CoCoA-5 - Feature \#888

## Escaped newline to allow a long line to be split into several "physical lines"

07 Jun 2016 00:00 - John Abbott

| Status: | New | Start date: | 06 Jun 2016 |
| :---: | :---: | :---: | :---: |
| Priority: | Normal | Due date: |  |
| Assignee: |  | \% Done: | 0\% |
| Category: | enhancing/improving | Estimated time: | 0.00 hour |
| Target version: | CoCoA-5.?.? | Spent time: | 0.75 hour |
| Description |  |  |  |
| Some languages allow long lines to be split into several "physical lines" by inserting an escaped-newline which is simply regarded as no character at all. |  |  |  |
| An example is in a makefile where a line ending with backslash is adjoined to the following line (and the backslash and newline are elided). |  |  |  |
| Should we add such a feature to CoCoA-5? |  |  |  |

## History

\#1-07 Jun 2016 00:05 - John Abbott
I was surprised not to find this issue already in redmine; I'm sure we have talked about it (in the distant past... perhaps before we started to use redmine?).

The idea is to allow something like:

A : = 123 \}
456;
which would be the same as

A := 123456;
because the backslash-newline digraph is simply "ignored" by the parser (apart from incrementing the line counter). In principle, backslash-newline could even appear inside a keyword!

Such a facility would make it very easy to split a long "logical" line across many short "physical lines": just insert backslash-newline every 75 characters.

## \#2-07 Jun 2016 00:15 - John Abbott

I have just checked what happens with bash (which also uses the backslash-newline convention): it may appear inside a keyword or a variable name;
however an end-of-line comment (i.e. preceded by a hash) which ends with a backslash does not then extend to the next line.
If we do adopt this idea, what should happen if an end-of-line comment meets a backslash-newline digraph? Which behaviour is more "natural" (or less "unnatural")?

Note that, as in the example above, even an integer literal can be split across several lines; this could be occasionally useful.

## \#3-07 Jun 2016 00:26 - John Abbott

Unfortunately there are probably some places where backslash-newline cannot be blindly inserted without changing the interpretation of the line: for instance, it might be "delicate" putting one inside another escape sequence... (or inside the backslash-newline escape sequence!)

What should the effect of backslash-backslash-newline-newline be? Probably backslash-backslash is an escape sequence for a single backslash character.

Of course, the most likely use case is splitting a very long line which has been produced as output of some program, and this will probably not contain escape sequences... in such instances there should be no problem inserting backslash-newline blindly whereever is convenient.

