



# The Linux Small Business Server

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CUC 2011

# Zentyal

- Gateway
- UTM
- Infrastructure management
- Office
- Unified Communications

# Proizvođač

- Tvrтka Zentyal
- Zaragoza, Spain
- E-mail: [info@zentyal.com](mailto:info@zentyal.com)
- <http://www.zentyal.com>



# Razvoj

- 2004. eBox Technologies S.L.
- 2005. prvo izdanje
- 2006. NEOTEC projekt, sredstva agencije  
Ministarstva gospodarstva, trgovine i turizma
- 2007. uključen u Ubuntu 7.10
- 2008. stabilna verzija (eBox Platform 1.0)
- 2010. Zentyal 2.0
- Trenutna verzija 2.2, očekuje se v.3.0

# Poslovni model

- Softver je besplatan
  - Većinom *open source*, GPL
- Plaća se podrška i edukacija
  - Tehnička podrška razvojnog tima
  - Zentyal akademija, certifikati
  - Neki dodaci su komercijalni (*Zarafa groupware*)
- Preko 50.000 aktivnih instalacija širom svijeta

# Zentyal Gateway

- Load balancing & availability
- Traffic shaping & QoS
- Transparent caching
- Web content filter

# Zentyal Gateway

Feature	Details	Software
<b>Configurable network interfaces</b>	Static DHCP VLAN PPPoE Bridge	Linux networking subsystem
<b>Advanced firewall</b>	Advanced filtering DMZ Port redirection (NAT)	Netfilter
<b>Advanced routing</b>	Policy routing Load balancing Automatic fail-over	Iproute2 Linux networking subsystem
<b>Traffic Shaping and QoS</b>	Traffic shaping Application layer (L7) classification	Iproute2 L7-filter
<b>Advanced HTTP proxy</b>	Internet cache Content filtering with antivirus Transparent or authenticated mode Multiple filtering profiles Ad-blocker	Squid Dansguardian ClamAV
<b>Captive Portal</b>	Secure authentication Source, destination and service exceptions Secure client filtering Client idle timeout Maximum no. of connections	
<b>RADIUS</b>	Network authentication and authorization	FreeRADIUS

# Zentyal UTM

- Firewall
- Virtual Private Network
- Content filter
- Intrusion Detection

# Zentyal UTM

Feature	Details	Software
<b>Advanced firewall</b>	Advanced filtering DMZ Port redirection (NAT)	Netfilter
<b>Advanced HTTP proxy</b>	Internet cache Content filtering with antivirus Transparent or authenticated mode Multiple filtering profiles Ad-blocker	Squid Dansguardian ClamAV
<b>Virtual Private Network</b>	SSL VPN Branch office connections Roadwarriors IPSec PPTP	OpenVPN OpenSWAN PPTPd
<b>Intrusion Detection System</b>	IDS	Snort
<b>Mail filter</b>	Advanced SMTP filter Antispam capabilities Antivirus capabilities Greylisting	Amavisd-new Spamassassin ClamAV Postgrey

# Zentyal Infrastructure

- DHCP server
- DNS
- Web server
- Certification Authority

# Zentyal Infrastructure

Feature	Details	Software
<b>DHCP server</b>	Dynamic and static leases Integration with DNS PXE support	<a href="#">ISC DHCP</a>
<b>DNS server</b>	DNS cache server DNS authoritative server Integration with DHCP	<a href="#">BIND 9</a>
<b>NTP server</b>	NTP server	<a href="#">NTPd</a>
<b>Certification Authority</b>	Certificate management Zentyal service integration	<a href="#">OpenSSL</a>
<b>Web server</b>	HTTP and HTTPS support Multiple virtual hosts Integration with DNS	<a href="#">Apache</a>
<b>FTP server</b>	Anonymous FTP Authenticated FTP	<a href="#">vsftpd</a>
<b>VM management</b>	VM management	<a href="#">KVM</a> <a href="#">VirtualBox</a> <a href="#">libvirt</a> <a href="#">noVNC</a>

# Zentyal Office

- Directory service
- File and printer sharing
- Groupware
- Data backup

# Zentyal Office

Feature	Details	Software
<b>LDAP Directory server</b>	Central management of users and groups Master/slave architecture Windows Active Directory synchronization	<a href="#">OpenLDAP</a>
<b>File sharing</b>	Windows file sharing (CIFS) Primary Domain Controller (PDC) Advanced password policies Roaming profiles Windows 7 support	<a href="#">Samba</a>
<b>Printer sharing</b>	Printer management Windows printer sharing IPP support	<a href="#">CUPS</a>
<b>Groupware</b>	Mail Shared calendar Shared contacts Shared tasks Mobile devices synchronization	<a href="#">Zarafa</a>
<b>Backup</b>	Incremental and full backup Advanced backup policy Disaster recovery	<a href="#">Duplicity</a>

# Zentyal Unified Communications

## E-mail

- Groupware
- Instant Messaging
- VoIP

# Zentyal Unified Communications

Feature	Details	Software
<b>Mail server</b>	SMTP with TLS POP3-IMAP4 with SSL Webmail Server side filtering (SIEVE) External mail retrieval Antispam Antivirus Greylisting Virtual domains User quota support	Postfix Dovecot Roundcube Sieve Fetchmail Spamassassin ClamAV Postgrey
<b>Groupware</b>	Mail Shared calendar Shared contacts Shared tasks Mobile devices synchronization	Zarafa
<b>Instant Messaging server</b>	XMPP/Jabber server Conference rooms	ejabberd
<b>Voice over IP server</b>	SIP users and phones Calls through an external provider Conference rooms Voicemail Call transfers and parking Music on hold Queues Logs	Asterisk

# Zaključak

- Iskoristili postojeći slobodni software
  - Linux, njegovi alati i aplikacije
- Grafičko sučelje za instalaciju i konfiguraciju
- Misija:
  - Povećanje produktivnosti
    - jednostavno administriranje
  - Objediniti više funkcija na jednom računalu

# Naglasci

- Captive portal – web proxy za autentikaciju
- Bandwidth quota



# Captive portal

[Settings](#) [Current users](#)

**General Settings**

Group:  Only users in this group will be allowed to login.

HTTP port:

HTTPS port:

**Bandwidth Settings**

Limit bandwidth usage:

Bandwidth quota:  Maximum bandwidth usage for defined period. 0 means no limit.

Period:

**Captive Interfaces**

<input type="text"/>	<input type="button" value="Search"/>	
Enabled	Interface	Action
<input checked="" type="checkbox"/>	eth1	<input type="button" value="Edit"/>

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# Certificate Authority

- Lokalni, samoizdani certifikati
  - Zasad...

# LDAP

Nekoliko modova rada:

- **Standalone** (ima svoj lokalni LDAP)
- **Master** (koristi drugom Zentyalu kao master)
- **Slave** (služi drugom Zentyalu kao slave )
- **Slave of Windows Active Directory**(služi kao slave Windows AD )
- **AAI imenik ?**

"Imamo, međutim, napravljenu podršku za sinkronizaciju AAI-LDAP->MS Active Directory, opisano na:  
<http://developer.aaiedu.hr/faq/AOSI-2-Plugins-MSAD.html> Vjerojatno bi se dalo napisati plug-in koji bi slao akcije i u Vaš sustav. Na sljedećem URL-u je opisan API za AOSI-WS plug-in-ove:

<http://developer.aaiedu.hr/faq/4.html> "

# Podrška

	Basic	Professional	Enterprise
	<b>FREE</b>	<b>17€ /month</b> <small>(paid annually)</small>	<b>25€ /month</b> <small>(paid annually)</small>
<b>Quality Assured SW Updates</b>	✗	✓	✓
<b>Alerts</b>	basic	Full	Full
<b>Reports</b>	basic	Full	Full
<b>Remote Monitoring &amp; Management</b>	basic	basic	Full
<b>Remote Configuration Backup</b>	Only one	Unlimited	Unlimited
<b>Disaster Recovery Service</b>	✗	Available	Available
<b>Advanced Security Updates</b>	✗	Available	Available
<b>Zarafa Small Business</b>	✗	Available	Available
<b>Technical Support</b>	✗	Available	Available
	<a href="#">Subscribe</a>	<a href="#">Buy now</a>	<a href="#">Buy now</a>

# Nekomercijalna podrška

Craig  
Ps.. I promise to stop lurking and start contributing soon!

Logged

**Trym**  
Zen Warrior  
 Posts: 108 Karma: +0/-0  


**Re: change standalone zentyal server to sync with active directory**  
« Reply #1 on: March 12, 2011, 11:06:41 pm »

If you run the following command, Zentyal will rip out everything depending on the current-user configuration, remove the ldap-information, re-install the modules and let you configure ldap and slave-status anew:

Code: [Select]  
`/usr/share/ebox-usersandgroups/ebox-usersandgroups-reinstall`

The sequence of events is important. First, shut down any open web-configurator-window. After running the script, go directly to the users and groups module, configure the slave-status and save. Then, and only then, go to module status and re-activate the re-installed modules.

As the script itself warns Make sure you know what you're doing before doing this. There's a good chance this will screw up your server.

Good luck.

::Trym  
« Last Edit: March 12, 2011, 11:12:31 pm by Trym »

Logged

**Zadeet**  
Zen Apprentice  
 Posts: 2 Karma: +0/-0  


**Re: change standalone zentyal server to sync with active directory**  
« Reply #2 on: March 14, 2011, 03:38:08 pm »

Trym, Thank you!

I will be with this client tomorrow (tuesday) and I will give its a bash. I suppose it will be prudent to backup the servers configuration to their zentyal cloud account just in case?

Will post back here with the (hopefully good) news

Craig

Logged

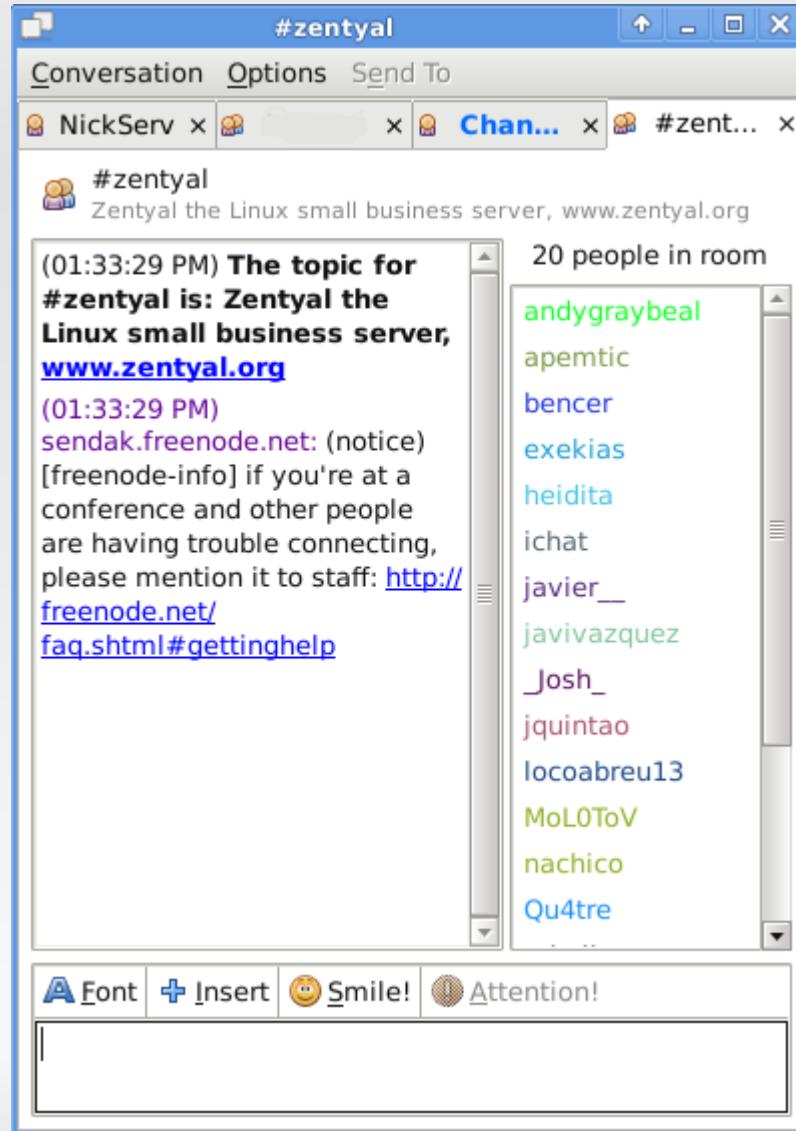
**Trym**  
Zen Warrior  
 Posts: 108 Karma: +0/-0  


**Re: change standalone zentyal server to sync with active directory**  
« Reply #3 on: March 14, 2011, 05:14:47 pm »

Yeah, you can't have too many backups.

You don't say what it's currently used for, except for "office-functions", if it's used as a mail-server, either zarafa or regular, you'll run into trouble no matter what you do. (The user id's won't be the same), and if you run the script, everything will be deleted (as the data depends on the users.) Make sure you have a backup of the data as well.

# Nekomercijalna podška



# Objekti

## Objects List

 [Add new](#)

Name	Members	Action
KIOSCI		 
KNJIZNICA		 
LABORATORIJI		 
LAPTOPI		 
NASTAVNO OSOBLJE		 
RACUNALNA UCIONICA		 
REFERADA		 
STUDENTSKA RACUNALA		 
TAJNISTVO-RACUNOVODSTVO		 

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# • Christian, Zentyal developer

Three main mistakes open source users make:

- Open source means free.
- More and more willingness to just mimic Windows instead of analyzing and describing needs in order to find suitable solution.
- Lack of understanding at concepts level before starting to implement and use components.

Intervju na <http://planet.zentyal.org>

# Christian...

- More and more users, moving from Windows world, are targeting Linux only because they want to reproduce with open source what they have with Windows, but for free. Because of the nature of open source, multiple components are available to cover similar needs. This requires maybe better technical understanding of involved concept, but this necessary effort is often not made. Hopefully there is still a lot of people balancing this with in-depth knowledge they are prone to share.

