

Inference at * 1 1 2 1
of proof for Lemma complete_nat_ind_with_y:

....assertion.... NILNIL

1. $P : \mathbb{N} \rightarrow \mathbb{P}\{k\}$
2. $g : \forall i:\mathbb{N}. (\forall j:\mathbb{N}i. P(j)) \Rightarrow P(i)$
3. $Y(\lambda f,x. g(x,f)) \in !\text{Void}() \rightarrow !\text{Void}()$
 $\vdash \forall n:\mathbb{N}. Y(\lambda f,x. g(x,f)) \in (\forall m:\mathbb{N}n. P(m))$
by ((D 0)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n
)) (first_tok :t) inil_term)))

1:

4. $n : \mathbb{N}$
 $\vdash Y(\lambda f,x. g(x,f)) \in (\forall m:\mathbb{N}n. P(m))$
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