

# **CLI**

## **Where PHP meets Command Line**

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# History

- ▣ Developers: Edin Kadribasic, Marcus Börger
- ▣ Borrowed code from CGI
- ▣ First released with PHP 4.2
- ▣ Stable since PHP 4.3
- ▣ Manpage since PHP 4.3.2
- ▣ Capable of '--' switches since PHP 4.3.3
- ▣ More sophisticated switches in PHP 5.0.0

# Comparing CLI and CGI

- ▣ Developed for usage on console
- ▣ No HTTP Headers
- ▣ Text format output for error messages
- ▣ Text format output for version and other information's
- ▣ Direct code execution with access a script
- ▣ Uses its own ini file if present: `php-cli.ini`

# Execute code directly

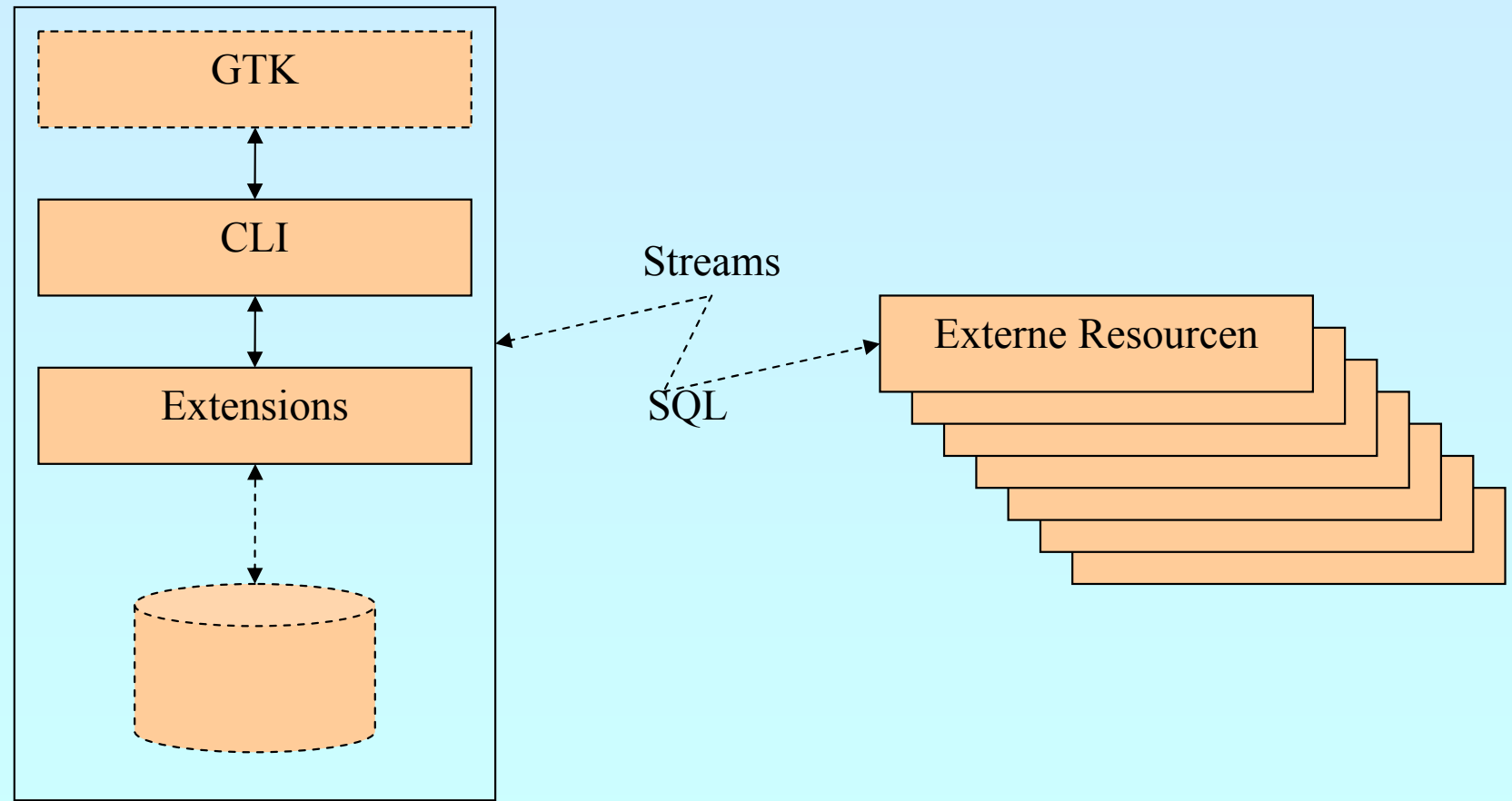
```
> php -r 'echo "hello world!";'  
hello world!
```

```
> php -r 'echo md5($argv[1]);' - whatever  
008c5926ca861023c1d2a36653fd88e2
```

