

# Kampüs Ađı Kullanıcı Yetkilendirme Portalı

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# İçerik

- Kullanıcı Profilleri
- Yerleşke Ağı Yönetimi
- Kullanıcı Yetkilendirmesi
- Sorunlar
- İhtiyaçlar
- Kullandığımız Çözüm
- Planlanan İyileştirmeler
- Öneriler / Sorular



# Kullanıcı Profilleri

- Kullanıcı Profilleri
  - Öğrenci
  - Personel
  - Misafir
  - Yönetici

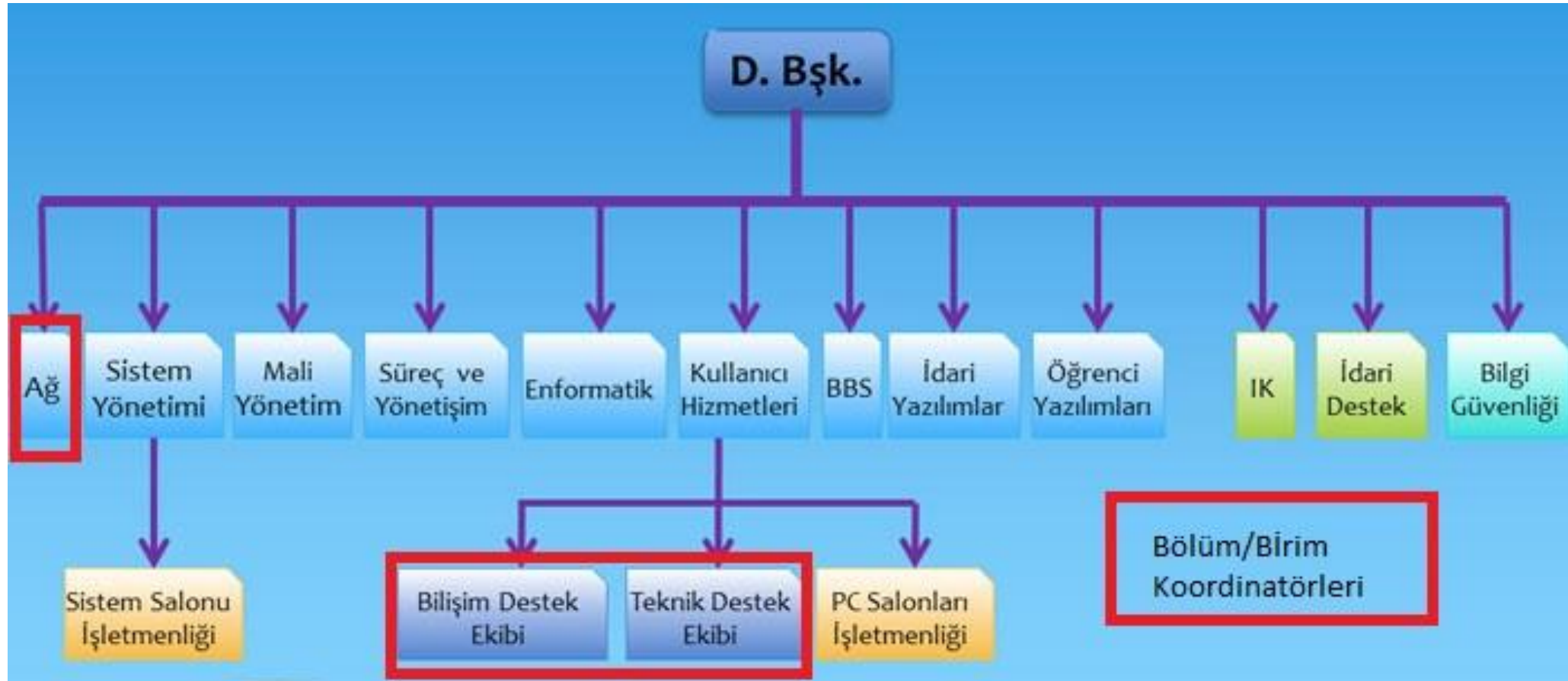


# Yerleşke Ağı Yönetimi

- Bölümler
- Akademik/İdari Birimler
- Yurtlar
- Lojmanlar
- Diğer Ortak Kullanım Alanları



# Yerleşke Ağı Yönetimi



# Kullanıcı Yetkilendirmesi

- Yasal zorunluluklar
- Ağ güvenliği
- Kullanıcıların sorumlu tutulması
- Kaliteli ve 7/24 ulaşılabilir hizmet
- Sorunları / İş yükünü azaltmak
- Sorunların takip edilebilirliğini arttırmak
- Sorunların çözümünü kolaylaştırmak



# Kullanılan Yöntemler

- IP bilgilerini imzalanmış dosyalarda tutmak
- MAC adresi bazlı yetkilendirme yapmak
- Statik/Dinamik DHCP kullanmak
- 802.1x kullanmak



# Kullanılan Yöntemler

- Bölüm/Birim yöneticilerini kendi haline bırakmak
  - Hiçbir şey tutmamak
  - Excel tutmak
  - DHCP kurup yönetmek/yönetememek
  - Rastgele IP girmek
  - Çeşitli ağ cihazlarına yatırım yapmak
  - Kullanıcılarla iletişime geçemeyen sistemler





# Sorunlar

- Yüksek oranda deęişkenlik gösteren
  - Bilgi/beceri seviyeleri
  - Kullanılan cihazların çeşitlilięi
  - Uçlardaki aę altyapısı
  - Bakış açısı
- Yüksek maliyetler
- Artan şikayetler
- Bürokratik kısıtlamalar (ihale, şartname vs)
- Yoęun iş gücü ihtiyacı



# Sorunlar

- Sıklıkla deęişen kanunlar/yönetmelikler
- Dökümantasyon eksikliği
- Personel deęişim oranları
- Sürekli artan kullanıcı beklentileri
- Çok başlı ve uyumsuz sistemler
- Sorun takibinin ve müdahalesinin zorlaşması
- Giderek artan sistem karmaşıklığı
- Tüm problemlerden sorumlu tutulmak



# İhtiyaçlar

- Esneklik (altyapı, kanunlar vs vs )
- Kullanım Kolaylığı
- Sürdürülebilirlik
- 7/24 Erişilebilirlik
- Uygun Maliyet
- Yasalarla Uyum
- Günün Teknolojisiyle Uyum
- Güvenlik



