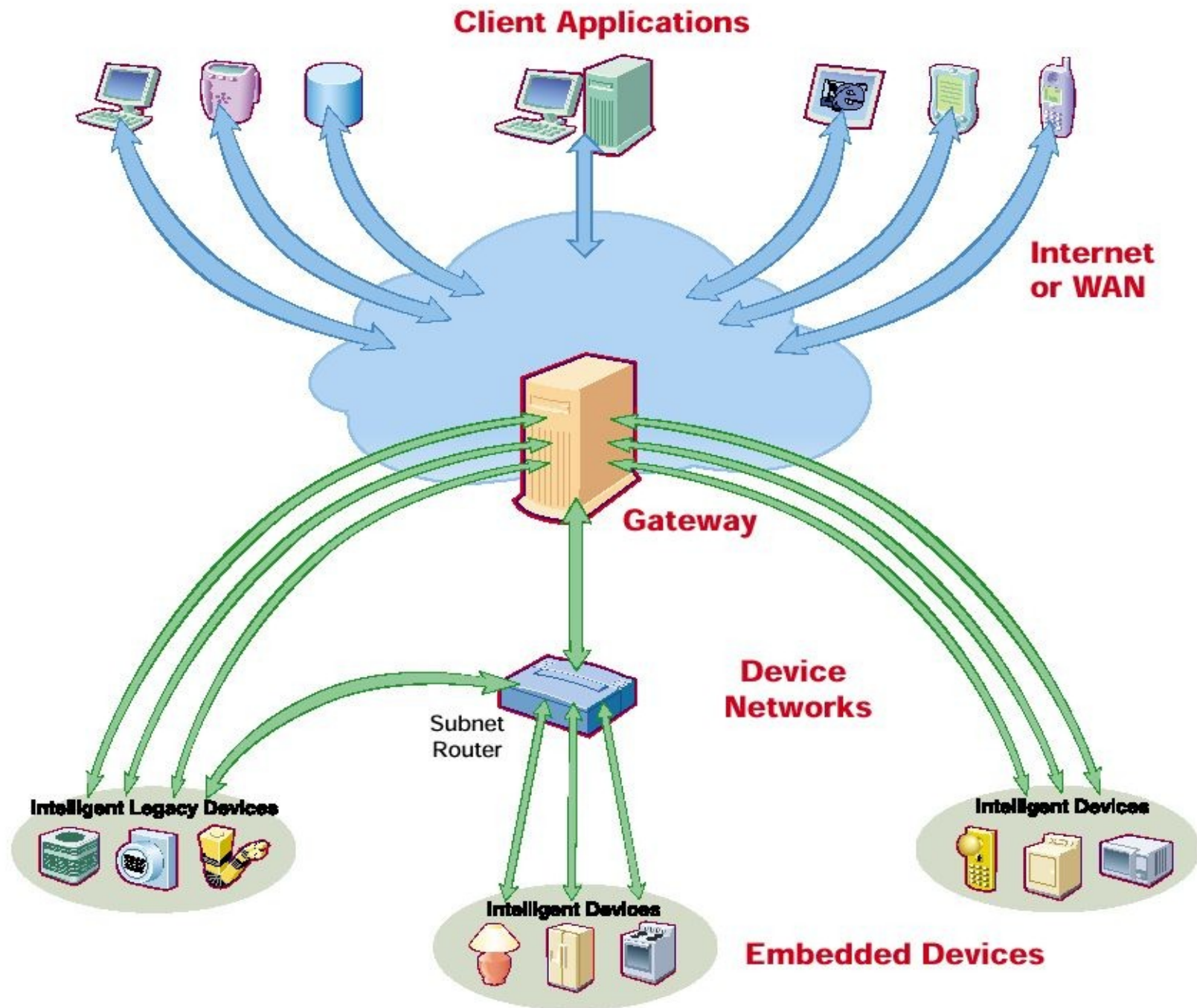


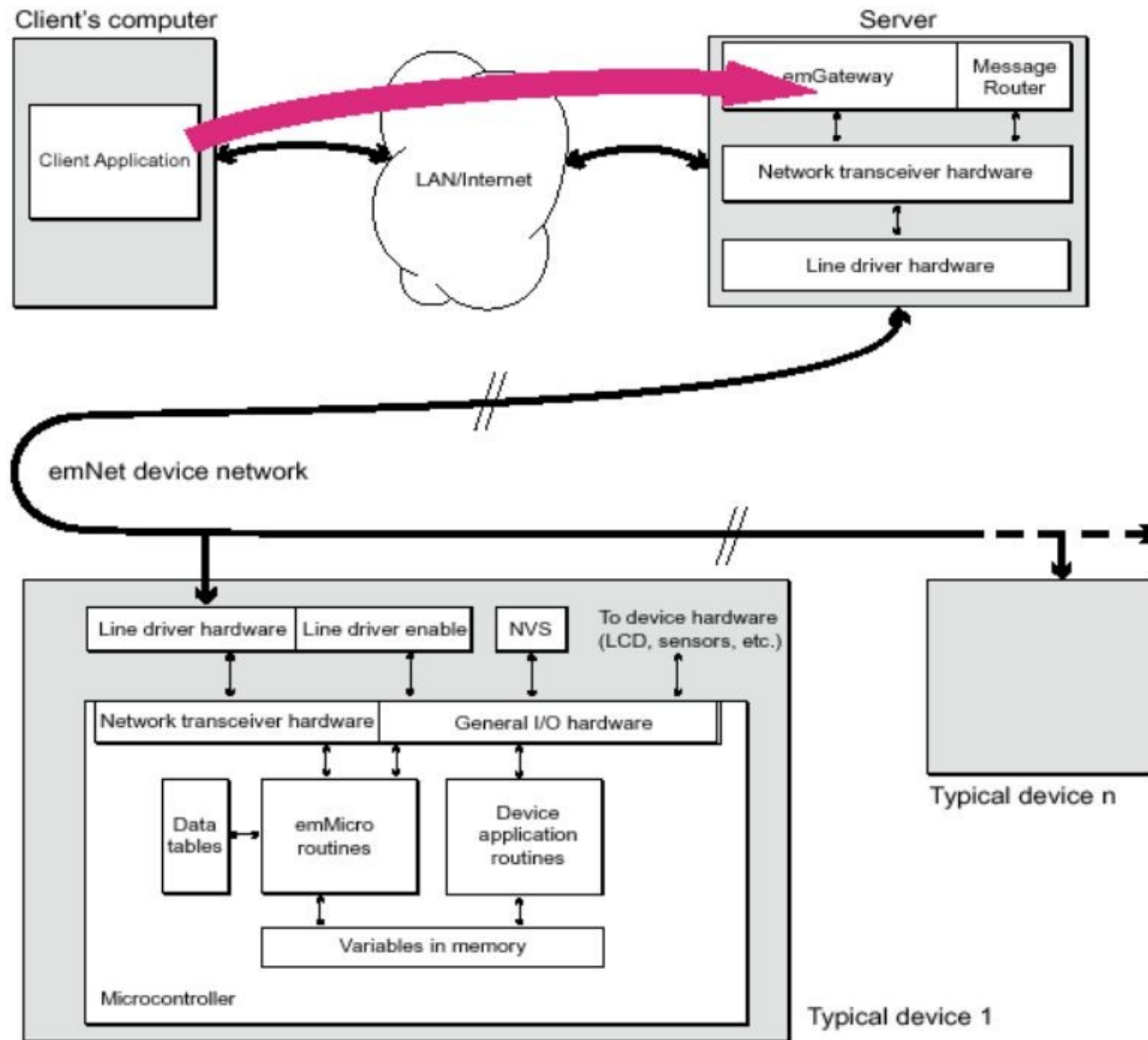


Teba'da Embedded Linux Kullanımı

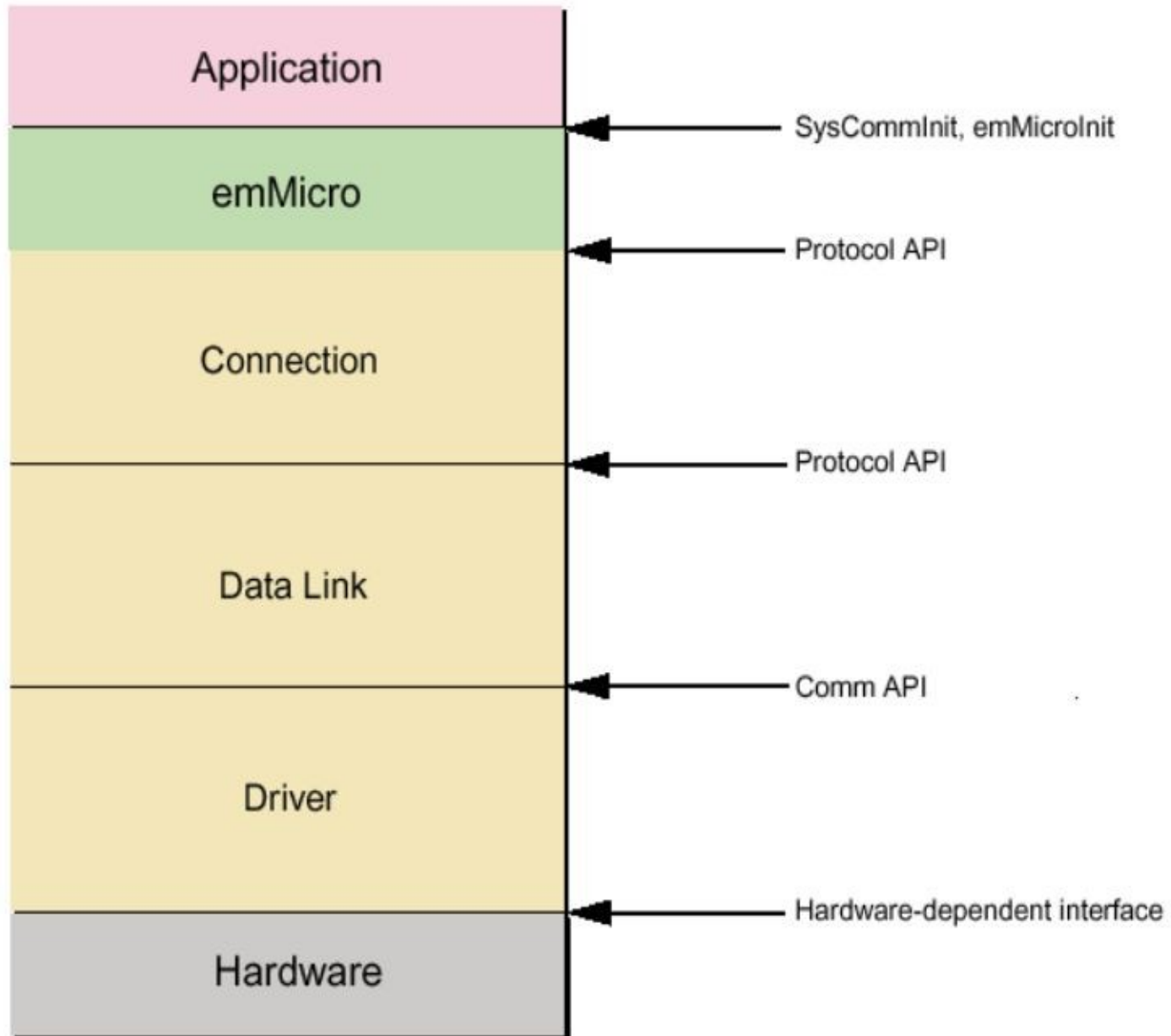
Ağ Mimarisi



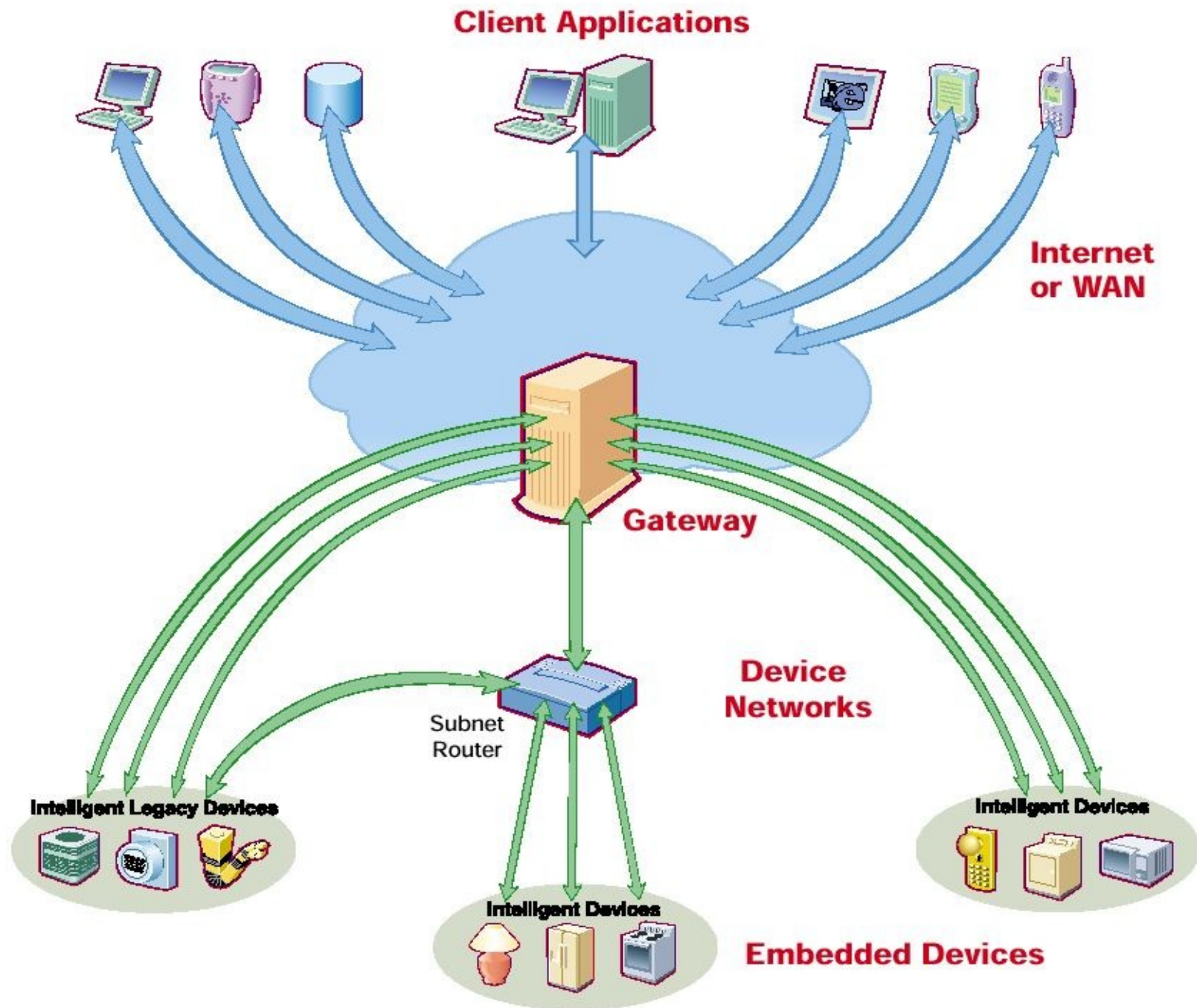
Embedded Micro Internetworking Protocol (EMIT)



Katmanlı EMIT Modeli



Ağ Mimarisi



Single Board Computer



Konfigürasyon

- 486 DX2-50 Uyumlu CPU
- 16 MB Flash Disk
- 16-32 MB RAM
- Ethernet 10/100
- 2 x RS-232, 1 x USB



Embedded-Gateway Gerçekleştirim



- ✓ Çalışan bir Linux sistemi üzerinde, sıfırdan yeni bir dağıtım geliştirildi.
Konuyla ilgili daha detaylı bilgi için,
<http://www.linuxfromscratch.org>
- ✓ Oluşturulan sistemin embedded-pc üzerine kurulabilmesi amacıyla, kurulum uygulaması hazırlandı.
- ✓ Sistem yönetimini servis elemanları için kolaylaştıracak uygulamalar geliştirildi.