# More differences

- ☑ Simplified access to stdin, stdout, stderr
- ☑ Starts in quiet mode (-q)
- ☑ Does not change working directory
- ☑ \$argc and \$argv are always populated
- ☑ implicit\_flush is always on
- ☑ max\_execution\_time set unlimited

# CLI Structure



# Where to use it?

- ▣ Replaces several command line tools
- ▣ Access internal resources
- ▣ Access external resources
- ▣ Easy test PHP language details during development
- ▣ GUI applications with GTK

# CLI modes

- ▣ Execute scriptes

```
php [options] [-f] file [[--] args...]
```

- ▣ Shebang support

```
#!/php  
<?php  
    . . .  
?>
```





# CLI modes

- ▣ Execute standard input

```
php [options] -- [args...]
```

# CLI modes

- ▣ Direct code execution

```
php [options] -r code [[--] args...]
```

- ▣ Interactive mode

```
php -a
```

# CLI modes

- ▣ Line by line input processing

```
php [-B code] -R code [-E code] [[--] args]
```

- ▣ Line by line input processing with scripts

```
php [-B code] -F code [-E code] [[--] args]
```



# Counting source lines

Try

```
find -regex '.*\.[ch]' -exec wc -l {} \;
```

Try

```
for i in `find -regex '.*\.[ch]'`;do wc -l $i;done;
```

Do

```
find -regex '.*\.[ch]' | xargs wc -l
```

Do

```
find -regex '.*\.[ch]' -exec wc -l {} \; |
    awk '{L=L+$1} END { print L }'
```

Do

```
find -regex '.*\.[ch]' |
    php -R '@$L+=count(file($argn));'
        -E 'echo "$L\n";'
```

# CLI meets CVS

- ▣ Search for locally modified files

```
cvsv -n up 2>/dev/null |  
    awk '/M\ / {print $2}'
```

```
cvsv -n up 2>/dev/null |  
    php -R 'ereg("^M ",$argn) &&  
        print(substr($argn,2))."\n";'
```

# CLI meets CVS

- ▣ CVS clean

```
cvs up -C
```

```
cvs -n up 2>/dev/null |  
    php -R 'ereg("^[MA] ",$argn) &&  
        system("rm -f ".substr($argn,2));'
```

