

Awesome Command Line Tools

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Netflix

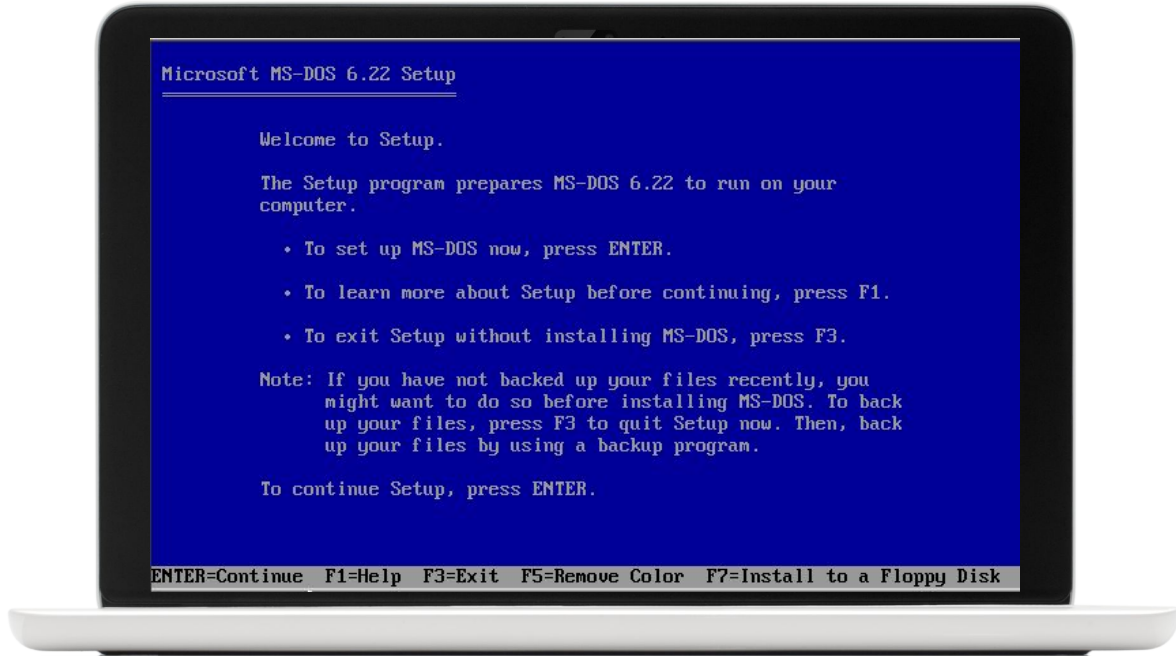
Traffic Engineering

PGCLI & MYCLI

<https://pgcli.com>

<http://mycli.net>

MS-DOS 6.22

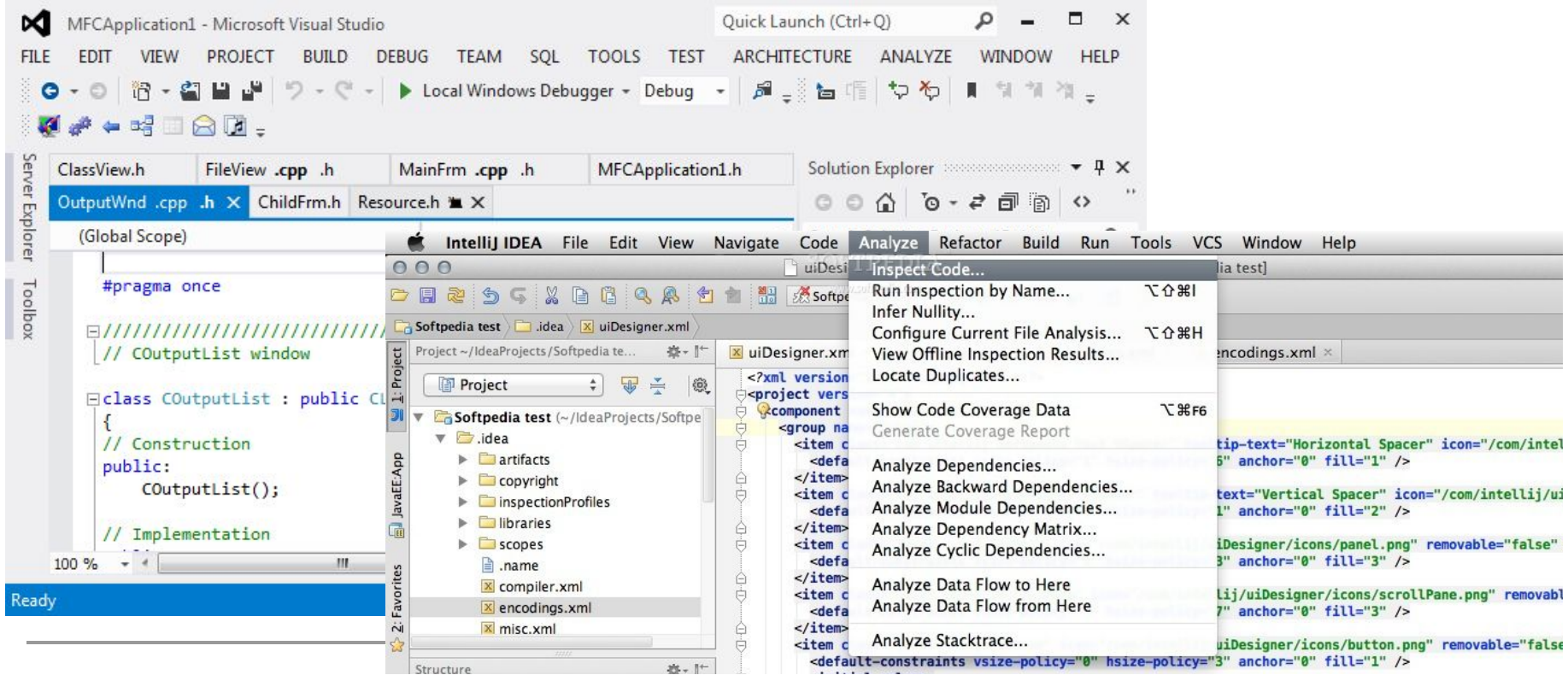


Linux

- Up/Down arrow
- Tab-completion



DISCOVERABILITY



GUI

- ICONS
- MENUS

PGCLI

<https://www.pgcli.com>

Fish Shell

<https://fishshell.com>

DEMO

Discoverability

- Be forthcoming
- Eschew special keys



USER FOCUS

MyCLI

<http://mycli.net>

DEMO

User Focus

- Users come first
- Implementation later



bpython

<https://bpython-interpreter.org>

DEMO

CONFIGURABILITY



Configurability

- Subjective options only



DISCOVERABILITY

USER FOCUS

CONFIGURABILITY

FISHSHELL

BPYTHON

PGCLI

MYCLI



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CHECKLIST

- Persistent History
- History search
- Emacs Keybindings
- Paged Output
- Auto-Completion**
- Minimal Config**
- Syntax Coloring**



prompt-toolkit

<https://github.com/jonathanslenders/python-prompt-toolkit>

REPL

Read/Eval/Print/Loop

```
1 from prompt_toolkit import prompt
2
3 while 1:
4     user_input = prompt('>')
5     print(user_input)
6
```

```
>hello
```

```
hello
```

```
>world
```

```
world
```

```
>Hello Pycon!
```

```
Hello Pycon!
```

```
>█
```

```
1 from prompt_toolkit import prompt
2 from prompt_toolkit.history import FileHistory
3
4 while 1:
5     user_input = prompt('>',
6                         history=FileHistory('history.txt'),
7                         )
8     print(user_input)
```

```
>Hello
```


```
Hello
```

```
>World!
```

```
World!
```

```
>World!
```

```
World!
```

```
(reverse-i-search)`Py`: Hello PyCon!
```

```
1 from prompt_toolkit import prompt
2 from prompt_toolkit.history import FileHistory
3 from prompt_toolkit.auto_suggest import AutoSuggestFromHistory
4
5 while 1:
6     user_input = prompt('>',
7                         history=FileHistory('history.txt'),
8                         auto_suggest=AutoSuggestFromHistory(),
9                         )
10     print(user_input)
