

# The `syntrace` package\*

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## Abstract

This file describe the `syntrace` package. This package is intended for  $\text{\LaTeX}$  users who must deal with traces in `synttree`.

## 1 Usage

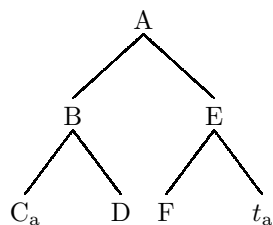
The `syntrace` package add a way to deal with trace in tree produce using the `synttree` package.

<code>\traceLabel</code>	The <code>\traceLabel{label}</code> set and draw a start trace. The parameter is the label to use for the reference.
<code>\traceReference</code>	The <code>\traceReference{ref}</code> draw a trace linked with the specified reference.
<code>\synttree</code>	The <code>\synttree</code> is redefined to auto reset the counter of trace at the start of a tree. The <code>\synttree*</code> work as the standard <code>\synttree</code> command (without auto resetting the counter).

## 2 Examples

### 2.1 Simply example

```
% \synttree[A %  
%           [B [C\traceLabel{11}] [D]] %  
%           [E [F] [\traceReference{11}]]%  
%           ]  
%
```

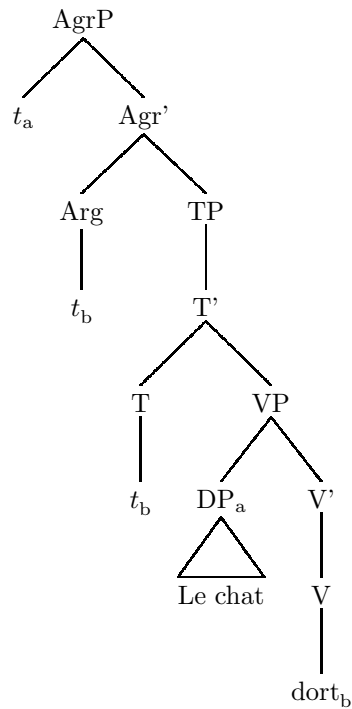


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\*This document corresponds to `syntrace` v1.0, dated 2006/08/13.

## 2.2 One complexe example

```
% \synttree[AgrP
%      [\traceReference{sujet1}]
%      [Agr'
%      [Arg [\traceReference{verbe1}]]
%      [TP
%      [T'
%      [T [\traceReference{verbe1}]]
%      [VP
%      [DP\traceLabel{sujet1} [.t Le chat]]
%      [V' [V [dort\traceLabel{verbe1}]]]]
%      ]
%      ]
%      ]
%      ]
%      ]
%      ]
%
```



## 3 Implementation

`syntrace@startvalue` This counter define the start value of the trace numbering

```

1 \newcounter{syntrace@startvalue}
2 \setcounter{syntrace@startvalue}{0}

syntrace@labelcounter This counter count the trace
3 \newcounter{syntrace@labelcounter}
4 \setcounter{syntrace@labelcounter}{\arabic{syntrace@startvalue}}

\thesyntrace@labelcounter This macro display the value of the trace counter
5 \renewcommand*{\thesyntrace@labelcounter}{%
6   \alph{syntrace@labelcounter}%
7 }

\syntrace@labelletter This macro display the default letter for the trace
8 \newcommand*{\syntrace@labelletter}{%
9   \ensuremath{t}%
10 }

\syntrace@displaytrace This macro display the value of a trace
11 \newcommand*{\syntrace@displaytrace}[1]{%
12   \raisebox{-.5\height}{\scriptsize\mbox{#1}}%
13 }

\traceLabel This macro add a start trace
14 \newcommand*{\traceLabel}[1]{%
15   \refstepcounter{syntrace@labelcounter}%
16   \syntrace@displaytrace{\thesyntrace@labelcounter}%
17   \label{syntrace-#1}%
18 }

\traceLabel This macro add a reference to a trace
19 \newcommand*{\traceReference}[1]{%
20   \syntrace@labelletter\syntrace@displaytrace{\ref{syntrace-#1}}%
21 }

\syntrace@reset This macro reset the trace counter
22 \newcommand*{\syntrace@reset}{%
23   \setcounter{syntrace@labelcounter}{\arabic{syntrace@startvalue}}%
24 }

synttree This macro add the autoreset to the synttree command
25 \let\syntrace@syntree=\synttree
26 \def\synttree{\@ifstar%
27   \syntrace@syntree%
28   \syntree@star%
29 }
30 \def\syntree@star{%
31   \syntrace@reset%
32   \syntrace@syntree%
33 }

```