

CISCO IOS

Internetwork Operating
System

Security

Routing

QoS

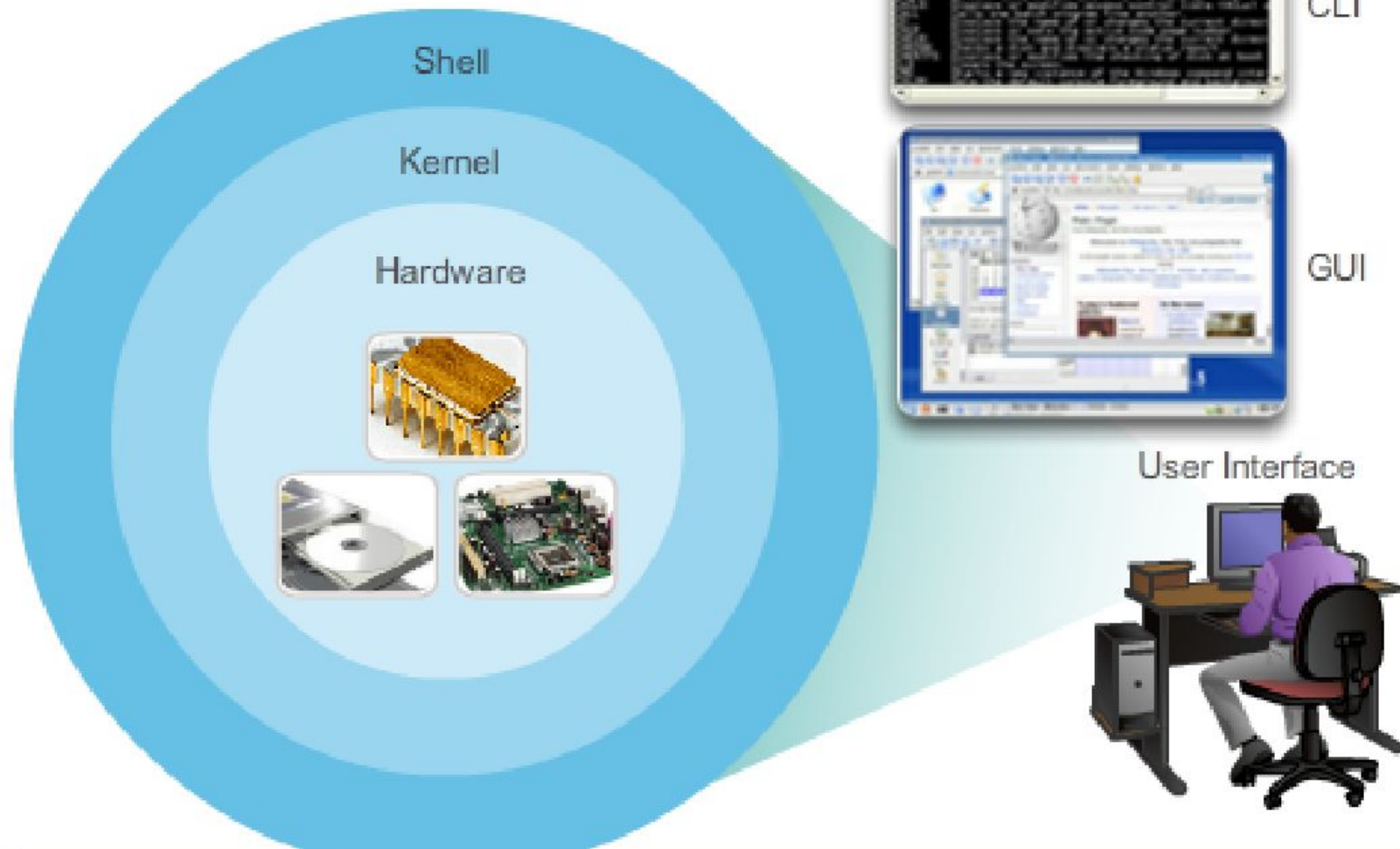


Addressing

Managing Resources

Interface

Operating System



Shell: The user interface that allows users to request specific tasks from the computer. These requests can be made either through the CLI or GUI interfaces.