# Kullandığımız Çözüm

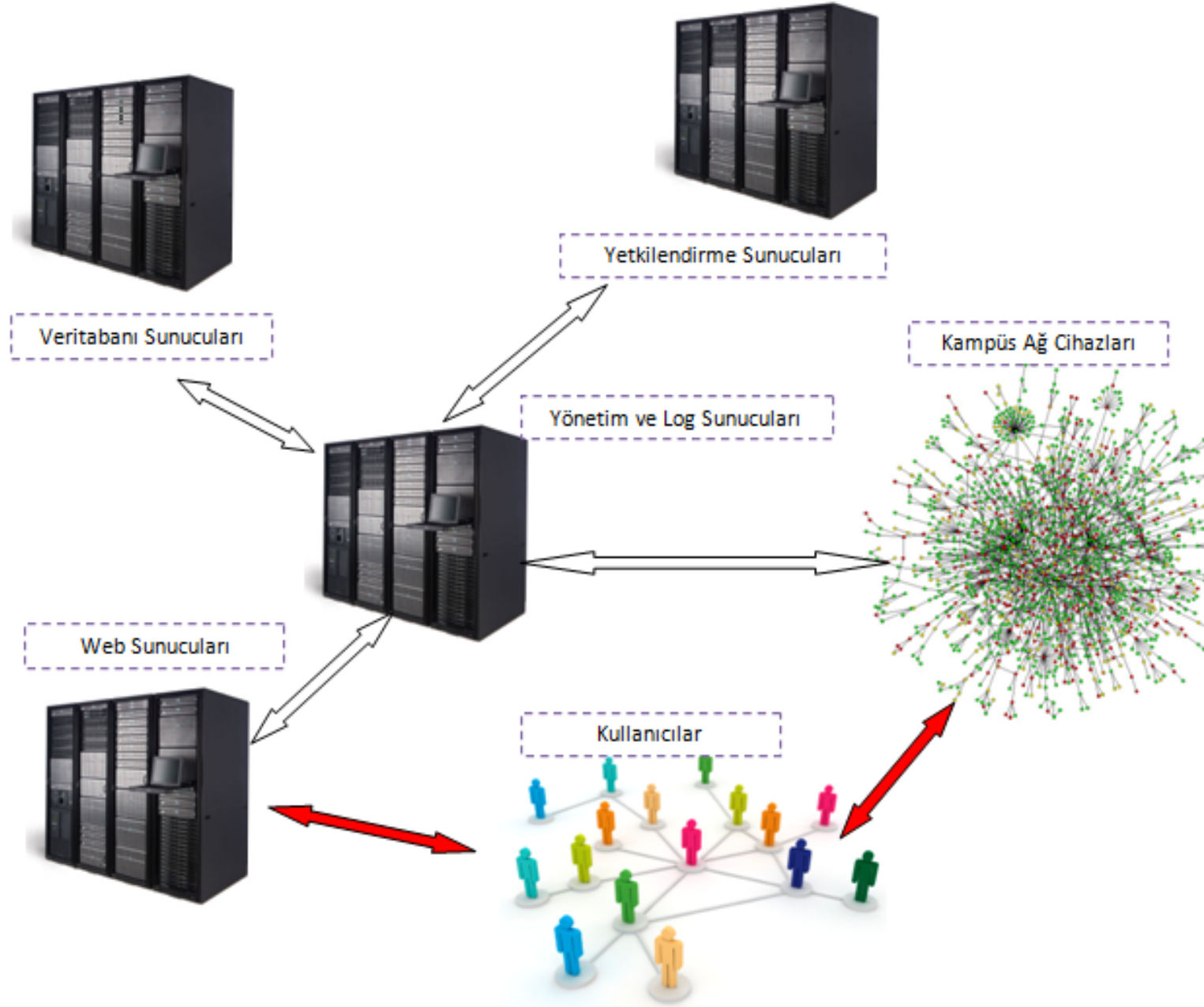
- Modüler
- 7/24 erişilebilir
- Mümkün olan en basit şekilde sunulan
- Hemen her çeşit alt yapıya uygulanabilir
- Gelişime açık
- Sorun takibini kolaylaştıran
- İş yükünü azaltan
- Belirli seviyede güvenlik sağlayan



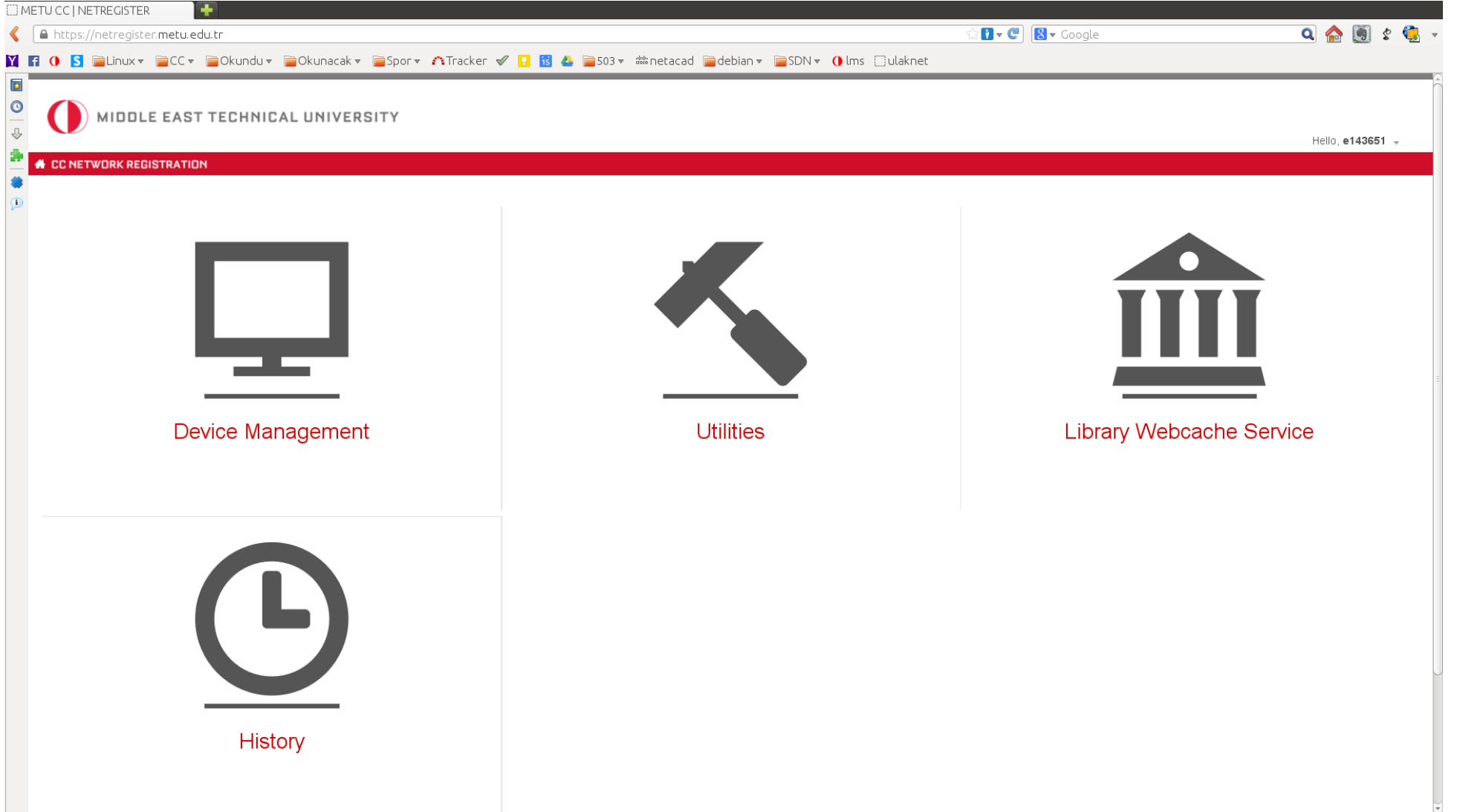
# Kullandığımız Çözüm

- Ölçeklenebilir
- Düşük maliyetli
- Sürdürülebilir
- Üretici bağımsız (Açık Kaynak)
- Bürokrasiyle uyum sağlayan
- Kullanıcı odaklı





