```
union_wf_stype  THM

⊢  ∀'a,'b:S. 'a+'b ∈ S  by Unab [‘stype‘] THEN StrongAuto
|
1. 'a : {T:Type| ∃x:T. True }
2. 'b : {T:Type| ∃x:T. True }
⊢  'a+'b ∈ {T:Type| ∃x:T. True }  by AllHyps Analyze THEN StrongAuto
|
1. 'a : Type
2. ∃x:'a. True
3. 'b : Type
4. ∃x:'b. True
⊢  'a+'b ∈ {T:Type| ∃x:T. True }  by Analyze THEN StrongAuto
|
.....set predicate .....
1. 'a : Type
2. ∃x:'a. True
3. 'b : Type
4. ∃x:'b. True
⊢  ∃x:'a+'b. True  by AllHyps Analyze THEN StrongAuto
|
1. 'a : Type
2. 'a
3. True
4. 'b : Type
5. 'b
6. True
⊢  ∃x:'a+'b. True  by DTerm inr(x) 0 THEN StrongAuto
END
```