Inference at $*$
of proof for Lemma add_mono_wrt_le:

$\vdash \forall a, b, n{:}\mathbb{Z}.\ (a \le b) \iff ((a{+}n) \le (b{+}n))$
by ((GenUnivCD)
CollapseTHENA ((Auto_aux (first_nat 1:n) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1:

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $n : \mathbb{Z}$
4. $a \le b$

$\vdash (a{+}n) \le (b{+}n)$

2:

1. $a : \mathbb{Z}$
2. $b : \mathbb{Z}$
3. $n : \mathbb{Z}$
4. $(a{+}n) \le (b{+}n)$

$\vdash a \le b$

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http://www.nuprl.org/FDLcontent/p0_942988_/p121_76490_{add_mono_wrt_le}.html