# CLI and PHP5 ?

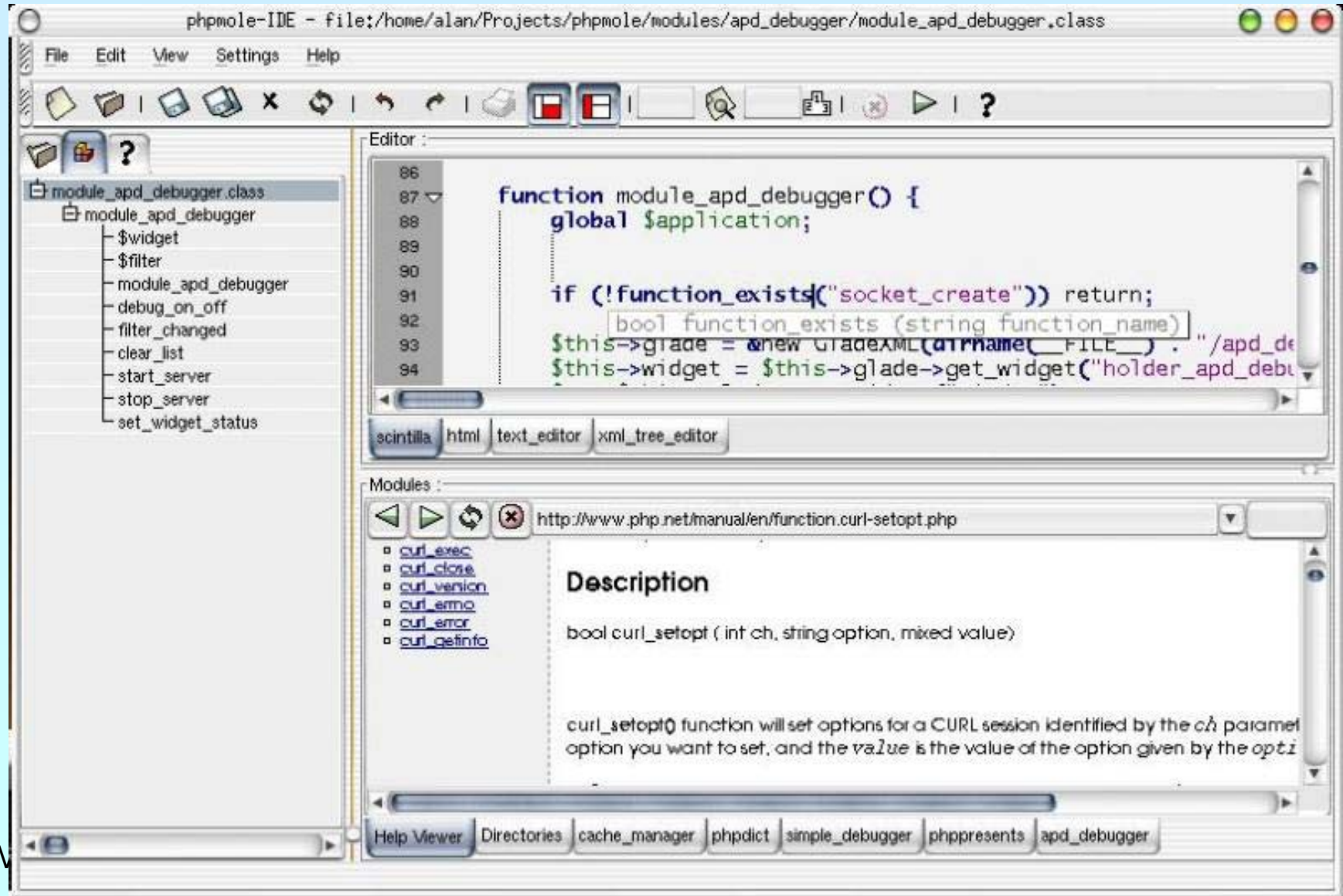
- ▣ New oo features provide new solutions

```
php -r 'foreach(new Dir($argv[1]) as $f)
      echo "$f\n";'
```

```
php -r 'include "dba.inc";
      $db=new dba($argv[1]);
      $db[$argv[2]=$argv[3];'
```



