

# Apache Web Sunucusunda Sanal Adresleme ve Dizin Eriřiminin Kısıtlanması NASIL

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## Özet

Bu belgede, APACHE web sunucusunda sanal adreslemenin ve htaccess ile izin erişimi kısıtlamasının NASIL yapılandırılacağı anlatılacaktır.

Virtual Hosting işlemi tek fiziksel web sunucusu ile farklı web adresleri kullanımını sağladığından, tam çevirisi olan sanal ev sahipliği yerine işlemi daha iyi ifade ettiğinden sanal adresleme denmesi uygun görülmüştür.

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**Geçmiş**

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16 Ekim 2000

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## 1. Sanal Adresleme (Virtual Hosting)

### 1.1. Sanal Adresleme Nedir?

Apache web sunucusunda Sanal Adresleme (Virtual Hosting), tek bir Apache web sunucusu üzerinde birden fazla web alanı için hizmet vermek amacı ile kullanılır. Bu belgede isme göre sanal adresleme yapılandırması anlatılacaktır. Tüm web alanları için web sunucusunda tek bir IP adresi kullanılacaktır. IP'ye göre de yapılandırma yapılır ama bunun için her web alanı için ayrı ayrı IP adresi tanımlanmalıdır. Bu durumda isme göre yapılandırma yapmak daha mantıklıdır (en azından ben öyle düşünüyorum :)) ).

### 1.2. Sanal Adres Yapılandırması

İlk önce Apache web sunucusunu kurmuş olmanız gerekiyor!!

Eğer apache yi kurmadıysanız [http://apache.bilkent.edu.tr<sup>\(B2\)</sup>](http://apache.bilkent.edu.tr<sup>(B2)</sup>) adresinden apache'nin en son sürümünü indiriniz (Şu anki son sürüm apache-1.3.12). Apache derlemek için aşağıdaki komutları sıra ile veriniz:

```
# tar -zxvf apache_1.3.12.tar.gz
# cd apache_1.3.12
# mkdir /www
# ./configure --prefix=/www && make && make install
```

--prefix=/www ifadesi apache ile ilgili tüm dosyaların /www dizini altına atılmasını sağlayacaktır. Bu parametreyi vermezseniz ön tanımlı olarak /usr/local/apache dizini altına atılacaktır.

Apache sunucusunu başlatmak için:

```
# /www/bin/apachectl start
```

komutunu vermeniz yeterlidir.

Daha sonra sevdiğiniz bir metin düzenleyici ile httpd.conf dosyasını açınız.

```
# vi /www/conf/httpd.conf
```

Diyelimki [www.linux.org.tr](http://www.linux.org.tr), [www.rt.net.tr](http://www.rt.net.tr), [www.bsdlive.org](http://www.bsdlive.org) için sanal adresleme yapacağız. İlk önce tüm bu alanlar için dns kaydı yapılması lazım ve dns sunucuda bu alanların IP adresi olarak apache web sunucusunun IP adresi verilmelidir.

Burada apache web sunucusun IP adresi olarak 195.1.2.4 verilecektir.

Sırası ile [linux.org.tr](http://linux.org.tr) ve [www.bsdlive.org](http://www.bsdlive.org) için sanal adresleme bilgilerini yazalım:

```
NameVirtualHost 195.1.2.4:80

# www.linux.org.tr 12 Ekim 2000 de olusturuldu (yenigul)

<VirtualHost 195.1.2.4>
  ServerAdmin yenigul@rt.net.tr
  DocumentRoot /www/htdocs/domains/linux
  ServerName www.linux.org.tr
  ErrorLog logs/error_linux.org.tr
  TransferLog logs/access_log_linux.org.tr
</VirtualHost>

# www.bsdlive web alanı 16 Ekim 2000 de olusturuldu (yenigul)

<VirtualHost 195.1.2.4>
```

```
ServerAdmin yenigul@rt.net.tr
DocumentRoot /www/htdocs/domains/bsdlive
ServerName www.bsdlive.org
ErrorLog logs/error_bsdlive
TransferLog logs/access_log_bsdlive
</VirtualHost>
```

Şimdi yukarıdaki ifadelerin ne demek olduğunu açıklayalım.