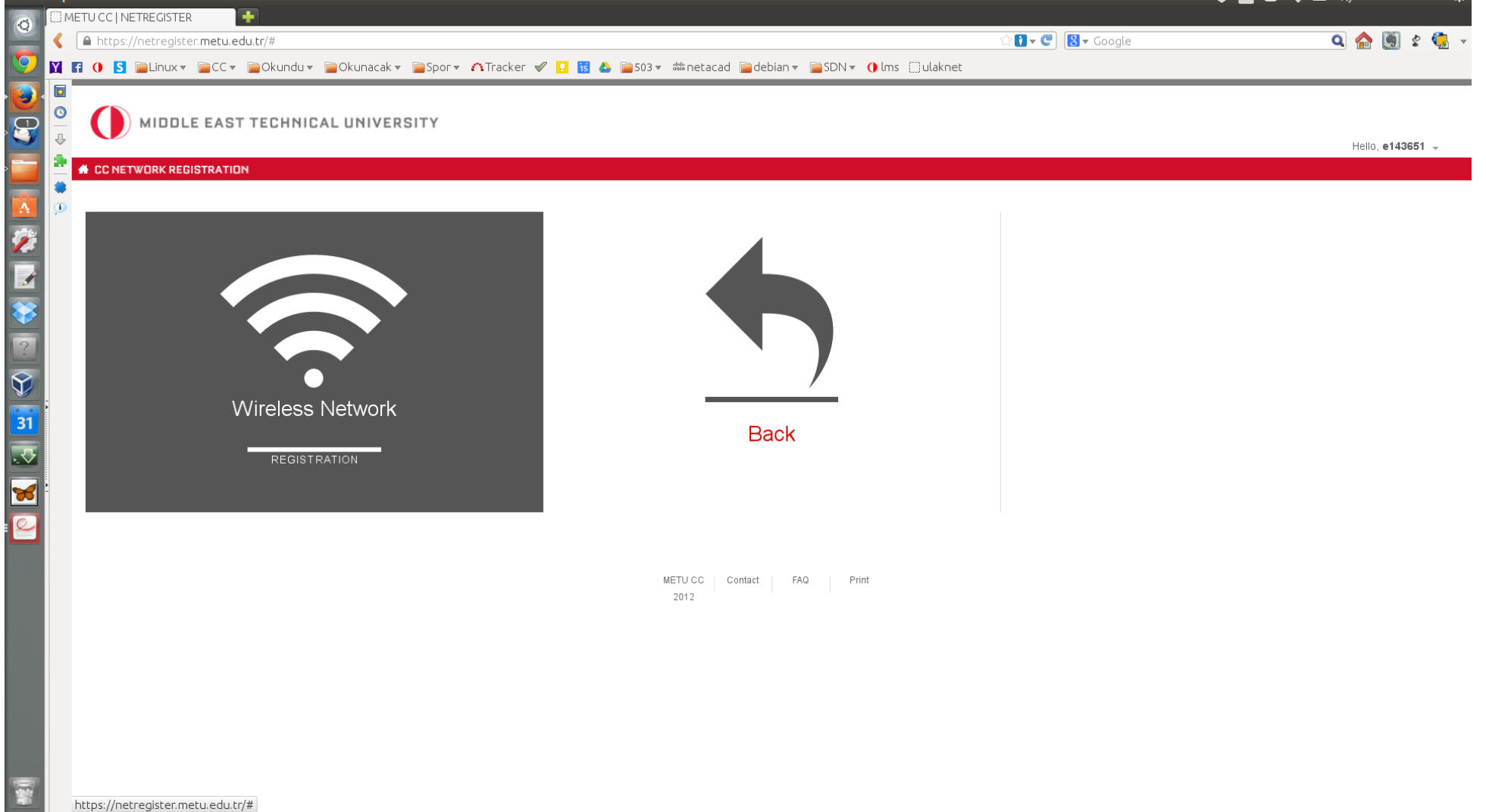
# Kullandığımız Çözüm



The screenshot displays the METU CC | NETREGISTER web application. The browser address bar shows the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION" and a user greeting "Hello, e143651". The main content area is divided into four sections, each with an icon and a label:

- Device Management**: Represented by a computer monitor icon.
- Utilities**: Represented by a hammer icon.
- Library Webcache Service**: Represented by a classical building icon.
- History**: Represented by a clock icon.

# Kullandığımız Çözüm



The screenshot displays a web browser window with the address bar showing <https://netregister.metu.edu.tr/#>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION". The main content area features a dark gray box with a white Wi-Fi symbol and the text "Wireless Network" and "REGISTRATION". To the right of this box is a large gray arrow pointing left, with the word "Back" written in red below it. At the bottom of the page, there are links for "METU CC 2012", "Contact", "FAQ", and "Print".



# Kullandığımız Çözüm

The screenshot shows a web browser window with the URL <https://netregister.metu.edu.tr/#>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains "CC NETWORK REGISTRATION". The main content area is titled "Wireless Network Service" and displays "MAC addresses under your responsibility". A table lists a single registration entry with columns for USER NAME, DATE, MAC, VALID THROUGH, NOTE, and TRANSACTIONS. Below the table, there is a "New MAC" button and a link to "Press the button below to add a new registration for METU Wireless Network". The footer contains navigation links for "METU CC", "Contact", "FAQ", and "Print".

METU CC | NETREGISTER

https://netregister.metu.edu.tr/#

MIDDLE EAST TECHNICAL UNIVERSITY

Hello, e143651

CC NETWORK REGISTRATION

## Wireless Network Service

MAC addresses under your responsibility

USER NAME	DATE	MAC	VALID THROUGH	NOTE	TRANSACTIONS
e143651	2013-08-17 15:06	bc:cf:cc:59:2f:4c	-	desire z yeni	<a href="#">Change</a> <a href="#">Erase</a>

