

# wme.pl

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# 1 Working Memory Management

Assertions are hashed on some index.

Assertions are grouped into *NI* numeric levels and zap can reset all working memory elements from level N2 and above.

## 2 Header

### 2.1 Flags \*/

```
:- dynamic(wme/3). /*
```

## 3 Body \*/

```
make(W) :-  
    wme(W,I,_), hash_term(I,H), assert(hashed(H,W)). /*
```

### 3.1 Finding WMEs \*/

```
wmes(L) :- wmes(-1,L).  
wmes(N,All) :-  
    setof(L=wme(W,I,L), N^(wme(W,I,L),L>=N), Temp)  
    -> maplist(arg(2),Temp,All)  
    ; All=[]. /*
```

### 3.2 Reset \*/

```
reset :-  
    forall((wme(W,_,_), functor(W,F,A)), dynamic(F/A)). /*
```

### 3.3 Zap

Zap from level N and above. \*/

```
zap :- zap(-1).  
zap(N) :-  
    wmes(N,All),  
    forall(member(wme(W,_,_),All), retractall(hashed(_,W))). /*
```

### 3.4 Report

Report upwards from level N. \*/

```
report :- report(-1).  
report(N) :-  
    wmes(N,All),  
    member(wme(W,_,_),All),  
    functor(W,F,A),  
    format('% ~w\n',F/A),
```

```
W,  
  numbervars(W,0,_),  
  format('~p.\n',W),  
  fail.  
report(_).
```