

Calc (v1.1)

1. Description

The Calc plugin lets users evaluate (calculate) mathematical expressions on IRC.

This plugin lets you give the bot a mathematical expression, e.g. $25+13*7$, and it will evaluate it and tell you the result. Additionally, it can tell you the factors of a given number, and generate random numbers.

This implementation uses [JEP](#) version 2.3.0.

2. Configuration

The configuration file for this plugin is `system/Calc/CalcConfig.xml`

2.1. commandCalc

The command to perform a calculation. You can set the `authLevel` to control who is allowed to access the command. The `output` is used to define where the output from the command will go.

- **authLevel** - ANY, ADMIN, MASTER, TRUSTED, NONE
- **output** - CHANNEL, PM, NOTICE

```
<commandCalc authLevel="none" output="channel">!calc</commandCalc>
```

2.2. commandCalcHelp

The command to get a list of functions, operators, etc that the Calc command knows. You can set the `authLevel` to control who is allowed to access the command. The `output` is used to define where the output from the command will go.

- **authLevel** - ANY, ADMIN, MASTER, TRUSTED, NONE
- **output** - CHANNEL, PM, NOTICE

```
<commandCalcHelp authLevel="none" output="channel">!calc-help</commandCalcHelp>
```

2.3. commandFactors

The command to get the factors of the given number. You can set the `authLevel` to control who is allowed to access the command. The `output` is used to define where the output from the command will go.

- **authLevel** - ANY, ADMIN, MASTER, TRUSTED, NONE
- **output** - CHANNEL, PM, NOTICE

```
<commandFactors authLevel="none" output="channel">!factors</commandFactors>
```

2.4. commandRandom

The command to get a random number. You can set the `authLevel` to control who is allowed to access the command. The output is used to define where the output from the command will go. You can set the default range from which to return a number when the command is used without parameters.

- **authLevel** - ANY, ADMIN, MASTER, TRUSTED, NONE
- **output** - CHANNEL, PM, NOTICE
- **defaultFrom** - any number
- **defaultTo** - any number

```
<commandRandom authLevel="none" output="channel" defaultFrom="1"
defaultTo="10">!random</commandRandom>
```

3. Commands

3.1. Perform a calculation

Command: !calc

Description: Evaluates an expression and returns the result.

Auth Level: none

Where to give command: channel, pm

Outputs to: same as given

Example(s):

- !calc 25+13*7

3.2. Show list of known functions, operators, etc.

Command: !calc-help

Description: Shows the list of functions, operators, etc. known by the !calc command.

Auth Level: none

Where to give command: channel, pm

Outputs to: same as given

Example(s):

- !calc-help

3.3. Show what factors a number consists of

Command: !factors

Description: Shows what (prime) factors a number consists of.

Auth Level: none

Where to give command: channel, pm

Outputs to: same as given

Example(s):

- !factors 660

3.4. Generate a random number

Command: !random

Description: Generates a random number in the given or default range(ranges are inclusive).

Auth Level: none

Where to give command: channel, pm

Outputs to: same as given

Example(s):

- !random
- !random 6
- !random 10 20

4. Change History

v1.1	Rewrite by EdorFaus , with more features. (Written before seeing v1.0)
v1.0	First Version by DeadEd