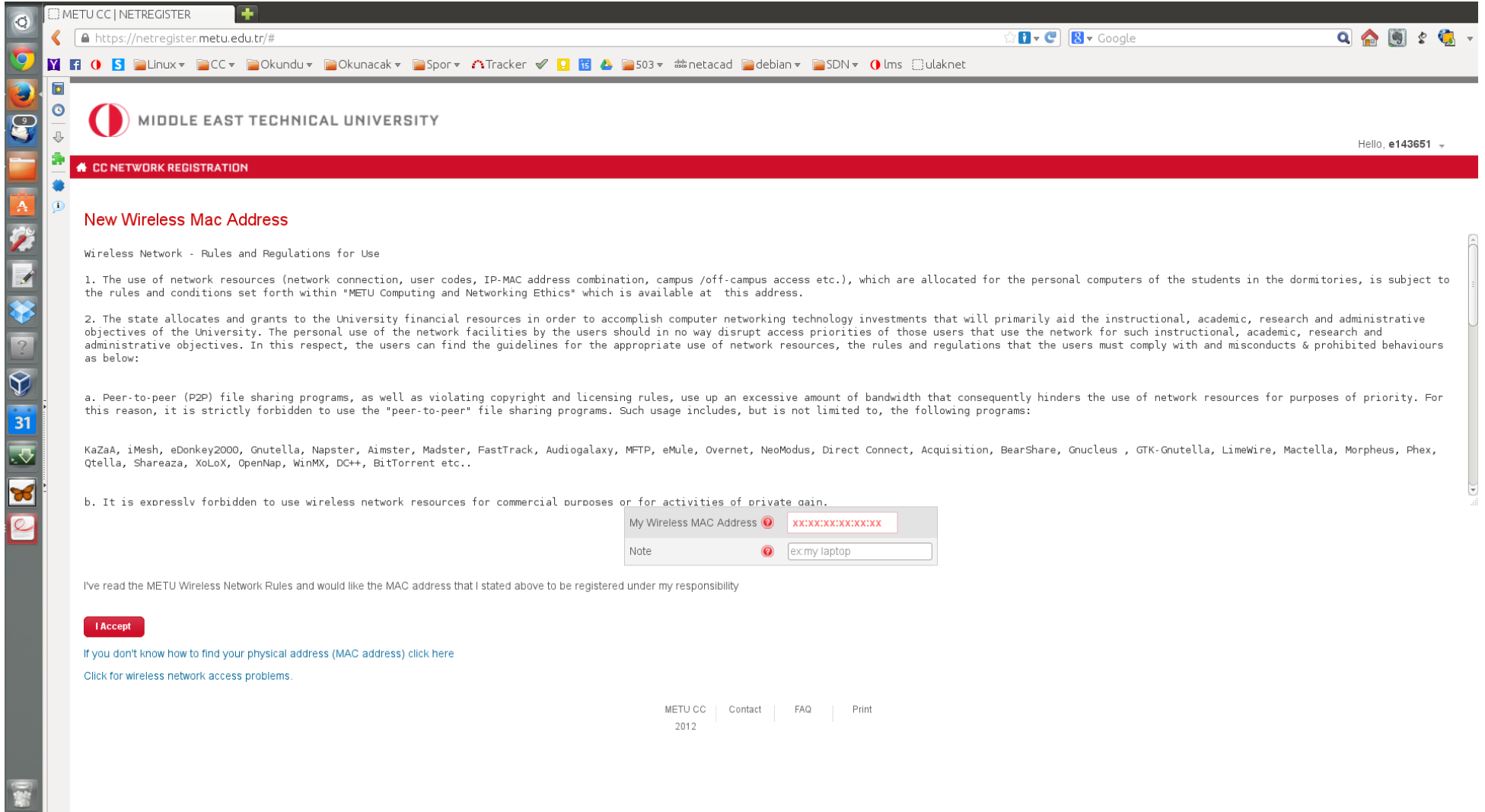
Press the button below to add a new registration for METU Wireless Network

[New MAC](#)

METU CC | Contact | FAQ | Print

METU CC  
2012

# Kullandığımız Çözüm



The screenshot shows a web browser window with the address bar displaying 'https://netregister.metu.edu.tr/#'. The page header includes the METU logo and 'MIDDLE EAST TECHNICAL UNIVERSITY'. A red banner at the top reads 'CC NETWORK REGISTRATION'. The main content area is titled 'New Wireless Mac Address' and contains the following text:

Wireless Network - Rules and Regulations for Use

1. The use of network resources (network connection, user codes, IP-MAC address combination, campus /off-campus access etc.), which are allocated for the personal computers of the students in the dormitories, is subject to the rules and conditions set forth within "METU Computing and Networking Ethics" which is available at this address.
2. The state allocates and grants to the University financial resources in order to accomplish computer networking technology investments that will primarily aid the instructional, academic, research and administrative objectives of the University. The personal use of the network facilities by the users should in no way disrupt access priorities of those users that use the network for such instructional, academic, research and administrative objectives. In this respect, the users can find the guidelines for the appropriate use of network resources, the rules and regulations that the users must comply with and misconducts & prohibited behaviours as below:
  - a. Peer-to-peer (P2P) file sharing programs, as well as violating copyright and licensing rules, use up an excessive amount of bandwidth that consequently hinders the use of network resources for purposes of priority. For this reason, it is strictly forbidden to use the "peer-to-peer" file sharing programs. Such usage includes, but is not limited to, the following programs:  
KaZaA, iMesh, eDonkey2000, Gnutella, Napster, Aimster, Madster, FastTrack, Audiogalaxy, MFTP, eMule, Overnet, NeoModus, Direct Connect, Acquisition, BearShare, Gnuceus, GTK-Gnutella, LimeWire, Mactella, Morpheus, Phex, Qtella, Shareaza, XoLoX, OpenNap, WinMX, DC++, BitTorrent etc..
  - b. It is expressly forbidden to use wireless network resources for commercial purposes or for activities of private gain.

Below the text, there is a form with two fields:

