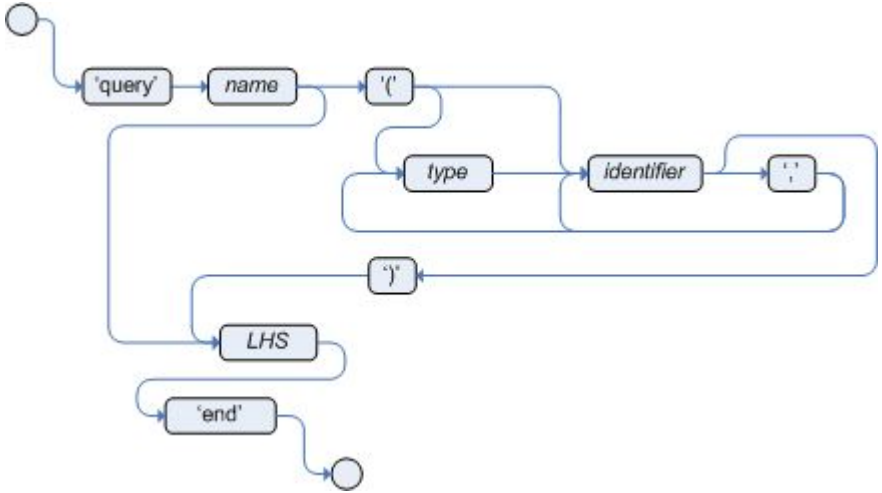
2023 BACKWARD CHAINING

Knowledge based systems

SADRŽAJ

Query



Query

- Jednostavan način za pretragu radne memorije
- Sadrži samo LHS deo pravila
- Za razliku od pravila može da prima parametre

```
query "people over the age of 30"
    person : Person( age > 30 )
end

query "people over the age of x"  (int x, String y)
    person : Person( age > x, location == y )
end
```

Query

- Query je moguće pozvati u pravilima ili direktno iz koda upotrebom ***getQueryResults*** metode
- *public QueryResults getQueryResults(String query, Object... arguments);*

```
QueryResults results = ksession.getQueryResults( "people over the age of 30" );
System.out.println( "we have " + results.size() + " people over the age  of 30" );

for ( QueryResultsRow row : results ) {
    Person person = ( Person ) row.get( "person" );
    System.out.println( person.getName() + "\n" );
}
```

Pozicioni argumenti

- Pozicioni argumenti u drools-u omogućavaju provjeru jednakosti bez eksplicitnog imenovanja atributa\
- Umjesto: ***IsPartOf(w == whole, p == part)***, koristi se ***IsPartOf(w, p);***

```
public class IsPartOf<T> {
    @Position(0)
    public final T whole;
    @Position(1)
    public final T part;
}
declare Cheese
    name : String @position(1)
    shop : String @position(2)
    price : int @position(0)
end
```

Pozicini argumenti

- bound - input
- unbount - output

w	p	Resulting pattern
bound	bound	IsPartOf(whole == w, part == p)
not bound	bound	IsPartOf(w: whole, part == p)
bound	not bound	IsPartOf(whole == w, p: part)
not bound	not bound	IsPartOf(w: whole, p: part)

Za pozivanje Query-ja iz java koda sa unbound varijablom iskoristiti:
org.kie.api.runtime.rule.Variable.v

Pitanja?