Inference at $*$ 1
of proof for Lemma int_lt_to_int_upper:

$\vdash \forall i{:}\mathbb{Z}$, $A{:}(\{i{+}1\ldots\}\rightarrow \mathbb{P})$. $(\forall j{:}\mathbb{Z}.\ (i < j) \Rightarrow A(j)) \Longleftrightarrow (\forall j{:}\{i{+}1\ldots\}.\ A(j))$
by ((GenUnivCD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 2:n),(first_nat
3:n)) (first_tok :t) inil_term)))·

1:

1. $i : \mathbb{Z}$
2. $A : \{i{+}1\ldots\}\rightarrow \mathbb{P}$
3. $\forall j{:}\mathbb{Z}.\ (i < j) \Rightarrow A(j)$
4. $j : \{i{+}1\ldots\}$

$\vdash A(j)$

2:

1. $i : \mathbb{Z}$
2. $A : \{i{+}1\ldots\}\rightarrow \mathbb{P}$
3. $\forall j{:}\{i{+}1\ldots\}.\ A(j)$
4. $j : \mathbb{Z}$
5. $i < j$

$\vdash A(j)$

.

---

http://www.nuprl.org/FDLcontent/p0_942988_/p121_94750_{int_lt_to_int_upper}1.html