My Wireless MAC Address	xx:xx:xx:xx:xx:xx
Note	ex.my laptop

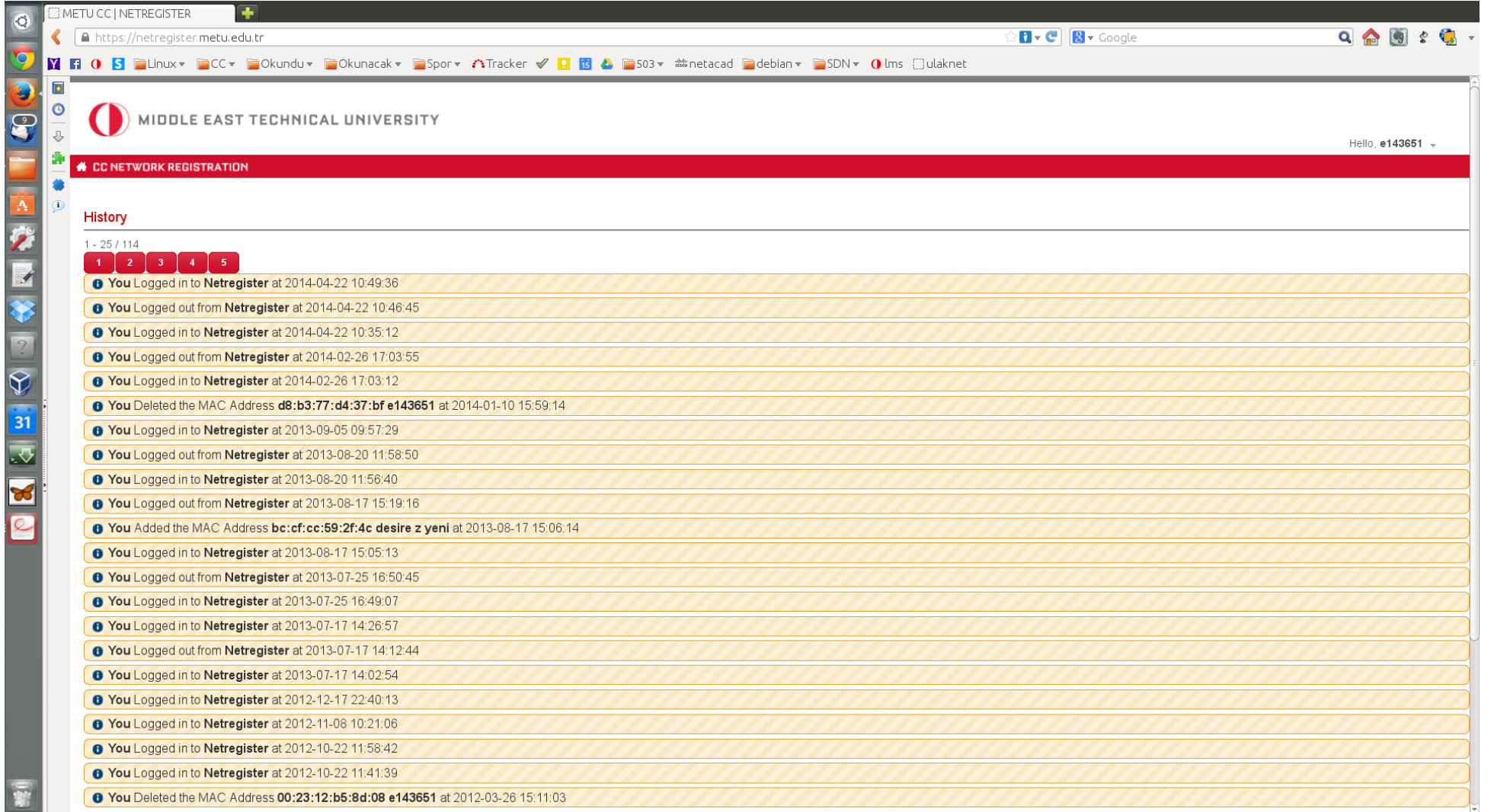
I've read the METU Wireless Network Rules and would like the MAC address that I stated above to be registered under my responsibility

[I Accept](#)

[If you don't know how to find your physical address \(MAC address\) click here](#)  
[Click for wireless network access problems.](#)

At the bottom, there are links for 'METU.CC', 'Contact', 'FAQ', and 'Print'. The footer text reads 'METU.CC 2012'.

# Kullandığımız Çözüm



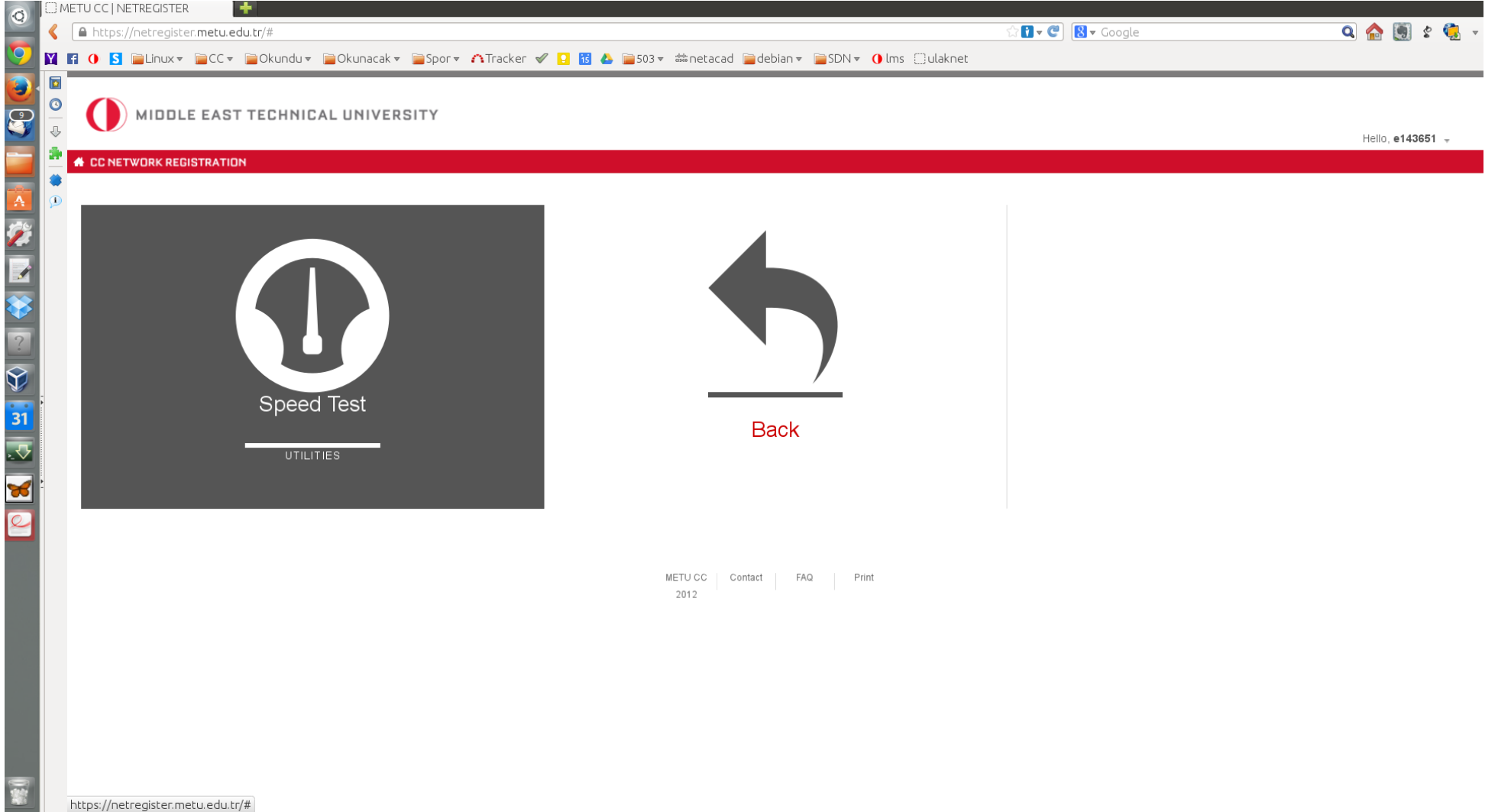
The screenshot displays the Netregister web application interface. The browser address bar shows the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION". Below this, a "History" section shows a list of 114 actions, with the first five actions highlighted in red. The actions are as follows:

