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Subject: Re: U++ Command Line Argument Processor Package

Posted by [captainc](#) on Sat, 15 Nov 2008 17:26:03 GMT

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All new version of UCLAP. Version 0.3.0.

This is a major upgrade to support validation for standard arguments as well as delimited arguments.

Backwards compatibility with 0.2.x series is broken.

Programs called take the form: MyProgramExecutable [OPTIONS] [ARGUMENTS]

Where:

OPTIONS is an unordered list of command line options specified by delimiters and flags

ARGUMENTS is an ordered list of arguments that come after the OPTIONS

Example: the tail program output the last few lines of a file.

tail -n 3 myfile

-n is an option (delimited argument) whose value is 3.

myfile is a normal base argument.

So now, in UCLAP, you specify options and arguments like this:

(From example 3b in package)

```
ArgProcessor ap("CmdLineArgProcessor Example", "3b");
Option<bool> sum_opt ("Summation", "If specified, program will calculate the sum of the
numbers.", true);
Option<bool> avg_opt ("Average", "If specified, program will calculate the average of the
numbers.", true);
MultiArg<double> numbers ("Number", "An number.", true);
ArgSet set1_sum, set2_avg;
set1_sum << sum_opt << numbers;
set2_avg << avg_opt << numbers;
ap << set1_sum << set2_avg;
ap.ProcessCmdLine(CommandLine());
```

And the usage information generated for this code above looks like this:

Usage Information:

1. CmdLineArgProcessorExample -s <Number1> ...

2. CmdLineArgProcessorExample -a <Number1> ...

-s, --summation : If specified, program will calculate the sum of the numbers.

-a, --average : If specified, program will calculate the average of the numbers.

Number : An number.

This argument must be specified 1 to an unlimited number of times.

Todo:

- Work a bit more on output formatting (maybe make an output formatting package).

--> most of the gnu tools limit the line width to 80 characters for all programs that output to the command line. Small consoles might be a problem for the output of this package in certain situations.

- See if using an Xor Argument type would be beneficial and shorten the output.

The zip file contains the main package, a package with examples, and the unit testing package. Topic++ documentation has also been updated.

## File Attachments

1) [CmdLineArgProcessor-0.3.0-all.zip](#), downloaded 630 times

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