# GTK: phpMole





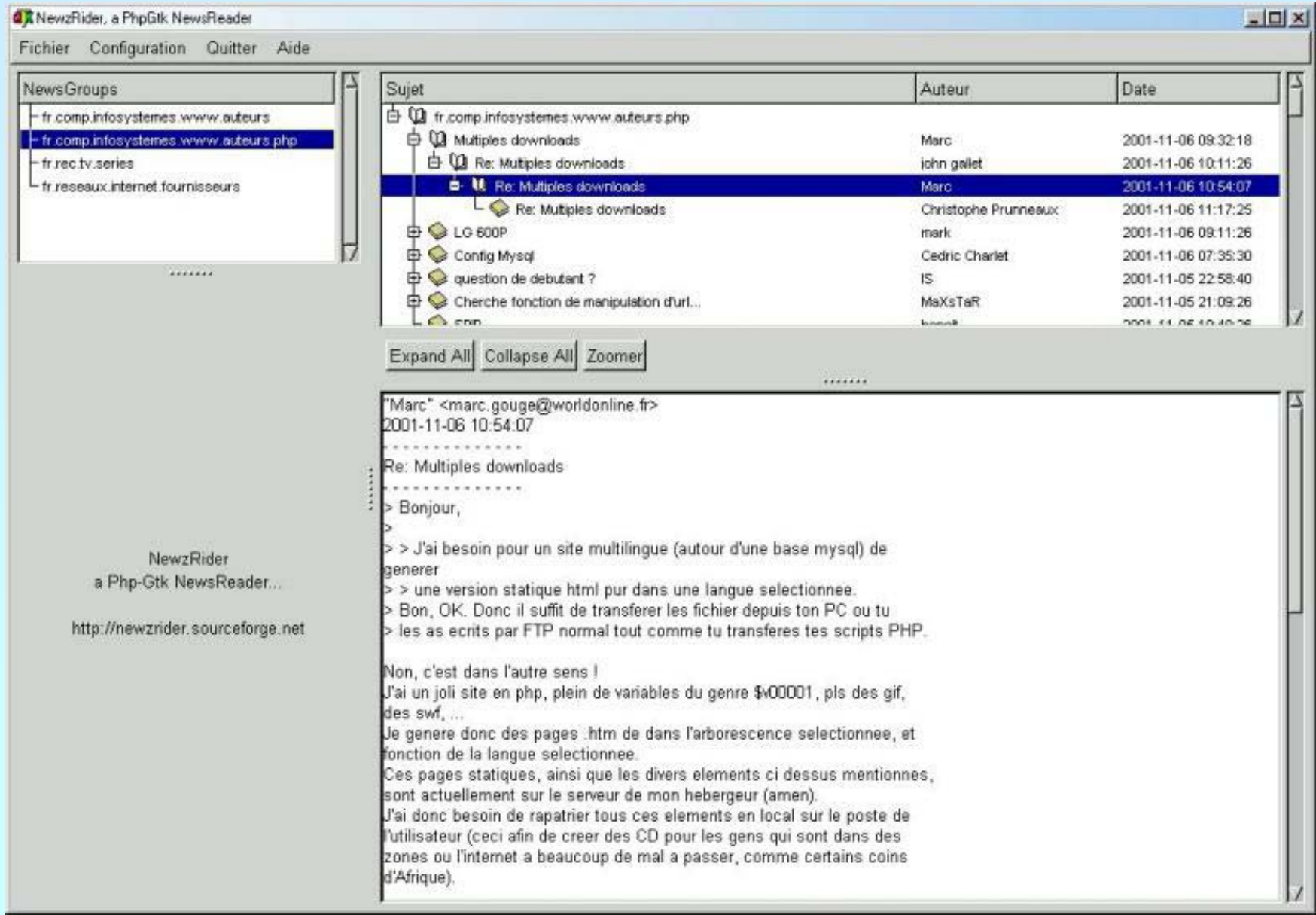
# GTK: AgataReport

The screenshot shows the 'Agata Report' application window. On the left side, there is a vertical red text label 'AGATA REPORT'. The main interface includes:

- Tables:** A dropdown menu showing 'pessoas'.
- Fields of Selected Table:** A list of field names for the 'pessoas' table, with 'id' selected. The list includes: id, identificacao, titulo\_academico, nome, rua, complemento, bairro, cep, ref\_cidade, fone\_particular, fone\_profissional, fone\_celular, fone\_recado, email, email\_alt, estado\_civil, dt\_cadastro, and tipo\_pessoa.
- Link Tables:** A section for defining relationships between tables. It shows 'titulos\_cr' selected in the 'Tables' dropdown. Below it are buttons for relationship types: '=', '>=', '>', '<=', '<', and '<>'. There is also a 'Clear Where' button.
- Fields of Selected Table (Link):** A list of field names for the 'titulos\_cr' table, with 'ref\_pessoa' selected. The list includes: id, ref\_pessoa, ref\_curso, ref\_campus, ref\_perodo, seq\_titulo, and ref\_cobranca.
- Click on line to edit the content:** A table showing the generated SQL query:
 

Block	Content
Select	pessoas.id, pessoas.nome, pessoas.rua, titulos_cr.id, titulos_c
From	pessoas, titulos_cr
Where	pessoas.id = titulos_cr.ref_pessoa and pessoas.id = 5181
Order by	titulos_cr.id asc
Group by	
- Bottom Panel:** Contains icons for file operations and buttons for 'Export TXT', 'Export PS', 'Merge with Doc', and 'Label Tool'.

# GTK: NewzRider



# Resources

- ☑ `man php`
- ☑ <http://www.php.net/features.commandline>
- ☑ <http://gtk.php.net>