Action	Timestamp
You Logged in to Netregister	2014-04-22 10:49:36
You Logged out from Netregister	2014-04-22 10:46:45
You Logged in to Netregister	2014-04-22 10:35:12
You Logged out from Netregister	2014-02-26 17:03:55
You Logged in to Netregister	2014-02-26 17:03:12
You Deleted the MAC Address d8:b3:77:d4:37:bf e143651	2014-01-10 15:59:14
You Logged in to Netregister	2013-09-05 09:57:29
You Logged out from Netregister	2013-08-20 11:58:50
You Logged in to Netregister	2013-08-20 11:56:40
You Logged out from Netregister	2013-08-17 15:19:16
You Added the MAC Address bc:cf:cc:59:2f:4c desire z yeni	2013-08-17 15:06:14
You Logged in to Netregister	2013-08-17 15:05:13
You Logged out from Netregister	2013-07-25 16:50:45
You Logged in to Netregister	2013-07-25 16:49:07
You Logged in to Netregister	2013-07-17 14:26:57
You Logged out from Netregister	2013-07-17 14:12:44
You Logged in to Netregister	2013-07-17 14:02:54
You Logged in to Netregister	2012-12-17 22:40:13
You Logged in to Netregister	2012-11-08 10:21:06
You Logged in to Netregister	2012-10-22 11:58:42
You Logged in to Netregister	2012-10-22 11:41:39
You Deleted the MAC Address 00:23:12:b5:8d:08 e143651	2012-03-26 15:11:03

# Kullandığımız Çözüm

The screenshot displays the METU CC | NETREGISTER web application. The browser address bar shows the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION" and a user greeting "Hello, e143651". The main content area features four service tiles: "Device Management" (represented by a monitor icon), "Utilities" (represented by a hammer and screwdriver icon), "Library Webcache Service" (represented by a classical building icon), and "History" (represented by a clock icon). The bottom of the browser window shows the URL <https://netregister.metu.edu.tr/#>.

# Kullandığımız Çözüm



METU CC | NETREGISTER

https://netregister.metu.edu.tr/#

MIDDLE EAST TECHNICAL UNIVERSITY

Hello, e143651

CC NETWORK REGISTRATION

Speed Test

UTILITIES

Back

METU CC | Contact | FAQ | Print

2012

https://netregister.metu.edu.tr/#

# Kullandığımız Çözüm

The screenshot shows a web browser window with the address bar displaying "https://netregister.metu.edu.tr/#". The page header includes the METU logo and "MIDDLE EAST TECHNICAL UNIVERSITY". A red banner at the top reads "CC NETWORK REGISTRATION". The main content area features a "Speed Test" section with a result of "113.41 Mbps (Uber Fast)". A gauge graphic shows the speed relative to a scale of "7 - 150 Mbps". Below the gauge, it says "Testing.....". Three informational messages are displayed in a yellow box:

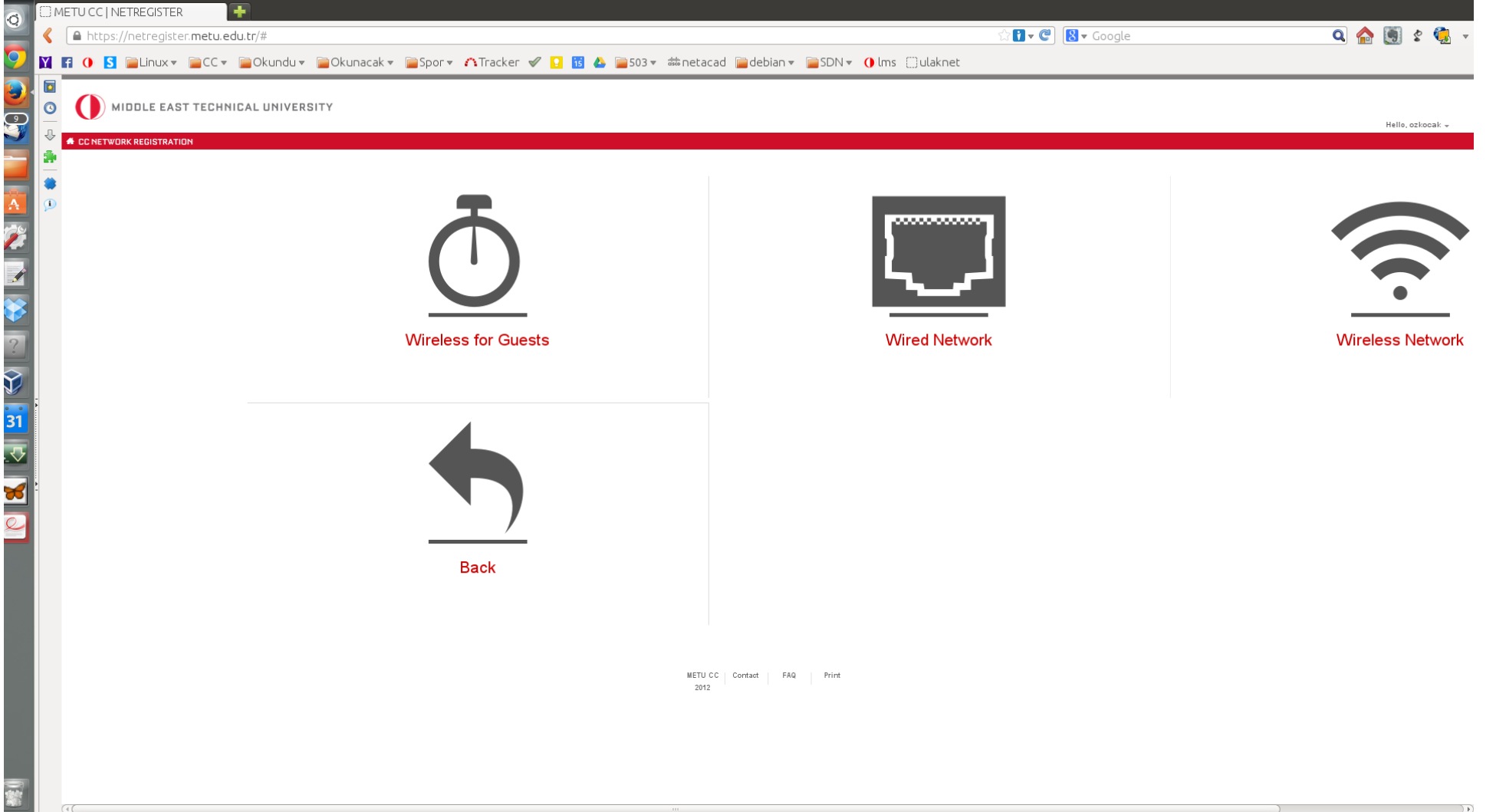
- Test results only reflects the page load time used in the test environment.
- This test is depended on your network connection and computer's configuration.
- Test results are aproximate and may not be reliable for exact connection speed testing.

At the bottom of the page, there are links for "METU CC", "Contact", "FAQ", and "Print", along with the year "2012".

