```
sigma_decls_mng_value  THM

⊢  ∀ds:Collection(dec()), rho:Decl, a:(Σ[[ds]] rho).
|  value(a) ∈ [[dec_lookup(ds;kind(a))]] rho
| by Auto THEN D 3 THEN All (Unfold ‘decl_type‘) THEN All Reduce
|
1. ds : Collection(dec())
2. rho : Decl
3. l : Label
4. a1 : [[ds]] rho(l)
⊢  a1 ∈ [[dec_lookup(ds;l)]] rho
| by All (Unfold ‘sts_mng‘) THEN MemTypeCD
THENA Auto THEN D (-1)
|
|
1. ds : Collection(dec())
2. rho : Decl
3. l : Label
4. a1 : [[ds]] rho(l)
5. x : SimpleType
6. x ∈ dec_lookup(ds;l)
⊢  a1 ∈ [[x]] rho
| by Using [‘ds’,ds; ‘x’, l] (BackThruLemma ‘decls_mng_subtype‘)

|    THEN Auto
|
1. ds : Collection(dec())
2. rho : Decl
3. l : Label
4. [[ds]] rho(l)
5. x : SimpleType
6. x ∈ dec_lookup(ds;l)
⊢  mk_dec(l, x) ∈ ds  by RWW "member_dec_lookup" (-1) THEN Auto
END
```