# Success Story

- North American Bancard (NAB) has seen numerous benefits since we started deploying Zentyal servers. The most obvious benefit is **costs savings**, measured upwards of **\$100,000 yearly**. Moreover, as we now deploy a **single server instead of many**, we have noticed a reduction in the monthly electric bills. Zentyal is **extremely simple to install, setup and configure**. We have **used the Microsoft product** in the past and have found that the **Zentyal is far superior** in quality, functionality and most importantly, in stability.
- Kelly Corbin, Senior Systems Administrator, NAB

# Instalacija i konfiguracija

# Instalacija Zentyala



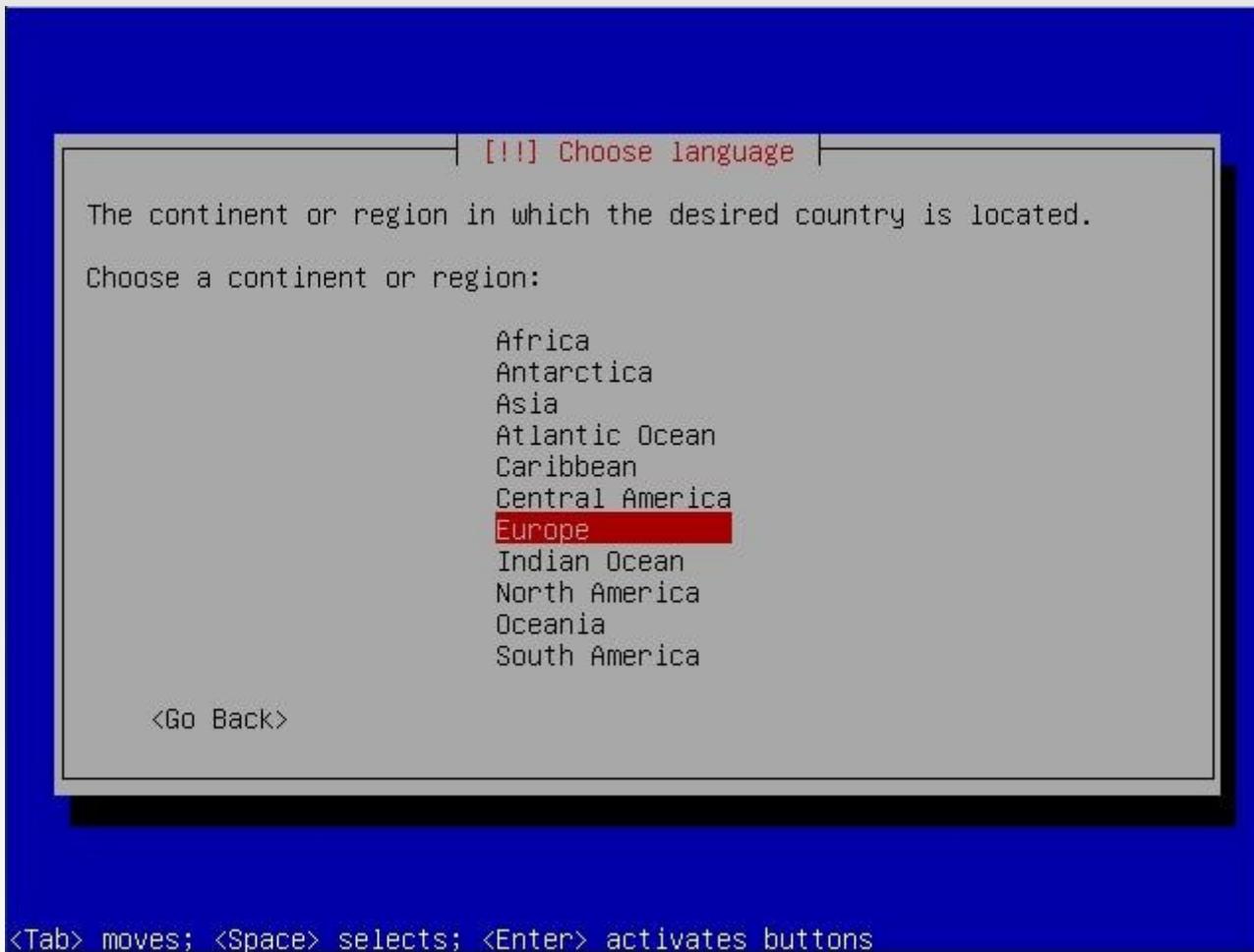
# Odabir jezika instalacije



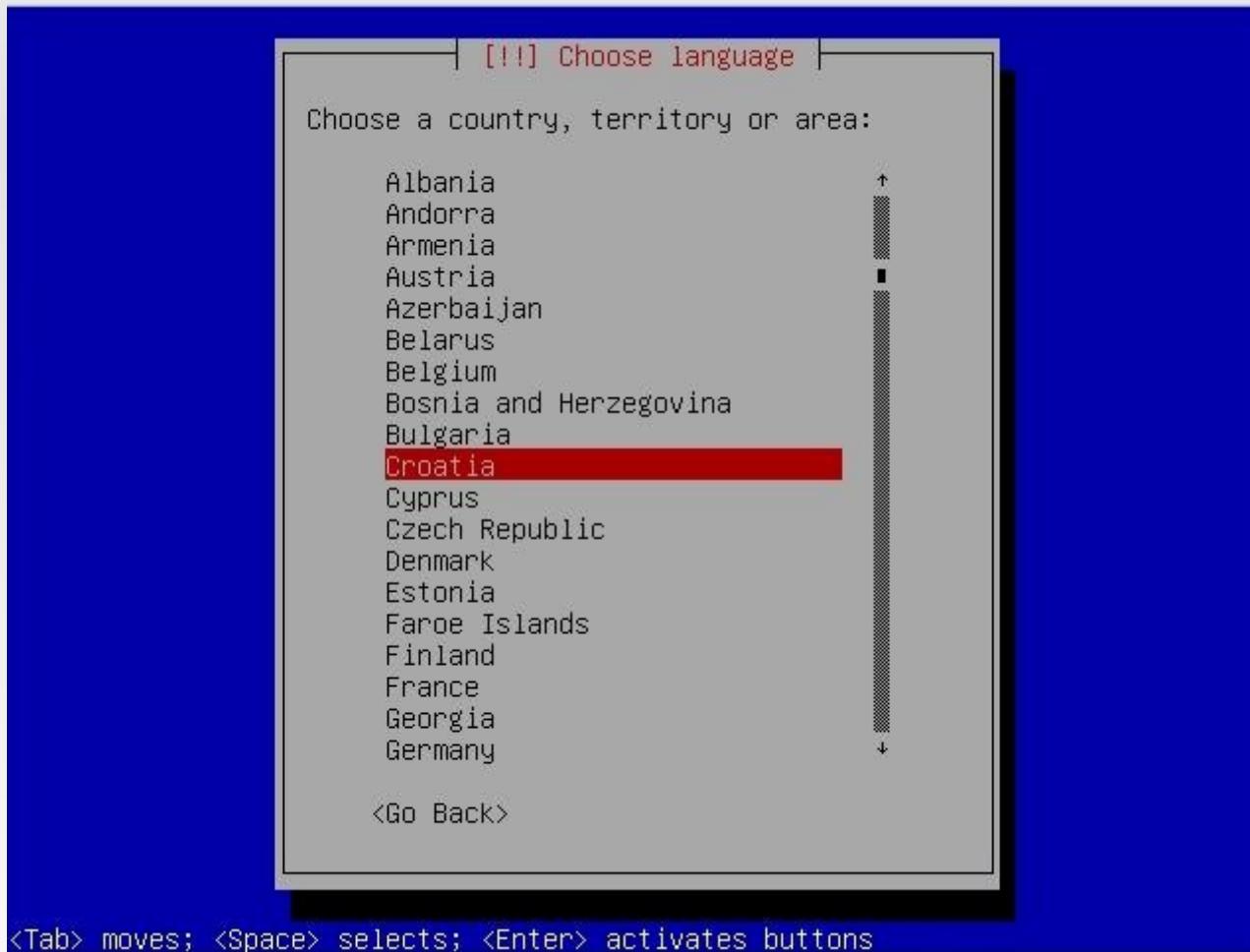
# Odabir lokacije



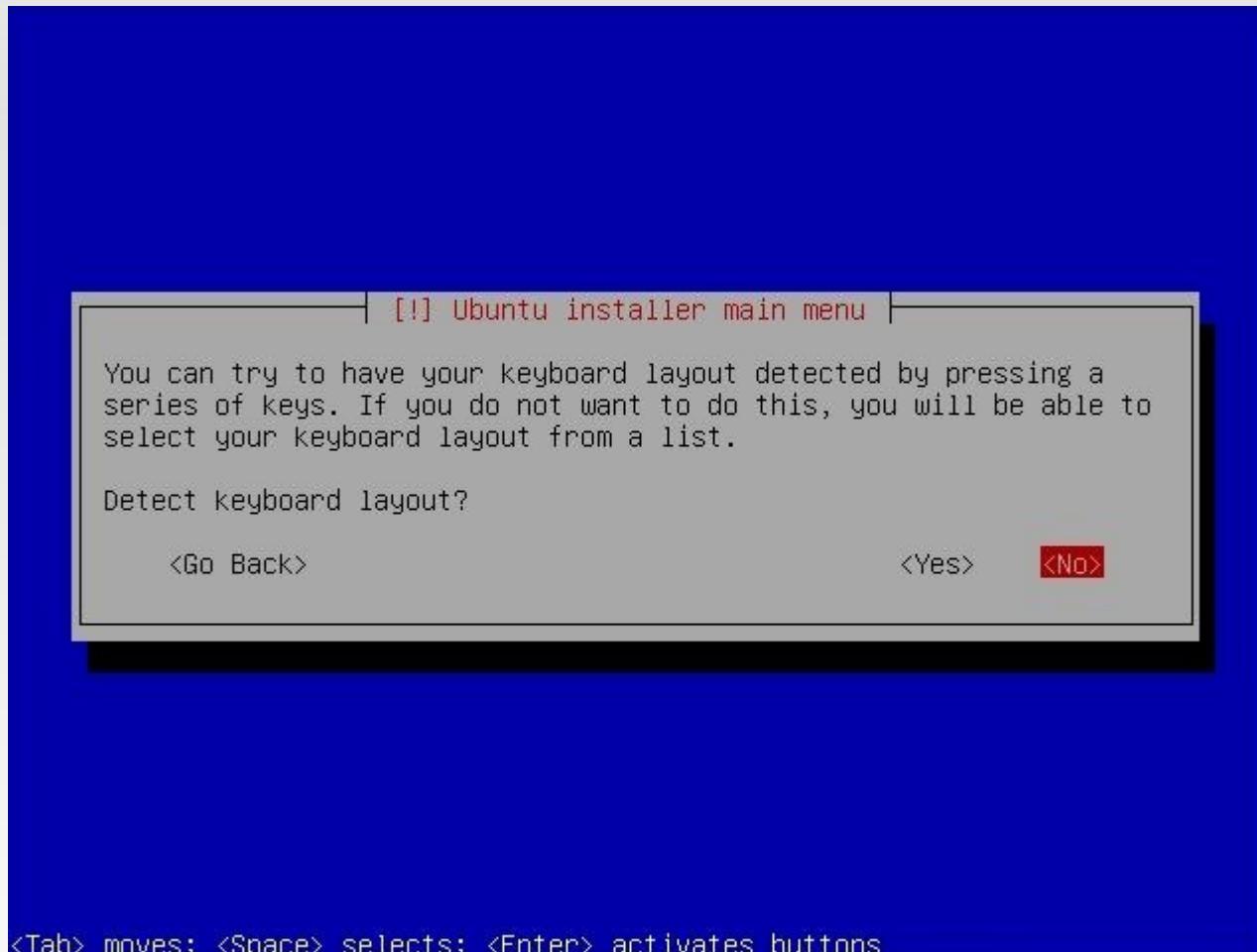
# Odabir lokacije



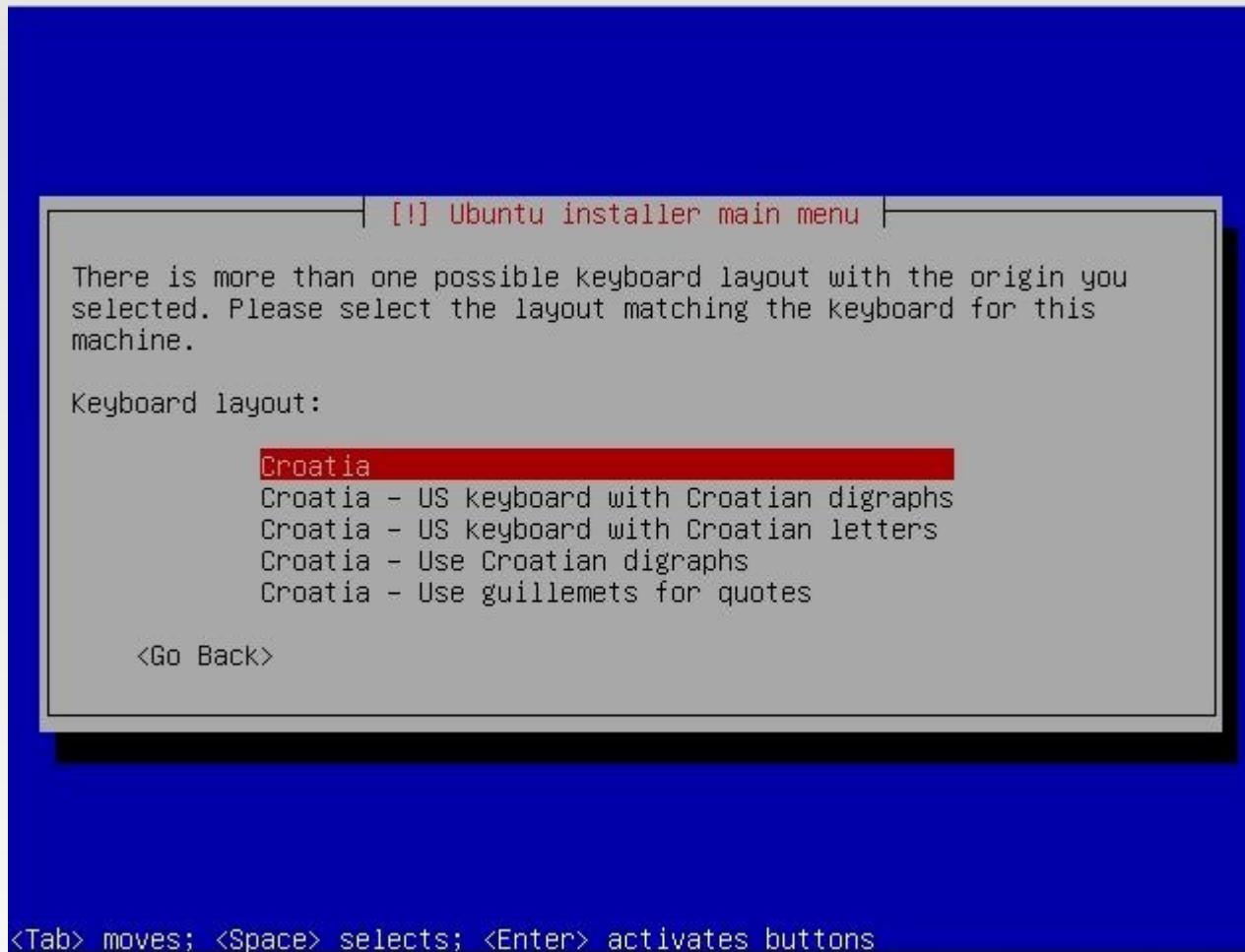
# Odabir lokacije



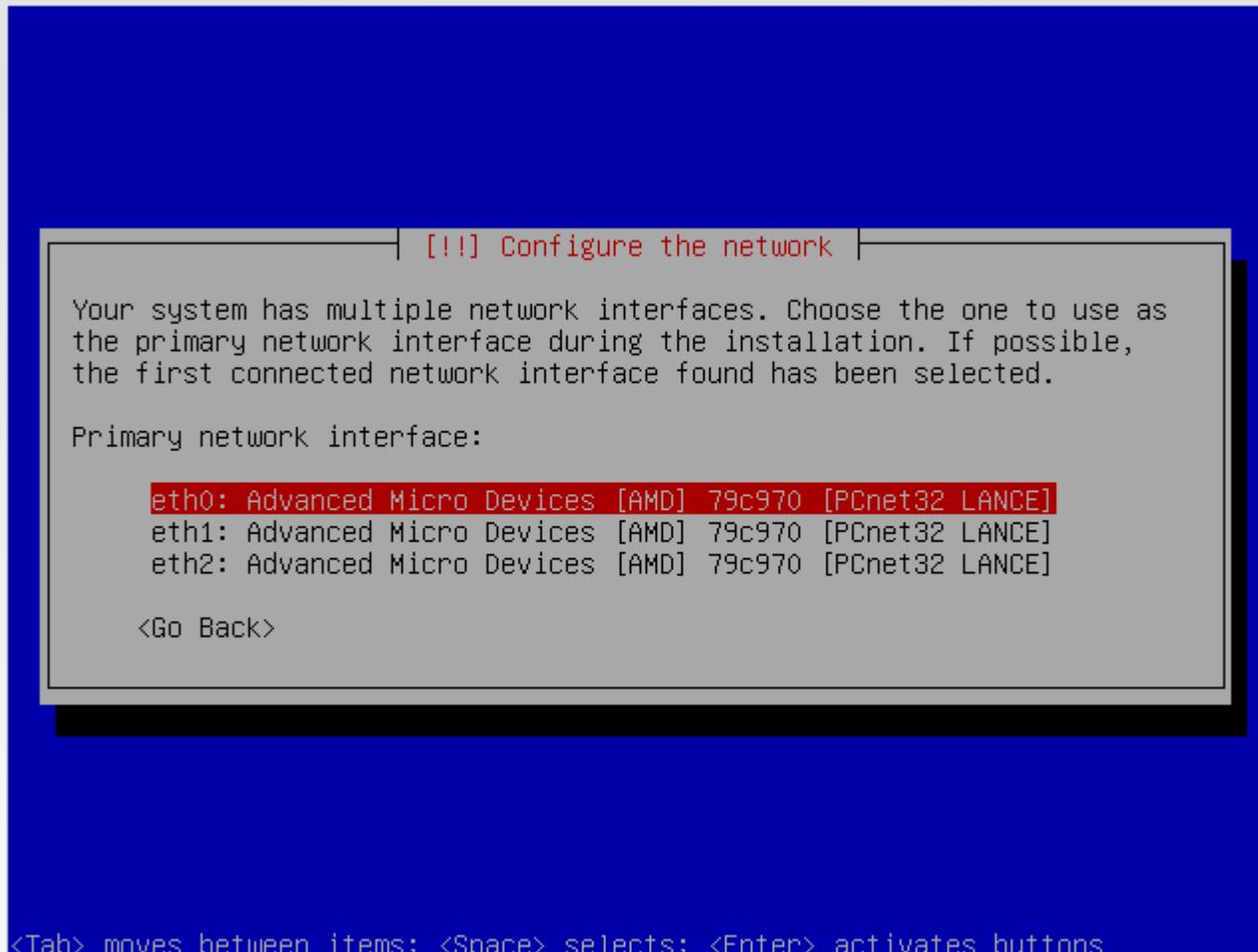
# Podešavanje tipkovnice



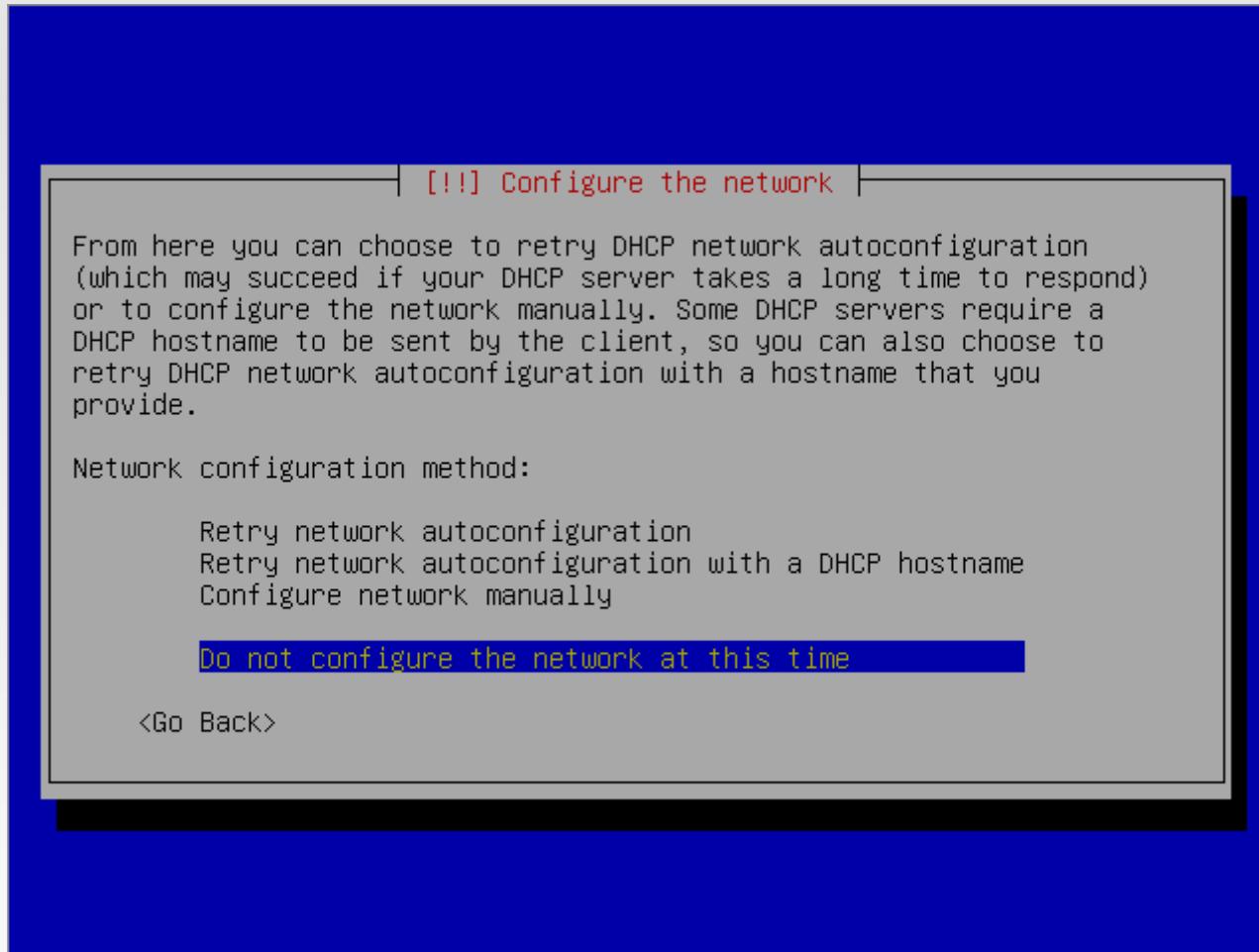
# Podešavanje tipkovnice



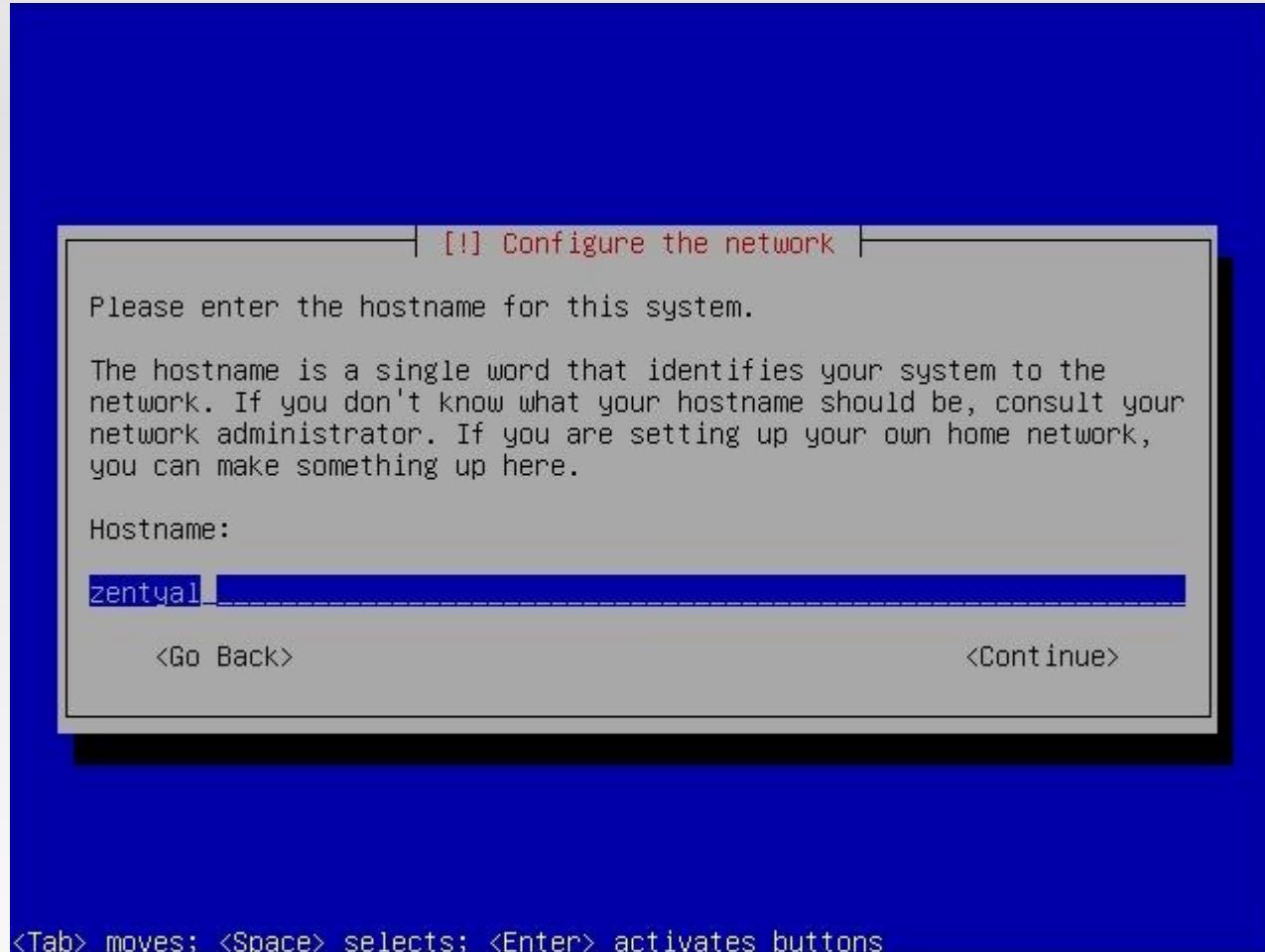
# Odabir primarne mrežne kartice



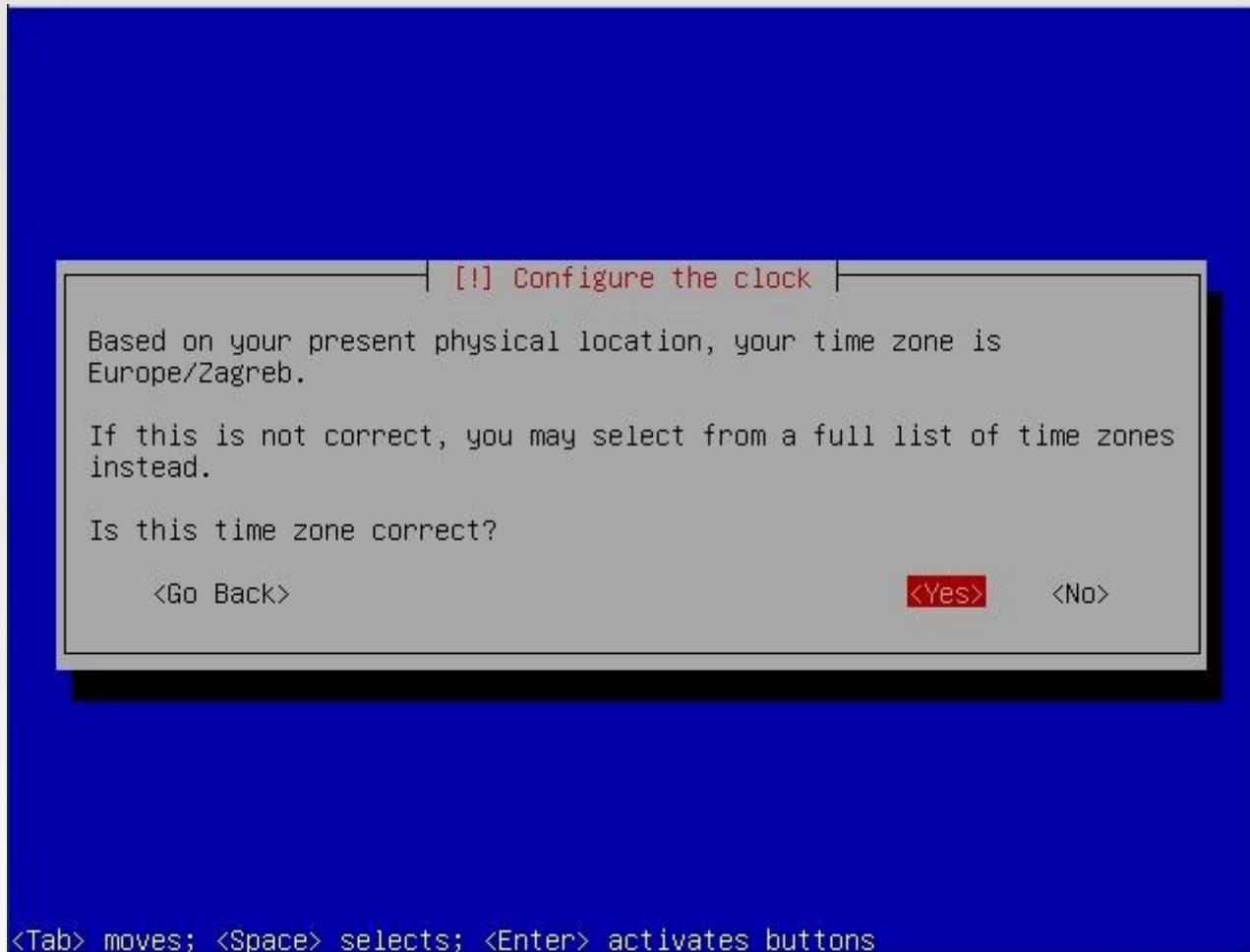
# Konfiguracija mreže



# Odabir imena



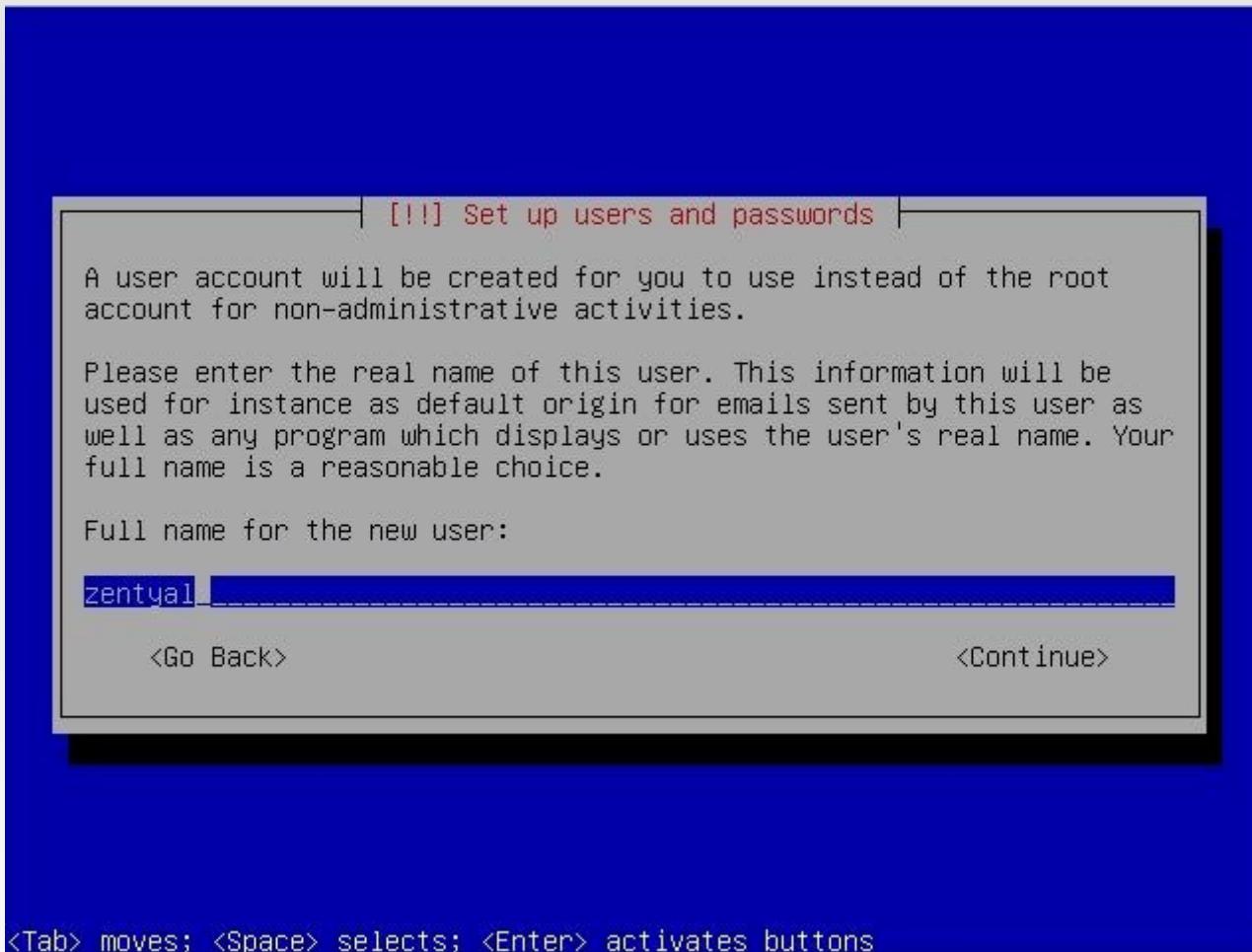
# Podešavanje sata



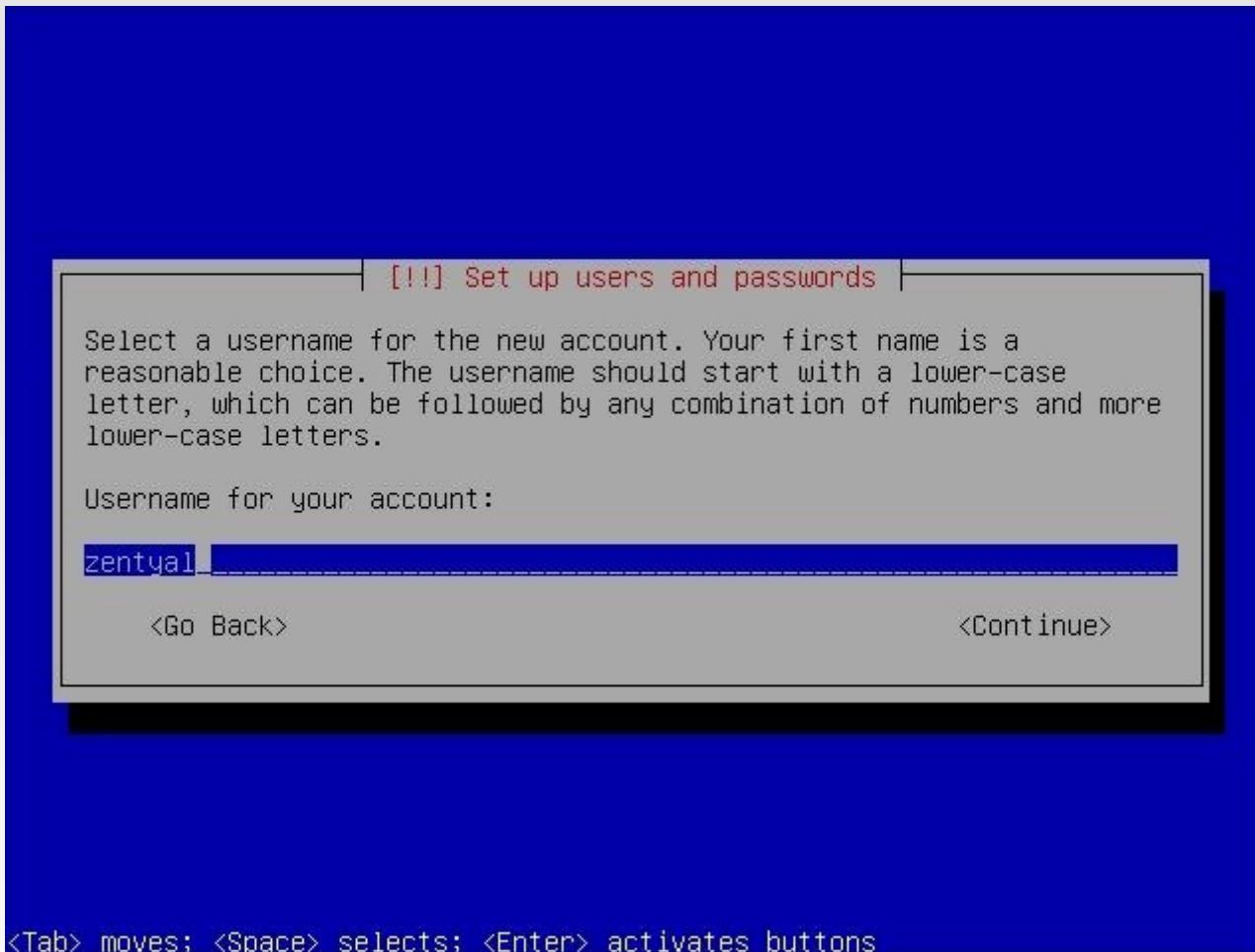
# Instalacija osnovnog sistema



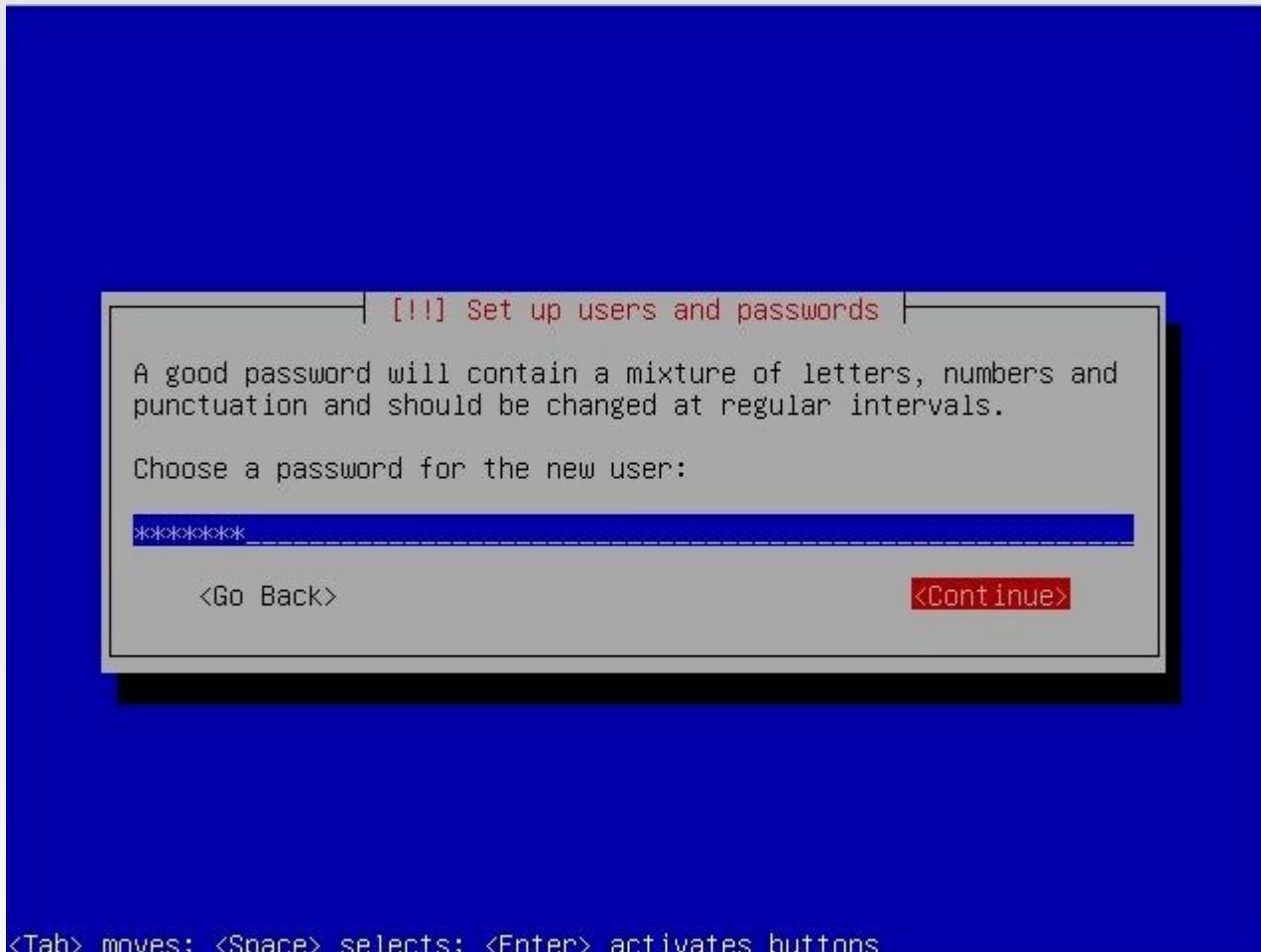