INSERT



CISCO™

64MB



16-2969-02

Console Port

There are several ways to access the CLI environment. The most common methods are:

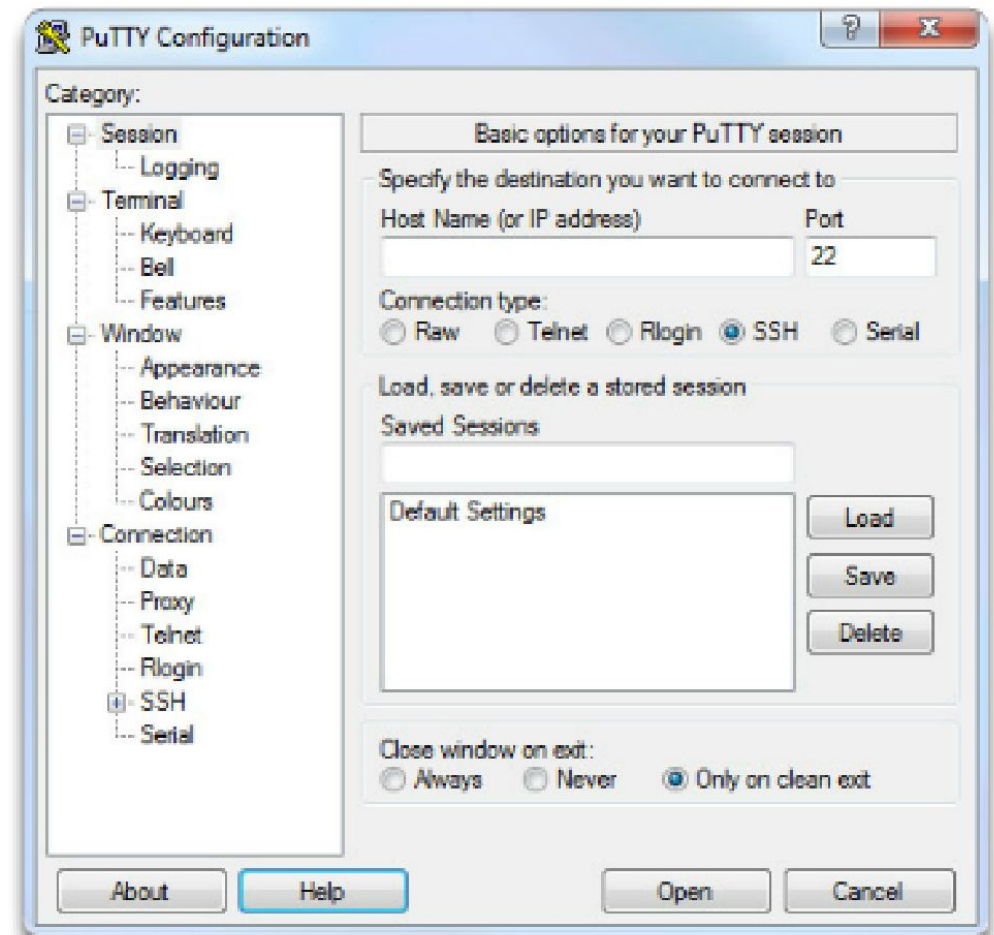
- Console
- Telnet or SSH
- AUX port



AUX Port



PuTTY



IOS Иерархическая структура режимов

User EXEC Command-Router>

ping
show (limited)
enable
etc.

Privileged EXEC Commands-Router#

all User EXEC commands
debug commands
reload
configure
etc.

Global Configuration Commands-Router(config)#

hostname
enable secret
ip route

interface ethernet
serial
dsl
etc.

Interface Commands-Router(config-if)#

ip address
ipv6 address
encapsulation
shutdown/no shutdown
etc.

router rip
ospf
eigrp
etc.

Routing Engine Commands-Router(config-router)#

network
version
auto summary
etc.

line vty
console
etc.

Line Commands-Router(config-line)#

password
login
modem commands
etc.

Пользовательский и привилегированный режимы

User EXEC Mode

Limited examination of router.
Remote access.

```
Switch>
```

```
Router>
```

The **User EXEC** mode allows only a limited number of basic monitoring commands and is often referred to as view-only mode.

The **Privileged EXEC** mode, by default, allows all monitoring commands, as well as execution of configuration and management commands.

Privileged EXEC Mode

Detailed examination of router. Debugging and testing. File manipulation. Remote access.

```
Switch#
```

```
Router#
```


Режимы конфигурации

Privileged EXEC Mode

Privileged EXEC Mode

Detailed examination of router, Debugging and testing. File manipulation. Remote access.

Switch#

Router#



Global Configuration Mode

Global configuration commands.

Switch(config)#

Router(config)#



Other Configuration Modes

Specific service or interface configurations.

