

Inference at * 1 1

of proof for Lemma comp_nat_ind_a:

....assertion.... NILNIL

1. $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$
2. $\forall i:\mathbb{N}. (\forall j:\mathbb{N}. (j < i) \Rightarrow P(j)) \Rightarrow P(i)$
3. $\mathbb{N}$
 $\vdash \forall j, s:\mathbb{N}. (s < j) \Rightarrow P(s)$
by (% do simple nat induction%
(((BLemma 'nat_ind_a'
CollapseTHENM (RepD)).)

CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok
:t) inil_term)))

1:

4. $s : \mathbb{N}$
5. $s < 0$
 $\vdash P(s)$

2:

4. $j : \mathbb{N}^+$
5. $\forall s:\mathbb{N}. (s < (j - 1)) \Rightarrow P(s)$
6. $s : \mathbb{N}$
7. $s < j$
 $\vdash P(s)$

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