# Dodavanje korisnika



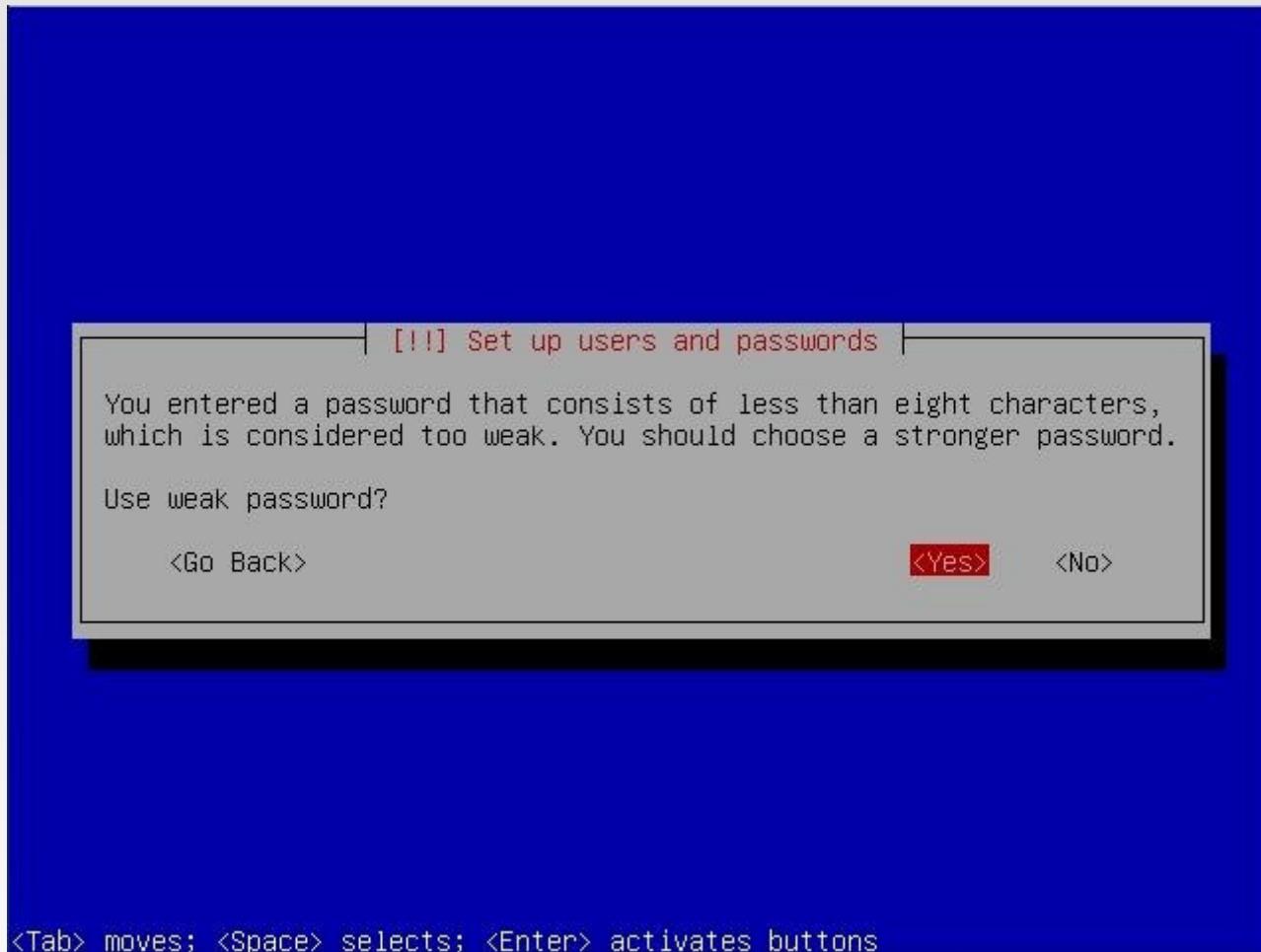
# Dodavanje korisnika



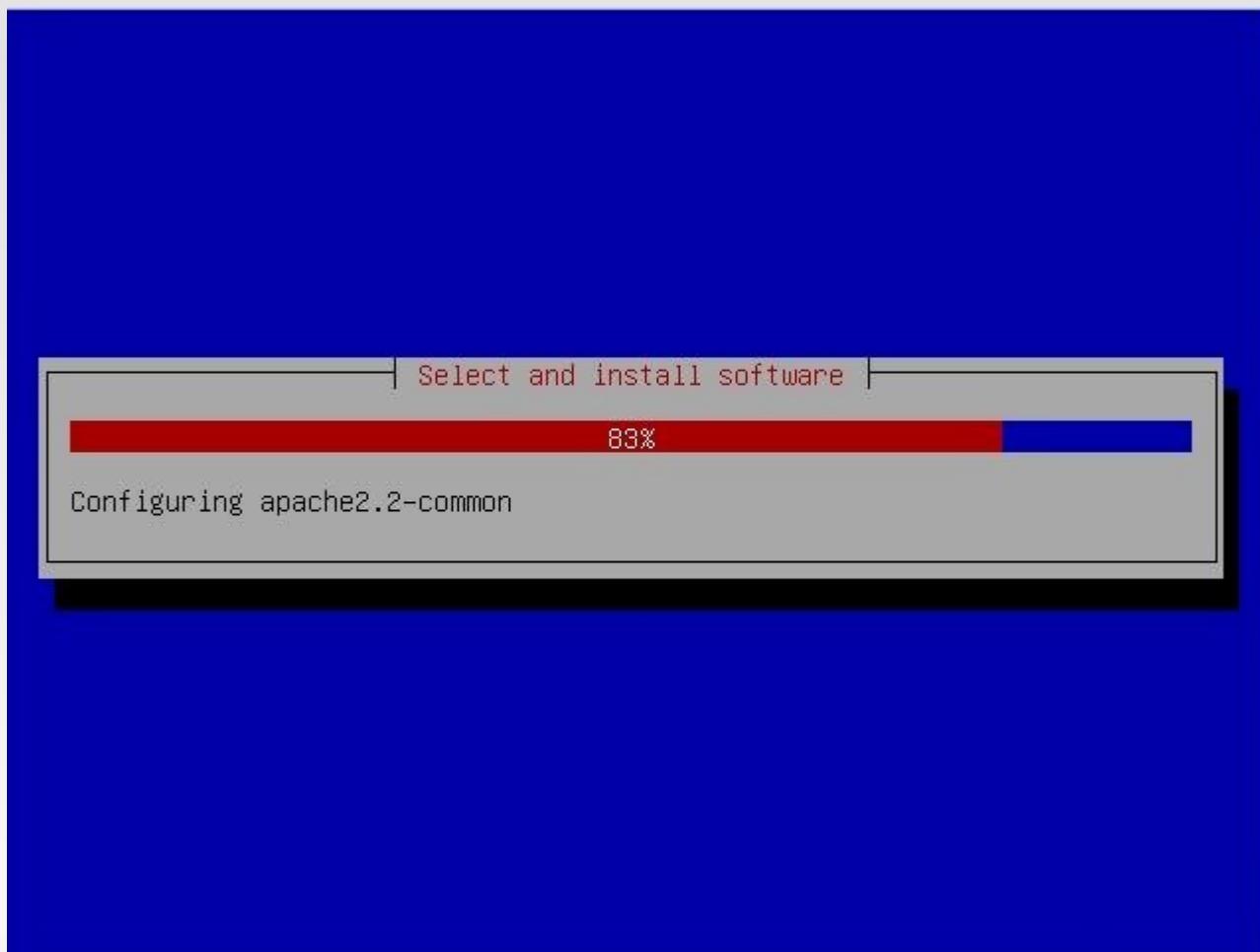
# Lozinka korisnika



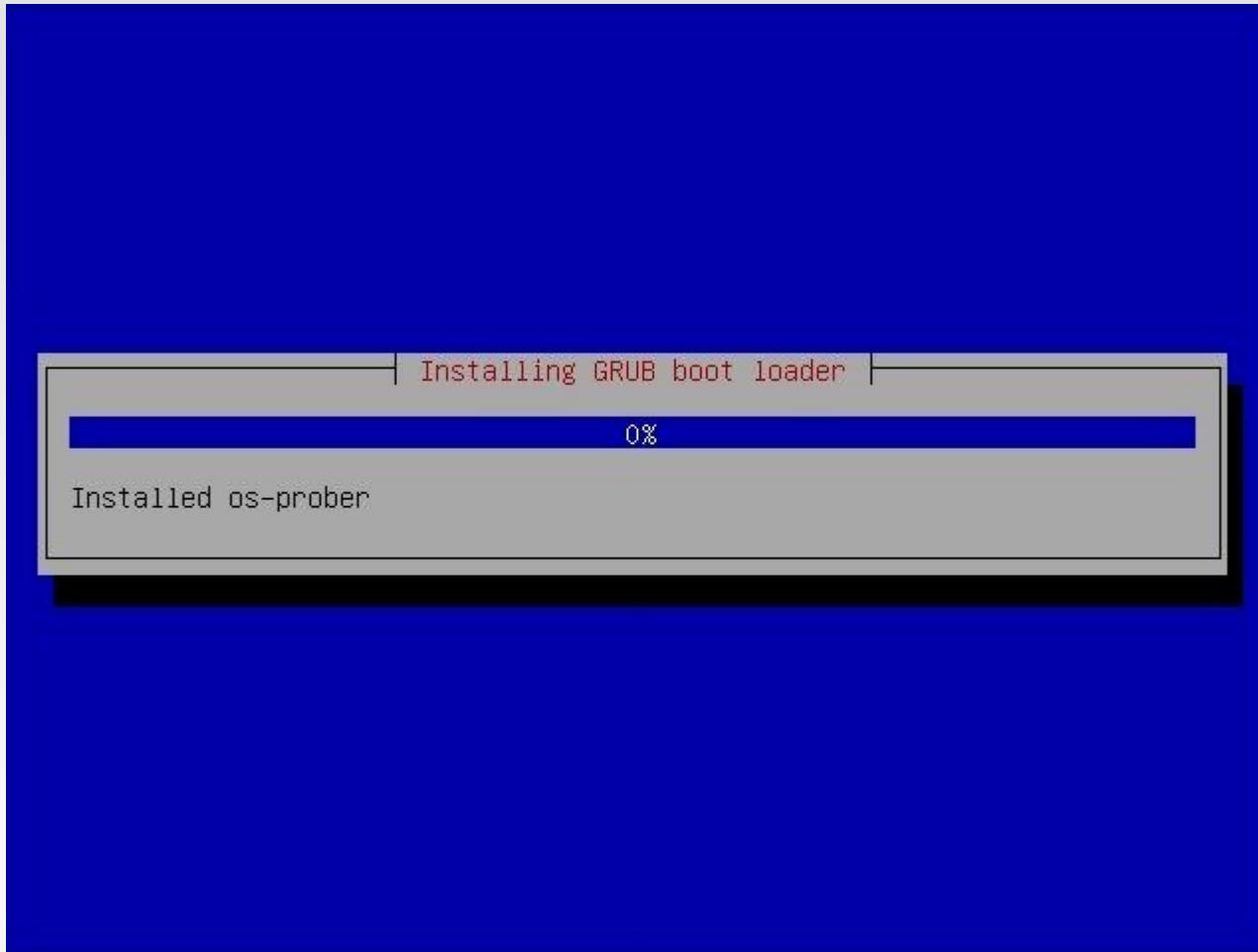
# ”Slaba” lozinka



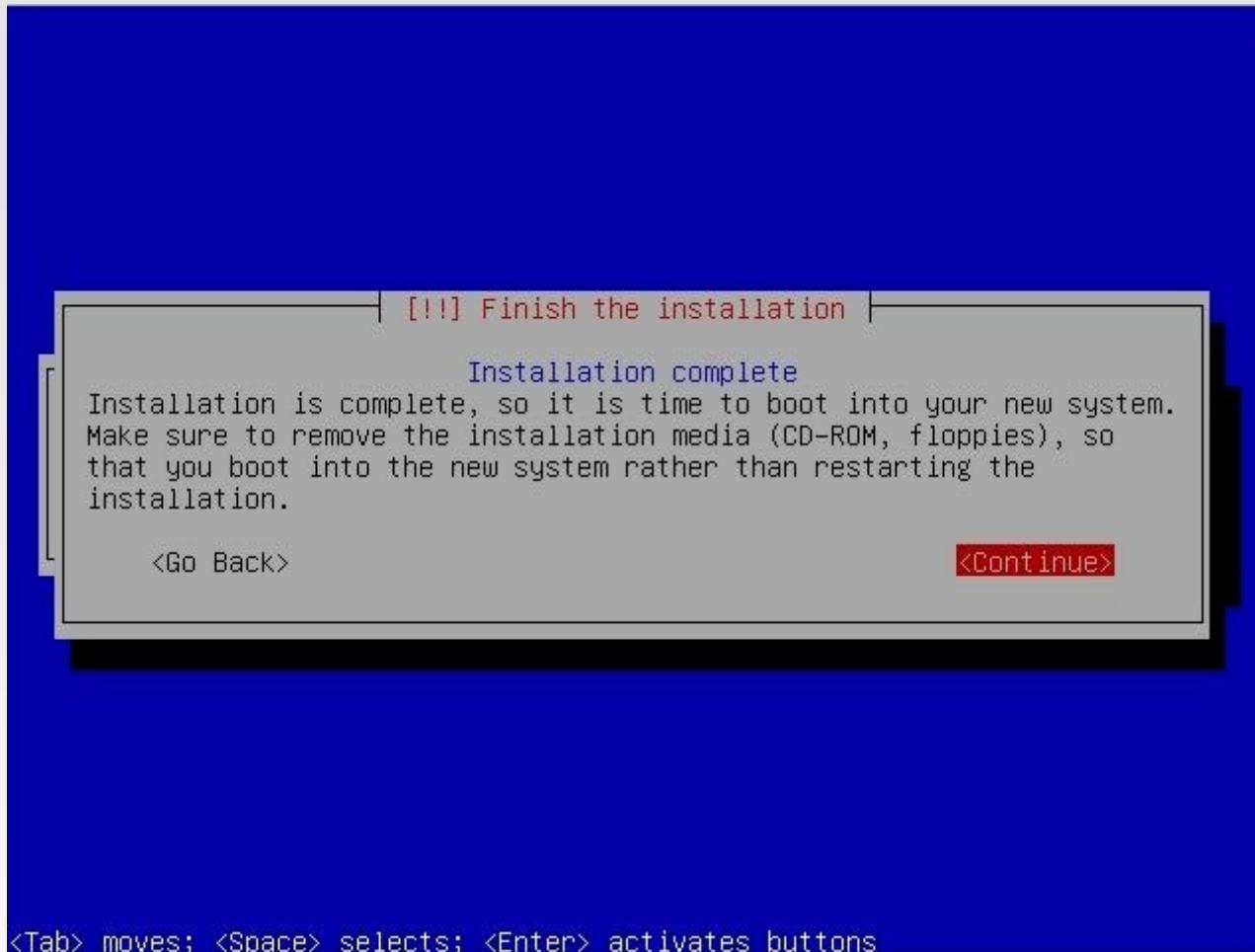
# Instalacija softwarea



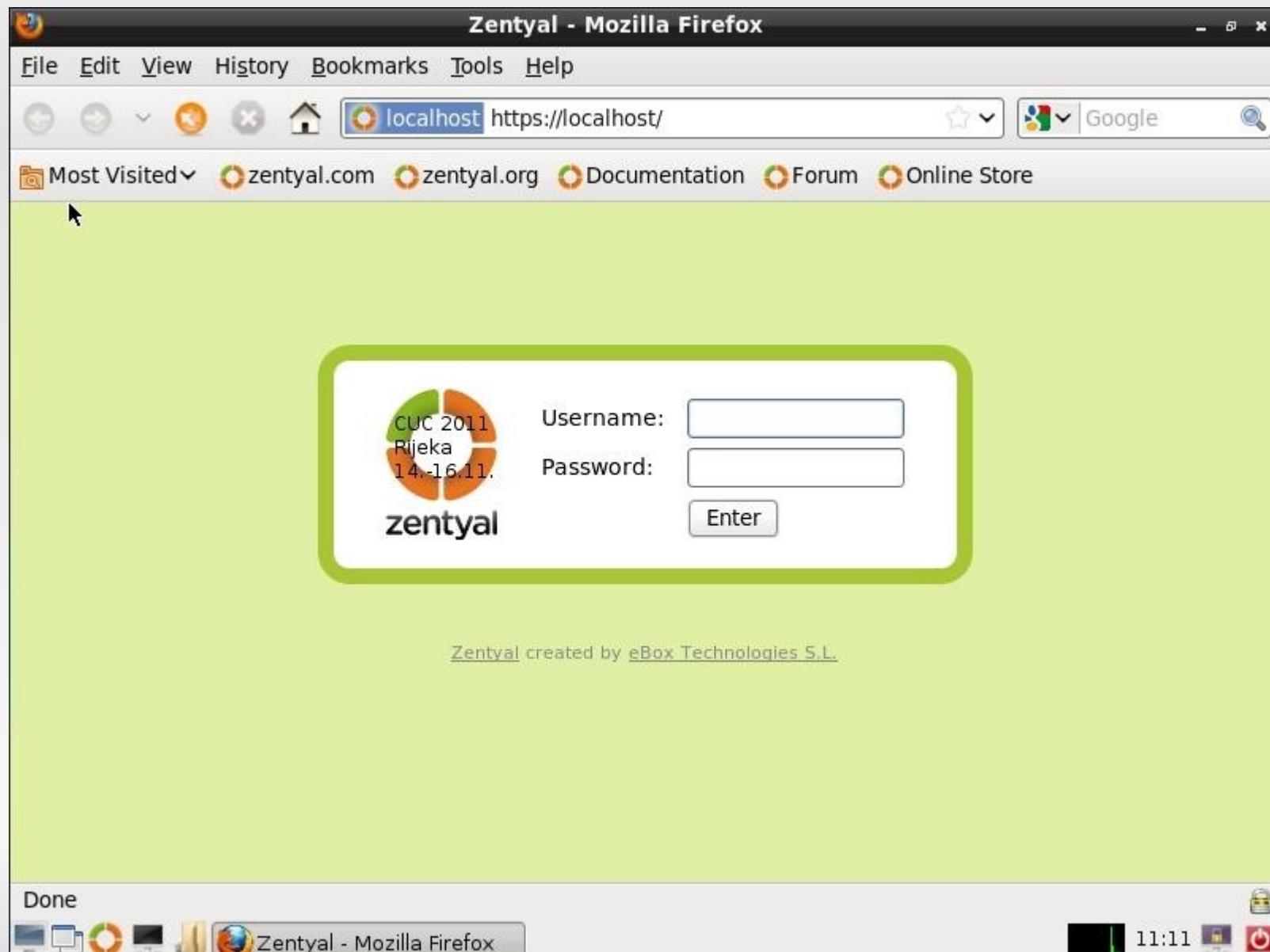
# Instalacija bootloadera



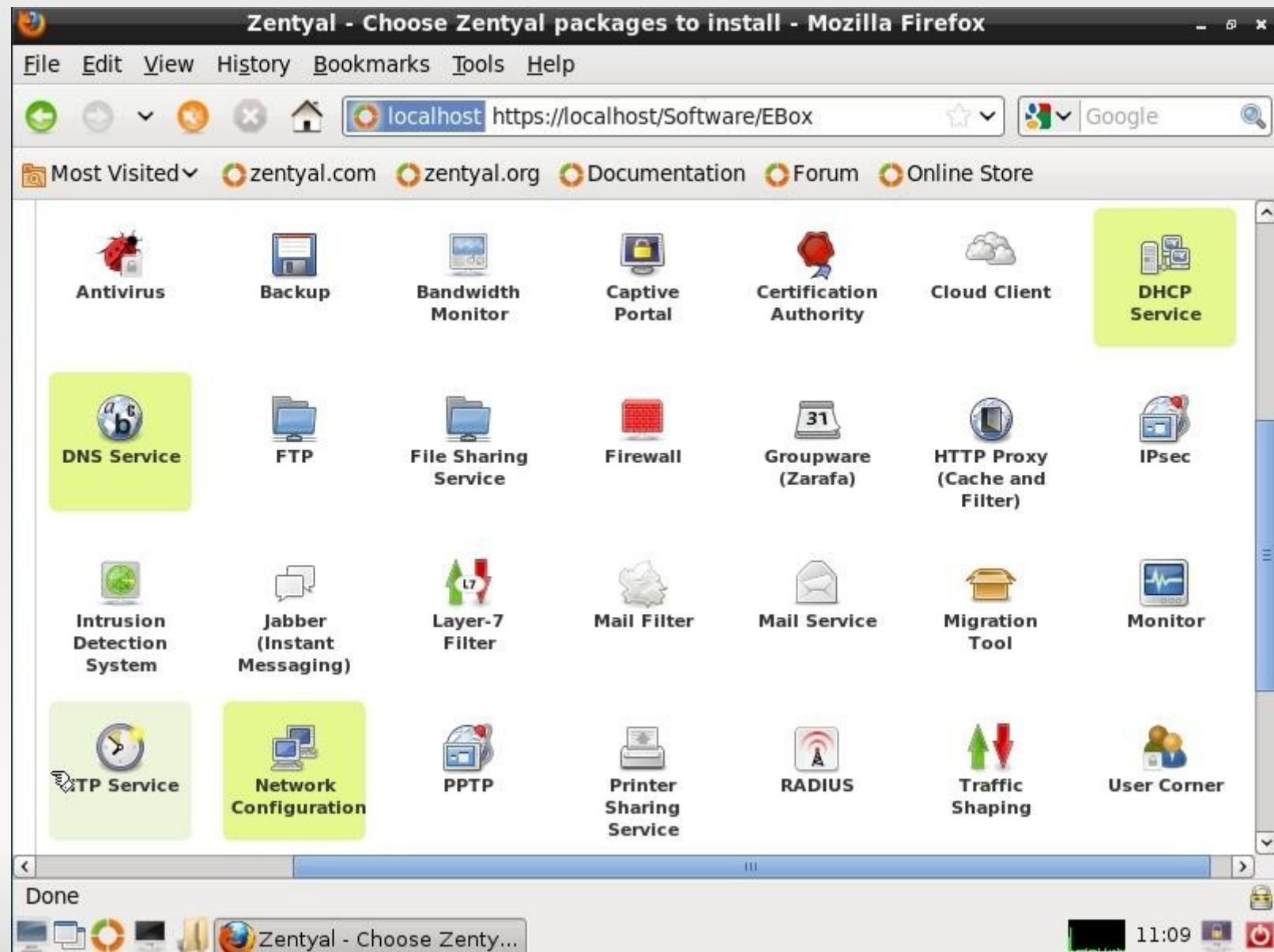
# Završetak instalacije



# Prvo pokretanje



# Početni meni za odabir paketa



# Instalacija network,DNS,DHCP

The screenshot shows a Mozilla Firefox browser window displaying the Zentyal web interface at <https://localhost/Software/InstallPkgs>. The title bar reads "Zentyal - Mozilla Firefox". The left sidebar has a "Core" tab selected, showing links for Dashboard, Module Status, System, Maintenance, and Software Management. In the Software Management section, there are links for Zentyal Components, System Updates, and Settings. Below these are two buttons: "Ok" and "Cancel". The main content area features a green header bar with a warning icon and the text "The following packages will be installed:". Below this are icons for Network Objects, Network Services, Network Configuration, Firewall, DHCP Service, and DNS Service.

Zentyal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Software/InstallPkgs

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**zentyal**

The following packages will be installed:

Core

Dashboard