Embedded-Gateway Özellikler

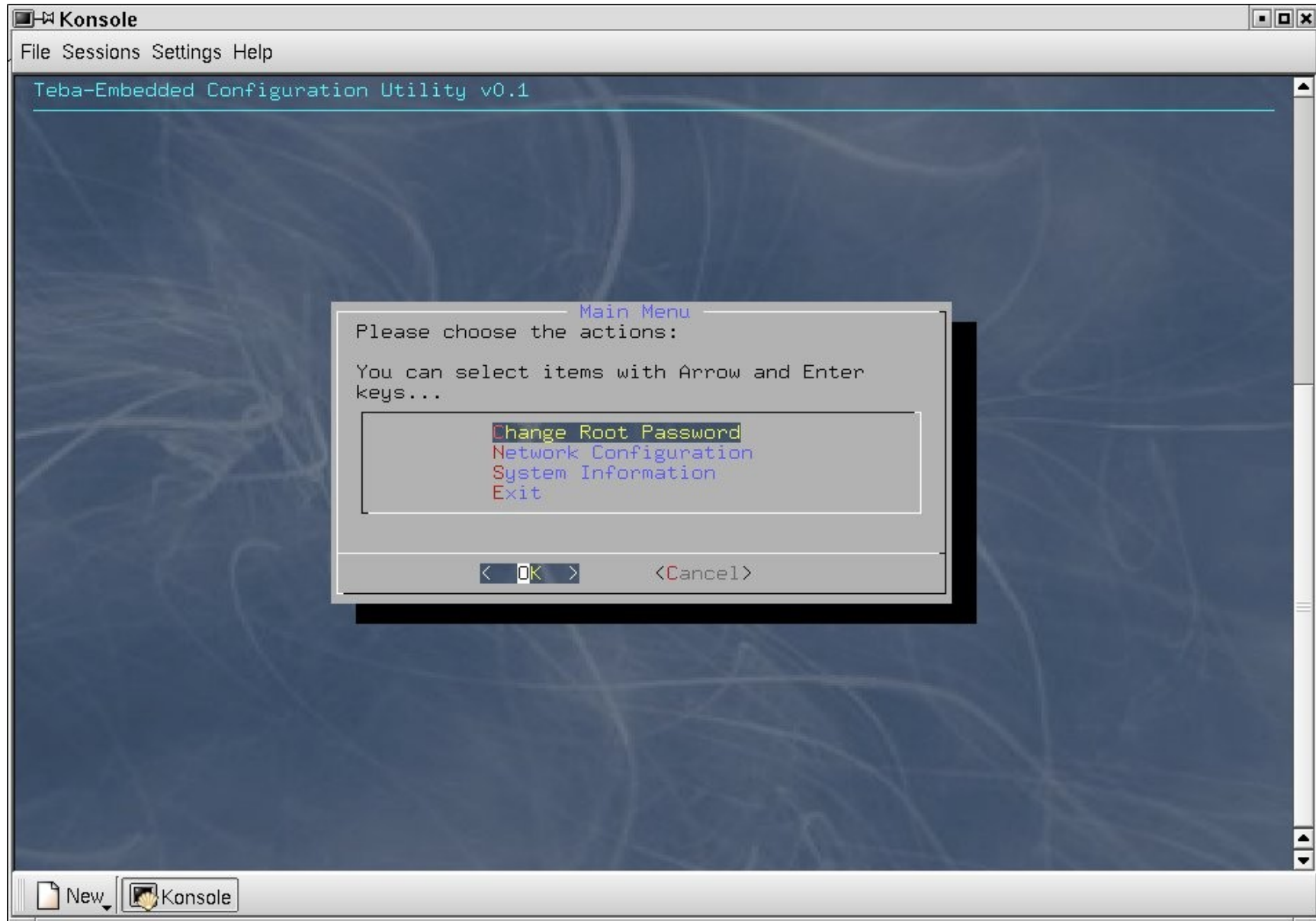


- ✓ Linux 2.4.18 Çekirdek ~ 360 Kb
- ✓ Apache 1.3.12
- ✓ Perl 5.6.1
- ✓ GNU bash 2.05a.0(1)
- ✓ Telnet Sunucu
- ✓ Ipchains Firewall
- ✓ EmWare Servisleri ~ 7 MB
- ✓ ncftp, nano, telnet, ping, lilo ...
- ✓ Seri konsol üzerinden sistemin yönetimi

