:Country
…country/D/	:Country

Capital

Subject	Object
…country/AL/	…/Tirane
…country/GR/	…/Athina
…country/D/	…/Berlin

Area

Subject	Object
…country/AL/	28750
…country/GR/	131940
…country/D/	Null

Conf code

Subject	Object
…country/AL/	'AL'
…country/GR/	'GR'
…country/D/	Null