`NameVirtualHost 195.1.2.4:80` ifadesindeki `195.1.2.4` Apache web sunucusunun IP adresi (IP Gerçek değil, öylesine bir IP verdim) ve `80` ile de `httpd` port'u belirtilmiştir.

`#` ile başlayan kısımlar sadece açıklama kısmıdır. Olup olmaması yapılandırmayı etkilemez.

`<VirtualHost 195.1.2.4>` ifadesindeki IP adresi web sunucusunun IP adresi olmalı.

`ServerAdmin yenigul@rt.net.tr` ifadesi ile bu web alanının yetkili kişinin eposta adresi belirtilir.

`DocumentRoot /www/htdocs/domains/linux` ifadesi ile `www.linux.org.tr` adresinin dosyalarının bulunduğu yeri belirttik.

`ServerName www.linux.org.tr` ifadesiyle adından da anlaşılacağı gibi Web alanı adı belirtildi.

`ErrorLog logs/error_linux.org.tr` ifadesi ile de bu web alanında oluşacak hatalar (dosyaların bulunamaması, CGI hataları) `logs` dizini altındaki (bizim kurulumda `/www/logs`) `error_rt.net.tr` dosyasına yazılır.

`TransferLog logs/access_log_linux.org.tr` ifadesi ile de bu web alanına hangi IP'lerden erişildiği hangi dosyalara bakıldığı gibi bilgiler `logs` dizini altındaki (bizim kurulumda `/www/logs`) `access_log.linux.org.tr` dosyasına yazılır.

`</VirtualHost>` ifadesi ile bu alan için gerekli yapılandırmanın bittiğini belirttik.

Evet sanal adreslememizin sonuna geldik sayılır ama bir sorun var!!!

Bizim Apache Sunucumuzun IP adresi `195.1.2.4` idi. Diyelimki bu IP `www.rt.net.tr` isimli makinaya ait ve bu adres `RT.NET` web sunucu.

Şu anki yapılandırmada `http://www.rt.net.tr` adresine girmek isteyen birisi `www.rt.net.tr` yerine `httpd.conf` dosyasında en üstte bulunan web alanına gidecektir. Yani `www.linux.org.tr` adresine erişecektir.

Bu sorunu çözmek için `www.rt.net.tr` sunucunun adı olmasına rağmen, bu alan içinde sanal adresleme kaydı yapılmalıdır.

Aşağıdaki ifadeler yazılırsa bu sorun giderilmiş olur.

```
# www.rt.net.tr Web alanı kaydı

<VirtualHost 195.1.2.4>
  ServerAdmin yenigul@rt.net.tr
  DocumentRoot /www/htdocs
  ServerName www.rt.net.tr
  ErrorLog logs/error_rt.net.tr
  TransferLog logs/access_log_rt.net.tr
</VirtualHost>
```

En son olarak

```
# /www/bin/apachectl restart
```

komutu ile değişiklikler etkin hale getirilir.

Eğer daha önceden apache'yi kurmuşsanız (Red Hat da)

```
# /etc/rc.d/init.d/httpd restart
```

komutu ile değişikliği etkinleştirebilirsiniz.

Bu komut `httpd.conf`'da yapılan her değişiklikten sonra çalıştırılmalıdır yoksa yapılanlar etkin olmaz!

Ve apache web sunucusunun her açılışta çalışması için `/etc/rc.d/rc.local` (Red Hat Linux için) dosyasının en sonuna

```
/www/bin/apachectl start
```

yazıyoruz.

Kolay gelsin artık sanal adresleme yapılıyor :)

## 2. Dizin Erişimini Kısıtlama

### 2.1. Htaccess ile Kullanıcılara Kısıtlama

Htaccess Apache Web sunucusu ile birlikte gelen ve Apache Web sunucu üzerindeki belirli dizinlere erişim için kullanıcı adı ve parola sorgulaması yapmaya yarayan bir uygulamadır. Bu sayede özel dizinlere sadece sizin belirlediğiniz kullanıcılar erişebilir.

Bir Örnek verelim, `http://www.rt.net.tr/cok_ozel` adresine htaccess uygulayalım.