Module Status

System

Maintenance

Software Management

Ok Cancel

Network Objects

Network Services

Network Configuration

Firewall

DHCP Service

DNS Service

Zentyal created by eBox Technologies S.L.

# Faza instalacije

The screenshot shows a Mozilla Firefox browser window with the title "Zentyal - Installing - Mozilla Firefox". The address bar displays "localhost https://localhost/Software/InstallPkgs". The page content is the Zentyal software management interface.

**Core** (highlighted in green)

- Dashboard
- Module Status
- System
- Maintenance
- Software Management
  - Zentyal Components
  - System Updates
  - Settings

**Installing**

Installing packages

Current operation: **Setting up zentyal-services (2.2) ...**

Progress bar: 67%

8 of 12 actions done

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# Odabir javne i privatne mreže

Zentyal - Initial configuration wizard - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Wizard

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 zentyal

Initial configuration wizard

Skip Next

Core

Dashboard

Module Status

System

Network

Maintenance

Software Management

UTM

Firewall

Infrastructure

DHCP

DNS

Network interfaces



Configure interface types

External interfaces connect to networks that are not under your control (typically the Internet), traffic coming from external networks is not trusted by default, thus, you will not be able to connect to Zentyal administration page through them

eth0:  Internal  External

eth1:  Internal  External

Skip Next

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# Podešavanje mreže

Zentyal - Initial configuration wizard - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Wizard

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**zentyal**

Initial configuration wizard

Skip Finish

Core

Dashboard

Module Status

System

Network

Maintenance

Software Management

UTM

Firewall

Infrastructure

DHCP

DNS

**Network interfaces**

Configure network for external interfaces

Now you can set IP addresses and networks for each interface

**eth1**

Method: Static

IP address: 161.53.190.90

Netmask: 255.255.255.128

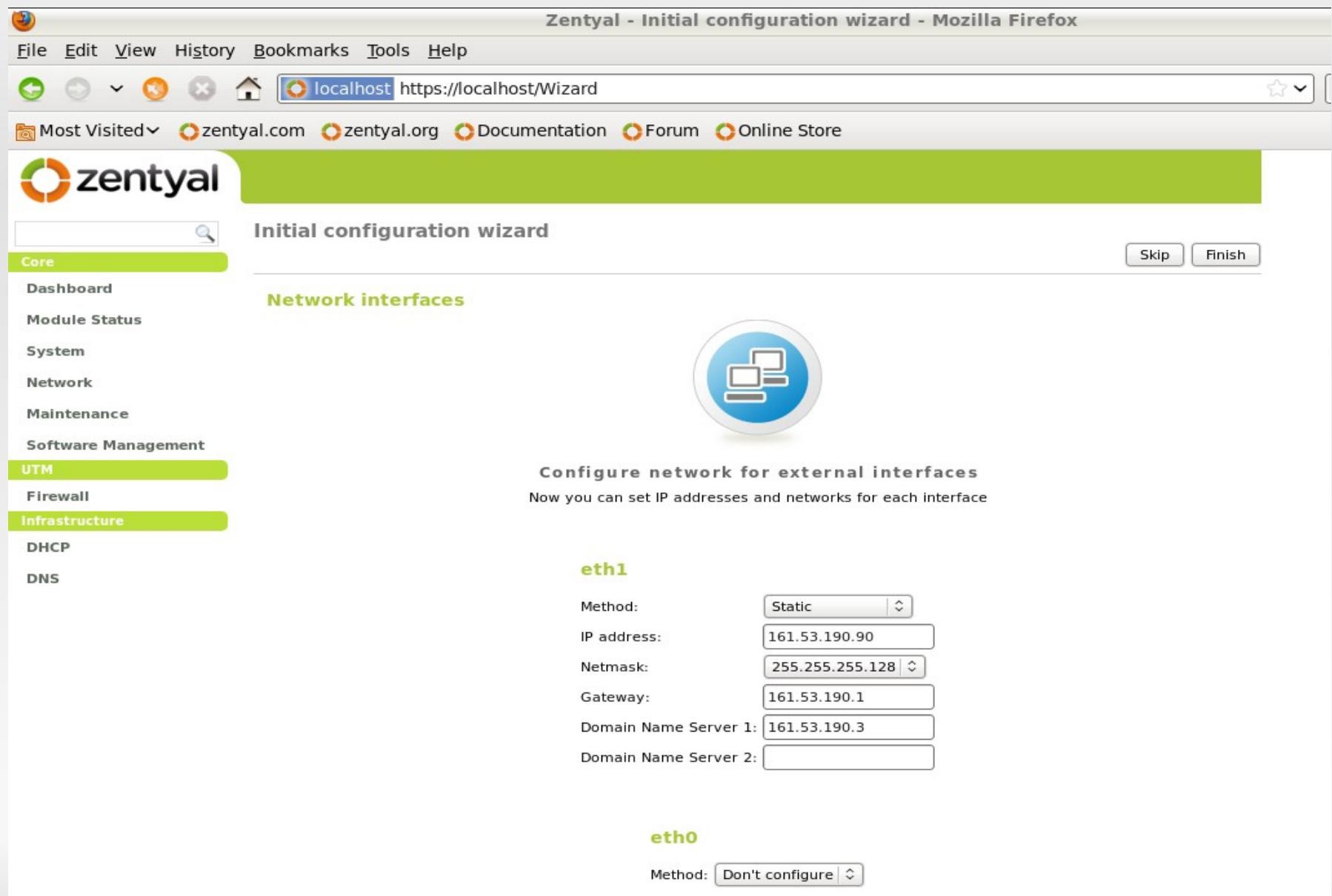
Gateway: 161.53.190.1

Domain Name Server 1: 161.53.190.3

Domain Name Server 2:

**eth0**

Method: Don't configure



# Aktiviranje modula mreže

Zentyal - Module Status Configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/ServiceModule/StatusView

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 Logout Save changes

### Module Status Configuration

Module	Depends	Status
Network		<input type="checkbox"/>
Firewall	Network	<input type="checkbox"/>
DHCP	Network	<input type="checkbox"/>
DNS		<input type="checkbox"/>
Events		<input type="checkbox"/>
Logs		<input type="checkbox"/>

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Core