Switch(config-mode)#

Router(config-mode)#

Режимы глобальной и частной конфигурации

IOS Prompt Structure

```
Router>ping 192.168.10.5

Router#show running-config

Router (config) #Interface FastEthernet 0/0

Router (config-if) #ip address 192.168.10.1 255.255.255.0
```

The prompt changes to denote the current CLI mode.

```
Switch>ping 192.168.10.9

Switch#show running-config

Switch (config) #Interface FastEthernet 0/1

Switch (config-if) #Description connection to WEST LAN4
```

Переключение между режимами (Switch)

```
Switch con0 is now available.
```

```
Press RETURN to get started.
```

```
User Access Verification
```

```
Password:
```

```
Switch>
```

User EXEC Mode Prompt

```
Switch>enable
```

```
Password:
```

```
Switch#
```

Privileged EXEC Mode Prompt

```
Switch#disable
```

```
Switch>
```

User EXEC Mode Prompt

```
Switch>exit
```

Переключение между режимами (Router)

Router con0 is now available.

Press RETURN to get started.

User Access Verification

Password:

Router>

User EXEC Mode Prompt

Router>**enable**

Password:

Router#

Privileged EXEC Mode Prompt

Router#**disable**

Router>

User EXEC Mode Prompt

Router>**exit**

Структура команды IOS

Switch> ping 192.168.10.5

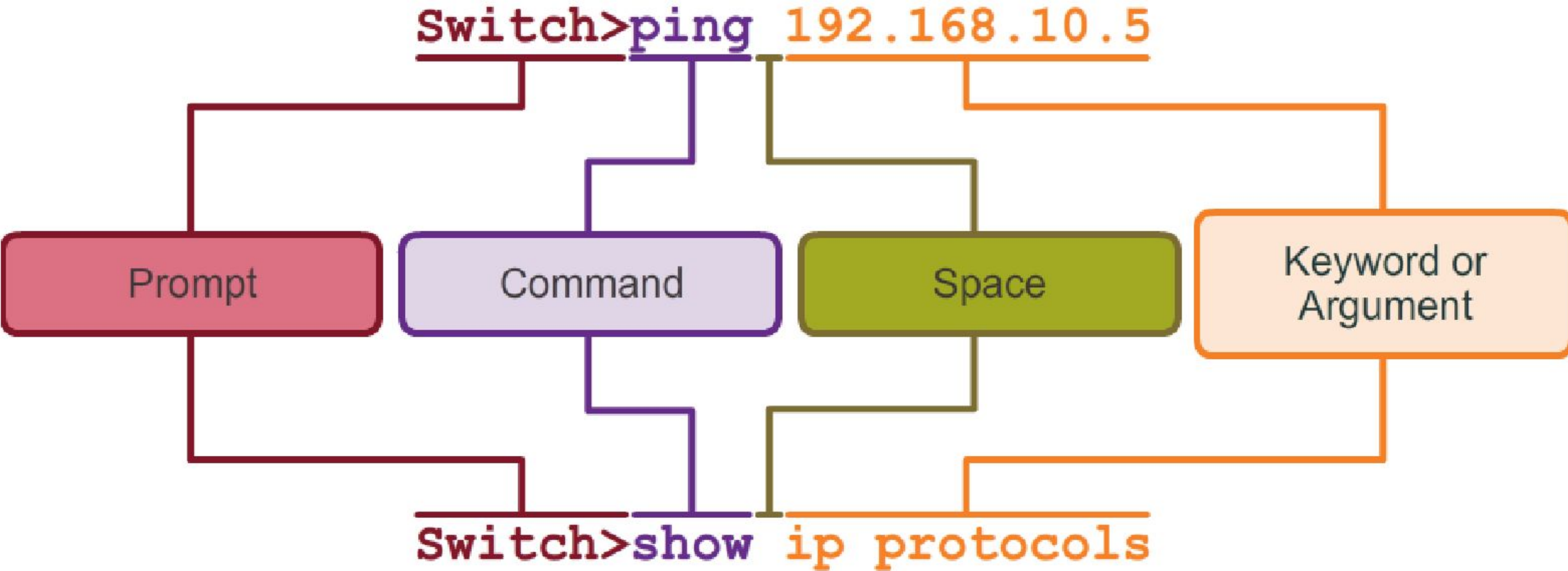
Prompt

Command

Space

Keyword or
Argument

Switch> show ip protocols



Контекстна ПОМОЩЬ

```
Switch#cl?  
clear clock
```

Command options -
display a list of commands
or keywords that start with
the characters **cl**

```
Switch#clock set ?  
hh:mm:ss Current Time
```

Command explanation -
the IOS displays what
command arguments or
variables can be next, and
provides an explanation of
each

```
Switch#clock set 19:50:00 ?  
<1-31> Day of the month  
MONTH Month of the year
```

Command explanation
with more than one
argument or variable option

```
Switch#clock set 19:50:00 25 June 2012  
Switch#
```


Команды проверки конфигурации