# Kullandığımız Çözüm

The screenshot displays a web browser window with the address bar showing <https://netregister.metu.edu.tr/#>. The browser's address bar includes social media icons for Facebook, Twitter, and Google. The page header features the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY" on the left, and a user greeting "Hello, ozkoak" on the right. Below the header, a red navigation bar contains the text "CC NETWORK REGISTRATION". The main content area is divided into three columns, each with a large icon and a label: "Monthly Traffic" (line graph icon), "Speed Test" (speedometer icon), and "Back" (curved arrow icon). At the bottom of the page, there is a footer with the text "METU CC | Contact | FAQ | Print" and "2012".

# Kullandığımız Çözüm



The screenshot displays a web browser window with the address bar showing <https://netregister.metu.edu.tr/#>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION" and a user greeting "Hello, ozkocak". The main content area features four large icons with corresponding labels: a stopwatch icon for "Wireless for Guests", a network port icon for "Wired Network", a Wi-Fi signal icon for "Wireless Network", and a curved arrow icon for "Back". The footer contains the text "METU CC 2012" and links for "Contact", "FAQ", and "Print".



# Kullandığımız Çözüm

METU CC | NETREGISTER

https://netregister.metu.edu.tr/#

MIDDLE EAST TECHNICAL UNIVERSITY

CCNETWORK REGISTRATION

## New Wireless Mac Address

Wireless Network - Rules and Regulations for Use

1. The use of network resources (network connection, user codes, IP-MAC address combination, campus /off-campus access etc.), which are allocated for the personal computers of the students in the dormitories, is subject to the rules and conditions set forth within Ethics\* which is available at this address.
2. The state allocates and grants to the University financial resources in order to accomplish computer networking technology investments that will primarily aid the instructional, academic, research and administrative objectives of the University. The personal use users should in no way disrupt access priorities of those users that use the network for such instructional, academic, research and administrative objectives. In this respect, the users can find the guidelines for the appropriate use of network resources, the rules must comply with and misconducts & prohibited behaviours as below:

- a. Peer-to-peer (P2P) file sharing programs, as well as violating copyright and licensing rules, use up an excessive amount of bandwidth that consequently hinders the use of network resources for purposes of priority. For this reason, it is strictly forbidden to use programs. Such usage includes, but is not limited to, the following programs:  
KaZaA, iMesh, eDonkey2000, Gnutella, Napster, Aimster, Madster, FastTrack, Audiogalaxy, MFTP, eMule, Overnet, NeoModus, Direct Connect, Acquisition, BearShare, Gnucleus, GTK-Gnutella, LimeWire, Mactella, Morpheus, Phex, Qtella, Shareaza, XoLoX, OpenNap, WinMX, DC+
- b. It is expressly forbidden to use wireless network resources for commercial purposes or for activities of private gain.
- c. It is forbidden to use network resources for mass mailing, mail bombing, sending spam and users are not allowed to provide the means to the third parties to perform similar acts.

**Attention! You have reached your MAC record right for unlimited time. You are not allowed to add MAC record for unlimited time any more.**

Full Name	<input type="text"/>
TCKN	<input type="text"/>
E-Mail	<input type="text"/>
Phone	<input type="text"/>
Valid For	<input type="radio"/> 3 hours <input type="radio"/> 6 hours <input checked="" type="radio"/> 1 day <input type="radio"/> 3 days <input type="radio"/> 7 days <input type="radio"/> 15 days <input type="radio"/> 30 days <input type="radio"/> 6 months
My Wireless MAC Address	<input type="text" value="XXXXXXXXXXXX"/>
Note	<input type="text" value="ex:my laptop"/>

I've read the METU Wireless Network: Rules and would like the MAC address that I stated above to be registered under my responsibility

If you don't know how to find your physical address (MAC address) click [here](#)

Click for wireless network: access problems.

METU CC | Contact | FAQ | Print

2012



# Kullandığımız Çözüm

The screenshot shows a web browser window displaying the METU CC | NETREGISTER website. The browser's address bar shows the URL <https://netregister.metu.edu.tr/#>. The website header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION" and a user greeting "Hello, ozkocak". The main content area features three large icons: a building icon labeled "cc202", another building icon labeled "OduKent", and a curved arrow icon labeled "Back". At the bottom of the page, there is a footer with the text "METU CC 2012" and links for "Contact", "FAQ", and "Print".

# Kullandığımız Çözüm

The screenshot displays the METU CC | NETREGISTER web application interface. The browser address bar shows the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY" on the left, and "Hello, ccng" on the right. A red navigation bar contains the text "CC NETWORK REGISTRATION". The main content area features several interactive tiles:

- 1 Restriction(s)**: A red tile with a white warning triangle icon.
- Eymir Card**: A red tile with a white globe icon.
- Network Administration**: A white tile with a black gear icon.
- Device Management**: A white tile with a black monitor icon.
- Utilities**: A white tile with a black hammer icon.
- Coordinator's Page**: A dark grey tile with a white person icon and the text "NETWORK MANAGEMENT" below it.
- History**: A white tile with a black clock icon.
- Library Webcache Service**: A white tile with a black classical building icon.

The footer of the page contains the text "METU CC Contact FAQ Print" and the URL <https://netregister.metu.edu.tr/#>.