- Dashboard
- Module Status
- System
- Network
- Maintenance
- Software Management
- UTM
- Firewall
- Infrastructure
- DHCP
- DNS

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# Aktiviranje modula mreže

The screenshot shows a Firefox browser window displaying the Zentyal web interface. The title bar reads "Zentyal - Module Status Configuration - Mozilla Firefox". The address bar shows "localhost https://localhost/ServiceModule>StatusView". The main content area is a modal dialog titled "Configure module: network". The dialog lists several configuration files and their reasons:

- File:** /etc/network/interfaces  
**Reason:** Zentyal will set your network configuration
- File:** /etc/resolv.conf  
**Reason:** Zentyal will set your DNS configuration
- File:** /etc/dhcp3/dhclient.conf  
**Reason:** Zentyal will set your DHCP client configuration
- File:** /etc/default/ddclient  
**Reason:** Zentyal will set your ddclient configuration
- File:** /etc/ddclient.conf  
**Reason:** Zentyal will set your ddclient configuration
- File:** /etc/ppp/chap-secrets  
**Reason:** Zentyal will store your PPPoE passwords
- File:** /etc/ppp/pap-secrets  
**Reason:** Zentyal will store your PPPoE passwords

At the bottom of the dialog is an "Accept" button. In the background, the Zentyal dashboard is visible, showing various service status icons and links for documentation, forum, and online store.