```

```
>select  
select  
>select * from abc  
select * from abc  
>select * from abc
```



```
1 from prompt_toolkit import prompt
2 from prompt_toolkit.history import FileHistory
3 from prompt_toolkit.auto_suggest import AutoSuggestFromHistory
4 from prompt_toolkit.contrib.completers import WordCompleter
5
6 SQLCompleter = WordCompleter(['select', 'show', 'from', 'insert', 'update',
7                               'delete', 'drop', 'where'], ignore_case=True)
8
9 while 1:
10     user_input = prompt(u'SQL>',
11                        history=FileHistory('history.txt'),
12                        auto_suggest=AutoSuggestFromHistory(),
13                        completer=SQLCompleter,
14                        )
15     print(user_input)
```

```
SQL>select * from abc
```

```
select
```

```
show
```

```
1 from prompt_toolkit import prompt
2 from prompt_toolkit.history import FileHistory
3 from prompt_toolkit.auto_suggest import AutoSuggestFromHistory
4 from prompt_toolkit.contrib.completers import WordCompleter
5 from pygments.lexers.sql import SqlLexer
6
7 SQLCompleter = WordCompleter(['select', 'show', 'from', 'insert', 'update',
8                               'delete', 'drop', 'where'], ignore_case=True)
9
10 while 1:
11     user_input = prompt(u'SQL>',
12                        history=FileHistory('history.txt'),
13                        auto_suggest=AutoSuggestFromHistory(),
14                        completer=SQLCompleter,
15                        lexer=SqlLexer,
16                        )
17     print(user_input)
```

```
SQL>select * FROM abc where a = 'abc' and
```

```
select  
show  
from  
insert  
update  
delete  
drop  
where
```

CHECKLIST

- ✓ Persistent History
- ✓ History search
- ✓ Emacs Keybindings
- Paged Output
- ✓ **Auto-Completion**
- ✓ **Minimal Config**
- ✓ **Syntax Coloring**



Resources

- `pgcli.com`
- `mycli.net`
- `fishshell.com` (design)
- `bpython-interpretter.org`
- `prompt-toolkit`



Contact

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Thank you!

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