Bu dizin dosya sistemimizde `/www/htdocs/cok_ozel` olsun. `httpd.conf` dosyasını bir metin düzenleyicide açalım ve şu ifadeleri yazalım:

```
<Directory /www/htdocs/cok_ozel>
  AllowOverride AuthConfig
</Directory>
```

`AllowOverride AuthConfig` ifadesi ile bu dizine erişim için htaccess kullanılması gerektiğini belirtiyoruz.

htaccess nerede mi olacak? Tabiki `/www/htdocs/cok_ozel` dizini altında! Evet `/www/htdocs/cok_ozel/` dizini altında `.htaccess` dosyasını oluşturun (Evet Nokta var! `.htaces`) ve içine:

```
AuthName "RT.NET Özel Erisim Bolgesi!!!"
AuthType Basic
AuthUserFile /www/htdocs/cok_ozel/.htpasswd
require valid-user
```

yazınız...

Biraz Açıklayalım.

`AuthName "RT.NET Özel Erisim Bolgesi!!!"` ifadesi ile `http://www.rt.net.tr/cok_ozel` yazıldığında karşınıza çıkan kullanıcı adı ve parola diyalogundaki açıklayıcı bilgidir. Buraya istediğinizi yazabilirsiniz.

`AuthType Basic` ifadesini değiştirmeyin. Burada kimlik kanıtlama türü belirtiliyor.

`AuthUserFile /www/htdocs/cok_ozel/.htpasswd`, yukarıdaki ifade ile de kullanıcı adı ve parolaların saklandığı dosyanın TAM! yeri belirtiliyor. Evet Tam olarak dosyanın yeri belirtilmelidir.

`require valid-user`, bu en son ile bu dizine `.htpasswd` dosyasındaki kullanıcıların erişebileceği belirtiliyor.

.htaccess dosyası tamam. Sıra .htpasswd dosyasını oluşturmaya geldi:

```
# /www/bin/htpasswd -c /www/htdocs/cok_ozel/.htpasswd yenigul
```

Yukarıdaki komut ile /www/htdocs/cok\_ozel/ dizini altında .htpasswd oluşturulur ve yenigul kullanıcısı eklenir.

-c (creat) parametresi ile .htpasswd dosyası hiç yoktan oluşturulur. İkinci bir kullanıcı eklemek için bu ifadeyi kullanmayınız. İkinci kullanıcının eklenmesi,

```
# /www/bin/htpasswd /www/htdocs/cok_ozel/.htpasswd yakup
```

şeklinde olmalıdır.

.htaccess'i de bitirdik!

## 2.2. Dizinleri IP Adresine veya Alan Adına Göre Kısıtlama

Bu kısımda kısıtlama yapılacak adresimiz <http://www.rt.net.tr/intranet> olsun ve dosyalar /www/htdocs/intranet altında bulunsun.

Sadece belirli IP'lere erişimi verip diğerlerine yasak koymak için, örneğin 212.65.128 uzayındaki IP'lere erişim verelim:

```
<Directory /www/htdocs/intranet>
  Order deny,allow
  Allow from 212.65.128
  Deny from All
</Directory>
```

Sadece belirli alan isimlerine erişim verip diğerlerine yasak koymak için, örneğin linux.org.tr alanına erişim verelim:

```
<Directory /www/htdocs/intranet>
  Order deny,allow
  Allow from linux.org.tr
  Deny from All
</Directory>
```

Sadece belirli IP'lere yasak koyup diğerlerine izin vermek için, örneğin 195.1.2 uzayındaki IP'lere yasak koyalım:

```
<Directory /www/htdocs/intranet>
  Order allow,allow
  Allow from All
  Deny from 195.1.2
</Directory>
```

Sadece belirli alan isimlerine yasak koyup diğerlerine izin vermek için, örneğin lamer.com alanına yasak koyalım:

```
<Directory /www/htdocs/intranet>
  Order allow,deny
  Allow from All
  Deny from lamer.com
</Directory>
```

Yapılan değişikliklerin etkin olması için

```
# /www/bin/apachectl restart
```

komutunu veriniz..

Belgemizin sonuna geldik.

Sorunlarınızı ve önerilerinizi yukarıda belirttiğim e–posta adresimden bana ulaşabilirsiniz.

Happy Linuxing  
İSMAİL YENİGÜL

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