# Spremanje postavki

The screenshot shows a Mozilla Firefox browser window displaying the Zentyal web interface. The title bar reads "Zentyal - Module Status Configuration - Mozilla Firefox". The address bar shows "localhost https://localhost/ServiceModule/StatusView". The page header includes the Zentyal logo, a search bar, and links for "Logout" and "Save changes". On the left, a navigation sidebar lists "Core" (Dashboard, Module Status, System, Network, Maintenance, Software Management, UTM, Firewall), "Infrastructure" (DHCP, DNS), and "UTM". The main content area is titled "Module Status Configuration" and contains a table with the following data:

Module	Depends	Status
Network		<input checked="" type="checkbox"/>
Firewall	Network	<input type="checkbox"/>
DHCP	Network	<input type="checkbox"/>
DNS		<input type="checkbox"/>
Events		<input type="checkbox"/>
Logs		<input type="checkbox"/>

At the bottom, a footer note says "Zentyal created by eBox Technologies S.L."

# Spremanje postavki

Zentyal - Save configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Finish

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 Logout Save changes

## Save configuration

**Core**

- Dashboard
- Module Status
- System
- Network
- Maintenance
- Software Management
- UTM**
- Firewall
- Infrastructure
- DHCP
- DNS

The following modules have unsaved changes but are **disabled**. If you need to enable them go to [Module Status](#).

- DHCP
- DNS
- Firewall

If you made changes to the network interfaces or the administration port, you may need to manually rewrite the url in order to access this administration interface again.

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# Uključivanje modula firewalla

# Uključivanje modula dhcp

Zentyal - Module Status Configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/ServiceModule/StatusView

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**Configure module: dhcp**

Enabling this module will cause Zentyal to perform the actions and file modifications listed below. You must explicitly accept these changes to enable the module.

**Actions to perform by Zentyal**

**Action:** Disable dhcpcd init script  
**Reason:** Zentyal will take care of start and stop the service

**Files to modify by Zentyal**

**File:** /etc/dhcp3/dhcpcd.conf  
**Reason:** dhcpcd configuration file

**File:** /etc/apparmor.d/usr.sbin.dhcpcd3  
**Reason:** AppArmor profile for dhcpcd daemon

Accept

Logout Save changes

	Status
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

# Uključivanje modula dns

Zentyal - Module Status Configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/ServiceModule/StatusView

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**zentyal**

Core

Dashboard

Module Status

System

Network

Maintenance

Software Management

UTM

Firewall

Infrastructure

DHCP

DNS

**Configure module: dns**

**Actions to perform by Zentyal**

**Action:** Change the permissions for /etc/bind to allow writing to bind group  
**Reason:** Let the bind daemon to be dynamically updated

**Action:** Remove bind9 init script link  
**Reason:** Zentyal will take care of starting and stopping the services.

**Files to modify by Zentyal**

**File:** /etc/bind/named.conf  
**Reason:** main bind9 configuration file

**File:** /etc/bind/named.conf.options  
**Reason:** bind9 options configuration file

**File:** /etc/bind/named.conf.local  
**Reason:** local bind9 configuration file

**File:** /etc/bind/keys  
**Reason:** Keys configuration file

Logout Save changes

Status

	Status
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>

Accept

# Spremanje postavki

The screenshot shows a Mozilla Firefox browser window displaying the Zentyal Module Status Configuration. The title bar reads "Zentyal - Module Status Configuration - Mozilla Firefox". The address bar shows "localhost https://localhost/ServiceModule/StatusView". The page header includes the Zentyal logo, a search bar, and navigation links for "Most Visited", "zentyal.com", "zentyal.org", "Documentation", "Forum", and "Online Store". On the right side of the header are "Logout" and "Save changes" buttons. The main content area is titled "Module Status Configuration" and contains a table with the following data:

Module	Depends	Status
Network		<input checked="" type="checkbox"/>
Firewall	Network	<input checked="" type="checkbox"/>
DHCP	Network	<input checked="" type="checkbox"/>
DNS		<input checked="" type="checkbox"/>
Events		<input type="checkbox"/>
Logs		<input type="checkbox"/>

The left sidebar shows a navigation menu with sections: Core (Dashboard, Module Status, System), Network, Maintenance, Software Management, UTM, Firewall, Infrastructure (DHCP, DNS), and Infrastructure (DHCP). The "Infrastructure (DHCP)" section is currently selected. At the bottom of the page, a footer note reads "Zentyal created by eBox Technologies S.L."

# Provjera konfiguracije javne mreže

Zentyal - Network Interfaces - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Network/Ifaces?iface=eth1

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**zentyal** Logout Save changes

**Network Interfaces** (show help)

Core Dashboard Module Status System Network Services Static Routes Dynamic DNS Diagnostic Tools Maintenance Software Management UTM Firewall Infrastructure DHCP DNS

Name: eth1 Method: Static External (WAN):  IP address: 161.53.190.90 Netmask: 255.255.255.128 Change

**Virtual Interfaces**

Name	IP address	Netmask	Action
		255.255.255.0	

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# Postavljanje privatne mreže

Zentyal - Network Interfaces - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Network/Ifaces?iface=eth0

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**zentyal** Logout Save changes

**Network Interfaces** (show help)

**Core**

eth0 eth1

Name:

Method:

External (WAN):  Check this if you are using Zentyal as a gateway and this interface is connected to your Internet router.

IP address:

Netmask:

**Virtual Interfaces**

Name	IP address	Netmask	Action
<input type="text"/>	<input type="text"/>	<input type="text" value="255.255.255.0"/>	<input type="button" value="+"/>

**Dashboard**

Module Status

System

**Network**

Interfaces

Gateways

DNS

Objects

Services

Static Routes

Dynamic DNS

Diagnostic Tools

**Maintenance**

**Software Management**

UTM

Firewall

**Infrastructure**

DHCP

DNS

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# DNS privatne mreže

The screenshot shows the Zentyal - DHCP - Mozilla Firefox interface. The left sidebar has a green header bar with 'Core' selected, followed by 'Dashboard', 'Module Status', 'System', 'Network', 'Maintenance', 'Software Management', 'UTM' (selected), 'Firewall', 'Infrastructure' (selected), 'DHCP', and 'DNS'. The main content area has a green header bar with 'DHCP (show help)' and a search icon. Below it, 'Service configuration' is selected. A dropdown menu says 'Choose a static interface to configure: interface eth0'. There are three tabs: 'Common options' (selected), 'Dynamic DNS Options', and 'Advanced options'. A green 'Done' button is visible. Configuration fields include:

- Default gateway: Zentyal (dropdown)
- Search domain: None (dropdown)
- Primary nameserver: local Zentyal DNS (dropdown)
- Secondary nameserver: 161.53.190.3 (text input)
- NTP server: None (dropdown)
- WINS server: None (dropdown)

Below the configuration area, there's a 'DHCP ranges' section with the following information:

- Interface IP address: 192.168.123.1
- Subnet: 192.168.123.0/24
- Available range: 192.168.123.1 - 192.168.123.254

# Podešavanje DNS-a

Zentyal - DNS - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/DNS/Composite/Global

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**zentyal** Logout Save changes

**DNS** [\(show help\)](#)

**Core** **Dashboard** **Module Status** **System** **Network** **Maintenance** **Software Management** **UTM** **Firewall** **Infrastructure** **DHCP** **DNS**

Enable transparent DNS cache:  [Change](#)

**forwarder added**

**Forwarders** [+ Add new](#)

Forwarder	Action
192.168.123.1	<a href="#"></a> <a href="#"></a>

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**Domains** [+ Add new](#)

Zentyal created by eBox Technologies S.L.

# Dodavanje raspona adresa DHCP

Zentyal - DHCP - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/DHCP/Composite/General

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Module Status Choose a static interface to configure: interface eth0

System Network Maintenance Software Management UTM Firewall Infrastructure DHCP DNS

Common options Dynamic DNS Options Advanced options

Default gateway: Zentyal Setting "Zentyal" as default gateway will set the interface IP address as gateway

Search domain: None The selected domain will complete on your clients those DNS queries which are not fully qualified

Primary nameserver: local Zentyal DNS If "Zentyal DNS" is present and selected, the Zentyal server will act as cache DNS server

Secondary nameserver: 161.53.190.3 Optional

NTP server: None If "Zentyal NTP" is present and selected, Zentyal will be the NTP server for DHCP clients

WINS server: None If "Zentyal Samba" is present and selected, Zentyal will be the WINS server for DHCP clients

Change

**DHCP ranges**

Interface IP address: 192.168.123.1  
Subnet: 192.168.123.0/24  
Available range: 192.168.123.1 - 192.168.123.254

**Adding a new range**

Name: moja\_mreza  
From: 192.168.123.2  
To: 192.168.123.254

Add Cancel

# Dodavanje raspona adresa DHCP

The screenshot shows the Zentyal DHCP configuration page within a Mozilla Firefox browser window. The URL in the address bar is `localhost https://localhost/DHCP/Composite/General`. The left sidebar, titled "Core", lists several modules: Dashboard, Module Status, System, Network, Maintenance, Software Management, UTM (selected), Firewall, Infrastructure (selected), DHCP (selected), and DNS. The main content area is titled "Service configuration" and shows settings for interface `eth0`. It includes tabs for Common options, Dynamic DNS Options, and Advanced options. Under Common options, the following settings are visible:

- Default gateway: `Zentyal` (dropdown menu)
- Search domain: `None` (dropdown menu)
- Primary nameserver: `local Zentyal DNS` (dropdown menu)
- Secondary nameserver: `161.53.190.3` (text input field)
- NTP server: `None` (dropdown menu)
- WINS server: `None` (dropdown menu)

Below these settings, there is a "Change" button. At the bottom of the page, under "DHCP ranges", the following information is displayed:

- Interface IP address: `192.168.123.1`
- Subnet: `192.168.123.0/24`
- Available range: `192.168.123.1 - 192.168.123.254`

A green status bar at the bottom indicates " range added". The page footer contains the number `67`.

# Podešavanje "dashboarda"

The screenshot shows a Mozilla Firefox browser window titled "Zentyal - Dashboard - Mozilla Firefox". The address bar displays "localhost https://localhost/Dashboard/Index". The main content area is a "Configure Widgets" dialog box. Inside the dialog, there is a message: "Browse the available widgets in the left menu and drag&drop them to the dashboard." On the left side of the dialog, a sidebar lists various modules: System, Information, Network, DHCP, Dashboard, Module Status, System, Network, Maintenance, Software Management, UTM, Firewall, Infrastructure, DHCP, and DNS. The "UTM" module is currently selected, indicated by a green bar. At the bottom of the dialog, a footer note reads "Zentyal created by eBox Technologies S.L.". The browser's top navigation bar includes File, Edit, View, History, Bookmarks, Tools, and Help.

# Podešavanje "dashboarda"

Zentyal - Dashboard - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Dashboard/Index

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Configure Widgets

System Information Network DHCP

Dashboard Module Status System Network Maintenance Software Management UTM Firewall Infrastructure DHCP DNS

DHCP leases

DHCP leases

IP address	MAC address	Host name
192.168.123.2	00:15:c5:6a:fe:0d	inspiron

General information

Time	Tue Nov 8 15:04:15 CET 2011
Hostname	zentyal
Core version	2.2.3
Software	No updates
System load	1.39, 0.70, 0.29
Uptime	5 min
Users	0

Zentyal created by eBox Technologies S.L.

https://localhost/Dashboard/Index#

# Podešavanje "dashboarda"

Zentyal - Dashboard - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Dashboard/Index

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Configure Widgets

System Information Network DHCP

Module Status

System

Network

Maintenance

Software Management

UTM

Firewall

Infrastructure

DHCP

DNS

Network Interfaces

IP address	MAC address	Host name
192.168.123.2	00:15:c5:6a:fe:0d	insipiron

Network Interfaces

eth0

Status	up, internal, link ok
MAC address	00:0c:6e:86:ea:6d
IP address	192.168.123.1

Tx bytes Rx bytes

eth1

Status	up, external, link ok
MAC address	00:06:4f:03:d2:6e
IP address	161.53.190.90

Tx bytes Rx bytes

General Information

Time	Tue Nov 8 15:04:45 CET 2011
Hostname	zentyal
Core version	2.2.3
Software	No updates
System load	1.20, 0.73, 0.31
Uptime	5 min
Users	0

Zentyal created by eBox Technologies S.L.

https://localhost/Dashboard/Index#

# Korisnici i grupe

Zentyal - - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Software/InstallPkgs

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 The following packages will be installed:

Core Dashboard Module Status System Network Maintenance Software Management Zentyal Components System Updates Settings UTM Firewall Infrastructure DHCP DNS

Ok Cancel

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Done

# Podešanjanje načina rada

Zentyal - Initial configuration wizard - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Wizard

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 **zentyal**

Initial configuration wizard

Core Dashboard Module Status System Network Maintenance Software Management Gateway Captive Portal UTM Firewall Infrastructure DHCP DNS Office

Users and Groups



Select the type of the server

Choose standalone unless you want LDAP replication or synchronization with Active Directory.

Standalone server  
 Advanced configuration (Master/Slave/AD Sync)

Skip Finish

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# Provjera postavki

Zentyal - Zentyal Users Mode - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Users/View/Mode

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 Logout Save changes

## Zentyal Users Mode

Done

! Users and Groups module is disabled. Don't forget to enable it on the [Module Status](#) section, otherwise your changes won't have any effect.

### Configuration

Mode:

LDAP DN:   
Only for master and AD slave configuration

Master host:   
Only for slave configuration: IP of the master Zentyal or Windows AD

LDAP password:   
Master Zentyal LDAP password

[Zentyal created by eBox Technologies S.L.](#)

# Uključivanje modula "users"

Zentyal - Module Status Configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/ServiceModule/StatusView

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**Configure module: users**

Enabling this module will cause Zentyal to perform the actions and file modifications listed below. You must explicitly accept these changes to enable the module.