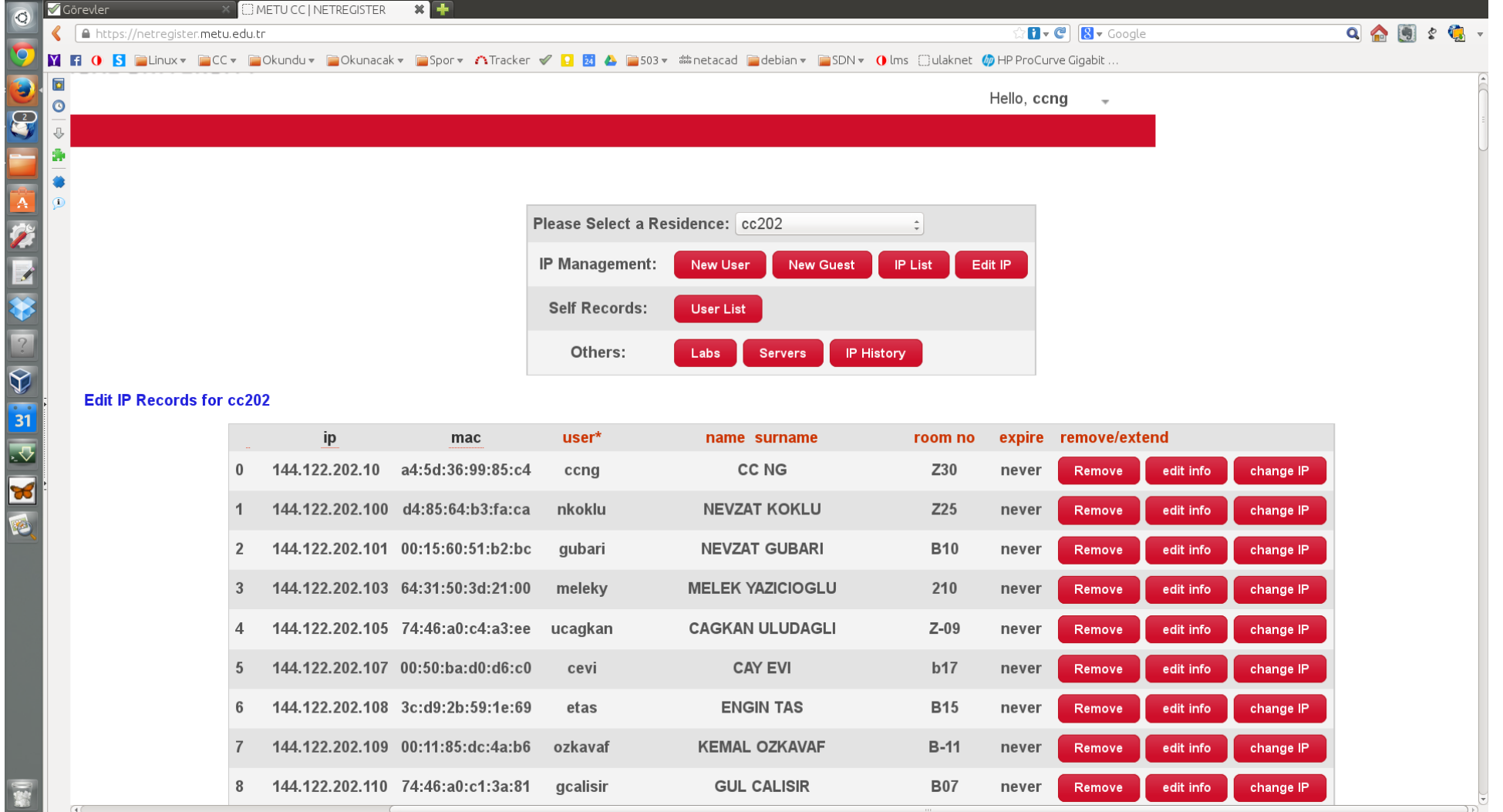
# Kullandığımız Çözüm

The screenshot shows a web browser window displaying the METU CC Network Registration page. The browser's address bar shows the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION". The main content area features a form with the following sections:

- Please Select a Residence:** A dropdown menu with "BIDB" selected.
- IP Management:** Buttons for "New User", "New Guest", "IP List", and "Edit IP".
- Self Records:** A button for "User List".
- Others:** Buttons for "Labs", "Servers", and "IP History".

At the bottom of the page, there is a footer with the text "METU CC 2012" and navigation links for "Contact", "FAQ", and "Print".

# Kullandığımız Çözüm



>Hello, ccng

Please Select a Residence: cc202

IP Management: [New User](#) [New Guest](#) [IP List](#) [Edit IP](#)

Self Records: [User List](#)

Others: [Labs](#) [Servers](#) [IP History](#)

Edit IP Records for cc202

	ip	mac	user*	name	surname	room no	expire	remove/extend
0	144.122.202.10	a4:5d:36:99:85:c4	ccng	CC	NG	Z30	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
1	144.122.202.100	d4:85:64:b3:fa:ca	nkoklu	NEVZAT	KOKLU	Z25	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
2	144.122.202.101	00:15:60:51:b2:bc	gubari	NEVZAT	GUBARI	B10	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
3	144.122.202.103	64:31:50:3d:21:00	meleky	MELEK	YAZICIOGLU	210	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
4	144.122.202.105	74:46:a0:c4:a3:ee	ucagkan	CAGKAN	ULUDAGLI	Z-09	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
5	144.122.202.107	00:50:ba:d0:d6:c0	cevi	CAY	EVI	b17	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
6	144.122.202.108	3c:d9:2b:59:1e:69	etas	ENGIN	TAS	B15	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
7	144.122.202.109	00:11:85:dc:4a:b6	ozkavaf	KEMAL	OZKAVAF	B-11	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>
8	144.122.202.110	74:46:a0:c1:3a:81	gcalisir	GUL	CALISIR	B07	never	<a href="#">Remove</a> <a href="#">edit info</a> <a href="#">change IP</a>



# Kullandığımız Çözüm

The screenshot shows a web browser window with the URL <https://netregister.metu.edu.tr>. The page header includes the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY". A red navigation bar contains the text "CC NETWORK REGISTRATION". The main content area features a form with a dropdown menu for "Please Select a Residence:" set to "cc202". Below this are sections for "IP Management" (New User, New Guest, IP List, Edit IP), "Self Records" (User List), and "Others" (Labs, Servers, IP History). A blue link "Process history for 144.122.202.19" is visible. A table displays a log of network registration processes.

date	process	user/id	mac	name	surname	coordinator
2009-09-28 09:45	remove	saydin	00:11:85:c0:d6:4b	---	---	ccng
2009-09-28 12:12	add	canatali	00:09:6b:47:d9:44	---	---	ccng
2009-09-28 12:19	edit	canatali	00:11:85:f1:71:3a	---	---	ccng
2009-10-05 10:10	edit	canatali	00:11:85:f1:71:3a	---	---	ccng
2010-03-15 11:23	edit	canatali	00:19:99:70:96:13	---	---	ccng
2011-02-04 10:07	edit	canatali	d4:85:64:b3:f8:54	---	---	ccng
2014-02-28 14:32	remove	canatali	d4:85:64:b3:f8:54	---	---	canatali
2014-02-28 14:32	add	canatali	74:46:a0:c1:3a:7e	---	---	canatali



# Kullandığımız Çözüm

The screenshot shows a web browser window displaying the METU CC Network Registration Administration Page. The page is titled "Administration Page" and is divided into several sections:

- Wireless**: A section with a light blue box containing the text "You can have access to Affected Management" and a red button labeled "Affected Management".
- Coordinators**: A section with a light blue box containing the text "Change the Coordinator Responsibilities" and a red button labeled "Coordinator's Responsibilities".
- DNS Manager**: A section with two light blue boxes. The first box contains the text "Add, Delete or Edit DNS Records" and a red button labeled "DNS Management". The second box contains the text "Set user zones and domains" and a red button labeled "User DNS Permissions".
- Wireless**: A section with a light blue box containing the text "Usage List" and a red button labeled "Usage List".
- Qouta**: A section with a light blue box containing the text "User Details" and a red button labeled "User Details".

The page also features the METU logo and the text "MIDDLE EAST TECHNICAL UNIVERSITY" at the top left, and a user greeting "Hello, ccong" at the top right. The browser's address bar shows the URL "https://netregister.metu.edu.tr/#".



# Planlanan İyileştirmeler

- Tüm bölüm/birimleri yapıya dahil etmek
- 802.1x desteğini kablolu ağlar için de yaygınlaştırmak
- SMS bazlı kimlik doğrulama
- Kota bazlı servis
- Kodlama ve dökümantasyon iyileştirmeleri
- Otomatik sorun tespiti ve çözümü





# Öneriler / Sorular

- Hedeflenen Kullanıcı Profili
  - Kendi kendine yeten
  - BİDB'den uzakta 😊
  - Aldığı hizmetten memnun (olanaklar dahilinde)



# Teşekkürler...