**Actions to perform by Zentyal**

**Action:** Your LDAP database will be populated with some basic organizational units  
**Reason:** Zentyal needs this organizational units to add users and groups into them.

**Action:** Create directories for slave journals  
**Reason:** Zentyal needs the directories to record pending slave actions.

**Files to modify by Zentyal**

**File:** /etc/nsswitch.conf  
**Reason:** To make NSS use LDAP resolution for user and group accounts. Needed for Samba PDC configuration.

**File:** /etc/ldap.conf  
**Reason:** To let NSS know how to access LDAP accounts.

**File:** /etc/fstab  
**Reason:** To add quota support to /home partition.

**File:** /etc/cron.d/zentyal-users

Logout Save changes

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https://localhost/ServiceModule/StatusView#

# Otvaranje korisnika

Zentyal - Users - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/UsersAndGroups/Users

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**zentyal**

Logout Save changes

**Users**

**Add User**

User name: pperic  
First name: Pero  
Last name: Peric  
Comment: *Optional*  
Password:  **••••**  
Retype password:  **••••**  
Group:

Add Add and Edit

There are no users at the moment

**Core**

Dashboard

**Module Status**

System

Network

Maintenance

Software Management

**UTM**

Firewall

**Infrastructure**

DHCP

DNS

**Office**

Users and Groups

Users

Groups

User Template

LDAP Settings

Slave Status

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# Dodavanje korisnika

Zentyal - Users - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/UsersAndGroups/Users

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**zentyal** Logout Save changes

**Users**

**Add User**

User name:

First name:

Last name:

Comment: Optional

Password:

Retype password:

Group:

**Users**

Name	Full name	Edit
pperic	Pero Peric	

10  Page 1

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Done

# Instalacija "Captive portal"

Zentyal - Zentyal components - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Software/EBox Google

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Core

Dashboard

Module Status

System

Network

Maintenance

Software Management

Zentyal Components

System Updates

Settings

UTM

Install Update (0) Delete

View basic mode

Component Latest version Select

Component	Latest version	Select
Antivirus	2.2	<input type="checkbox"/>
Backup	2.2.2	<input type="checkbox"/>
Bandwidth Monitor	2.2.2	<input type="checkbox"/>
Captive Portal	2.2	<input checked="" type="checkbox"/>
Certification Authority	2.2.2	<input type="checkbox"/>
Cloud Client	2.2.2	<input type="checkbox"/>
FTP	2.2.1	<input type="checkbox"/>
File Sharing Service	2.2	<input type="checkbox"/>
Groupware (Zarafa)	2.2	<input type="checkbox"/>
HTTP Proxy (Cache and Filter)	2.2.1	<input type="checkbox"/>
IPsec	2.2	<input type="checkbox"/>
Intrusion Detection System	2.2	<input type="checkbox"/>
Jabber (Instant Messaging)	2.2	<input type="checkbox"/>
Layer-7 Filter	2.2	<input type="checkbox"/>
Mail Filter	2.2	<input type="checkbox"/>
Mail Service	2.2	<input type="checkbox"/>
Migration Tool	2.2	<input type="checkbox"/>
NTP Service	2.2	<input type="checkbox"/>
PPTP	2.2	<input type="checkbox"/>
Printer Sharing Service	2.2	<input type="checkbox"/>

Done

# Captive portal

Zentyal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/Software/InstallPkgs

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 The following packages will be installed:

Core

Dashboard

Module Status

System

Network

Maintenance

Software Management

Zentyal Components

System Updates

Settings

**UTM**

Firewall

Infrastructure

DHCP

DNS

Office

Users and Groups

Ok Cancel

Zentyal created by eBox Technologies S.L.

Done

# Konfiguracija "Captive portal"

Zentyal - Captive Portal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/CaptivePortal/Composite/General

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**zentyal** Logout Save changes

**Captive Portal** ([show help](#))

**!** Captive Portal module is disabled. Don't forget to enable it on the [Module Status](#) section, otherwise your changes won't have any effect.

[Settings](#) [Current users](#)

**General Settings**

Group: [All users](#) Only users in this group will be allowed to login.

HTTP port: 4444

HTTPS port: 4443 [Change](#)

If you want to limit bandwidth usage install and enable Bandwidth Monitor module.

**Captive Interfaces**

Enabled	Interface	Action
<input checked="" type="checkbox"/>	eth0	<a href="#"></a>

10 [Page 1](#)

Zentyal created by eBox Technologies S.L.

# Uključivanje "Captive portal" modula

Zentyal - Module Status Configuration - Mozilla Firefox

File Edit View History Bookmarks Tools Help

localhost https://localhost/ServiceModule/StatusView

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**zentyal**

Configure module: captiveportal

Enabling this module will cause Zentyal to perform the actions and file modifications listed below. You must explicitly accept these changes to enable the module.

**Actions to perform by Zentyal**

Action: Add LDAP schemas  
Reason: Zentyal will use this schema to store user sessions info.

Accept

Logout Save changes

	Status
	<input checked="" type="checkbox"/>
Captive Portal	<input type="checkbox"/>
Firewall, Users and Groups	<input type="checkbox"/>

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https://localhost/ServiceModule/StatusView#

# "Captive portal " sa strane MS korisnika

Certificate Error: Navigation Blocked - Windows Internet Explorer

File Edit View Favorites Tools Help

Favorites Suggested Sites Free Hotmail Upgrade Your Browser

Certificate Error: Navigation Blocked

Internet Explorer is currently running with add-ons disabled. Click here to manage, disable, or remove your add-ons.

**There is a problem with this website's security certificate.**

The security certificate presented by this website was not issued by a trusted certificate authority.

The security certificate presented by this website was issued for a different website's address.

Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.

**We recommend that you close this webpage and do not continue to this website.**

Click here to close this webpage.

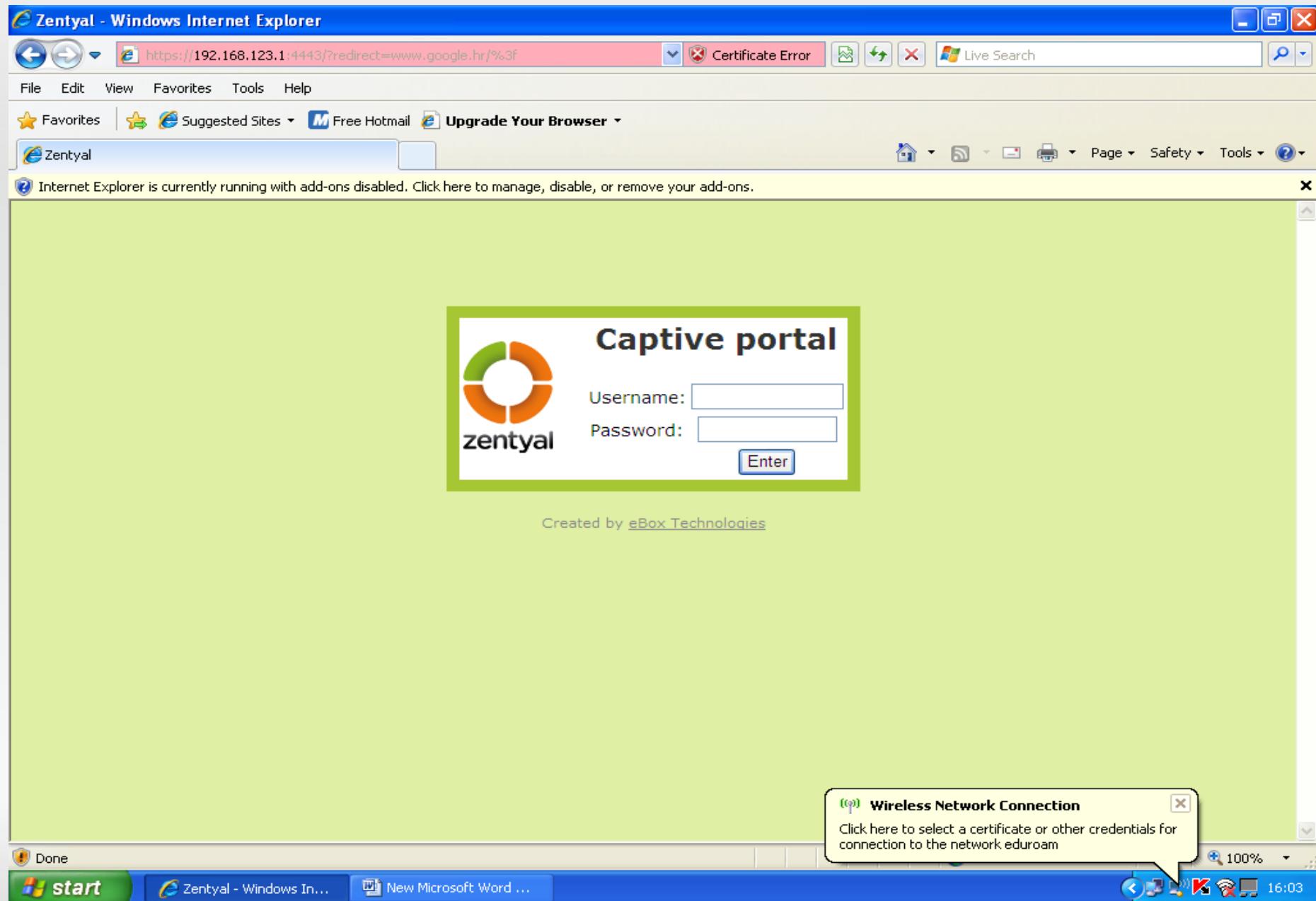
Continue to this website (not recommended).

More information

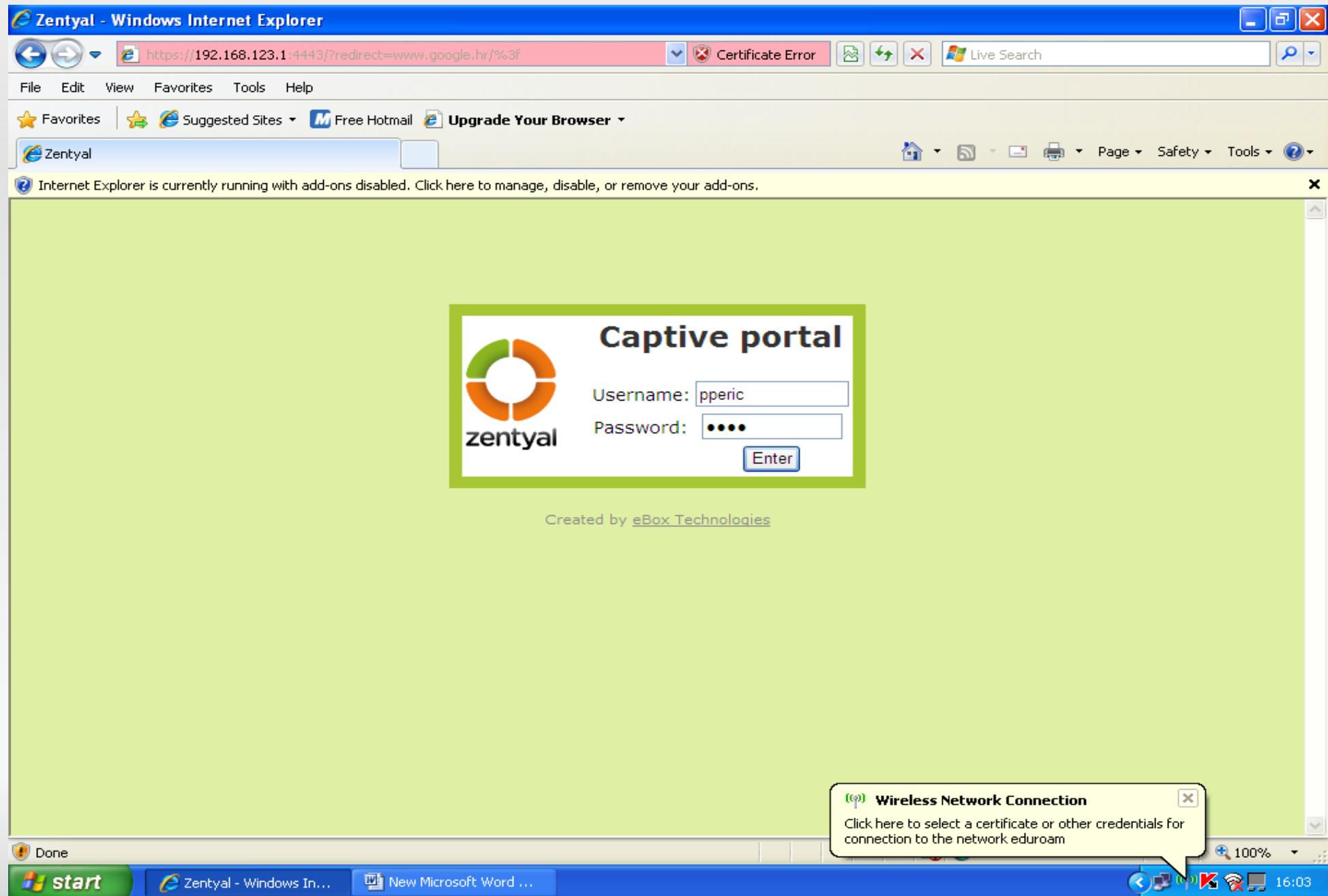
Wireless Network Connection  
Click here to select a certificate or other credentials for connection to the network eduroam

Done Start Certificate Error: Nav... 100% 16:02

# "Captive portal" sa strane MS korisnika



# "Captive portal" sa strane MS korisnika



# "Captive portal" sa strane MS korisnika

The screenshot shows a Windows Internet Explorer window with the following details:

- Title Bar:** Zentyal - Windows Internet Explorer
- Address Bar:** https://192.168.123.1:4443/Dashboard/Index
- Status Bar:** Certificate Error
- Toolbar:** File, Edit, View, Favorites, Tools, Help
- Menu Bar:** Favorites, Suggested Sites, Free Hotmail, Upgrade Your Browser
- Content Area:** Displays the Zentyal captive portal login page. The page features the Zentyal logo (a green and orange circular icon) and the text: "You have logged in successfully. If your web browser blocked the popup click [here](#) and allow it." Below this is the text "Created by [eBox Technologies](#)".
- Taskbar:** Shows icons for Start, Zentyal - Windows In..., and New Microsoft Word ...
- System Tray:** Shows icons for Network Connection (Wireless Network Connection), Battery, Volume, and a clock showing 16:04.
- Bottom Status Bar:** Shows "Error on page.", "100%", and "84".