- ✓ Kullanılan Toplam Disk Alanı = 12,5 MB

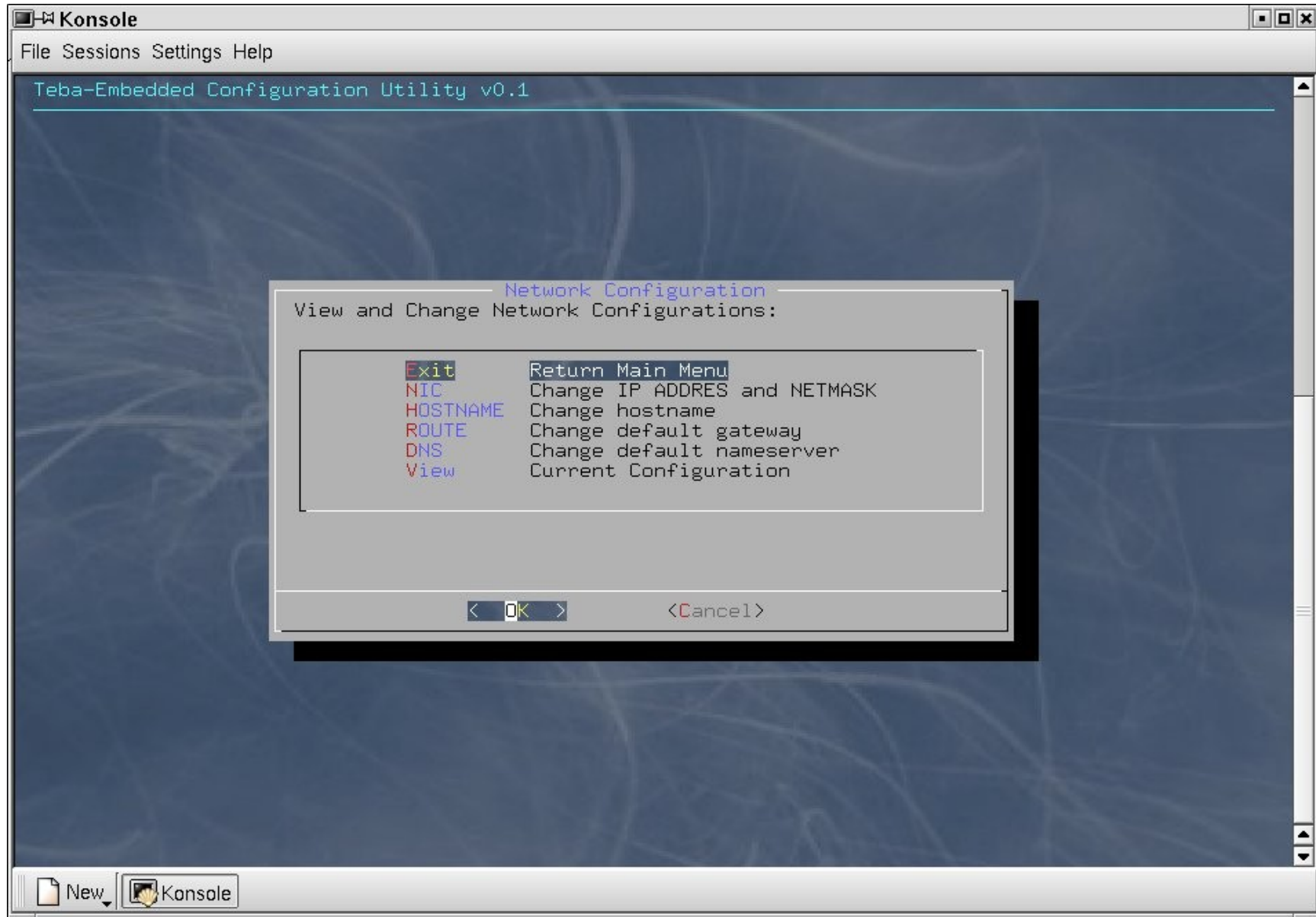


Embedded-Gateway Yönetim - 1



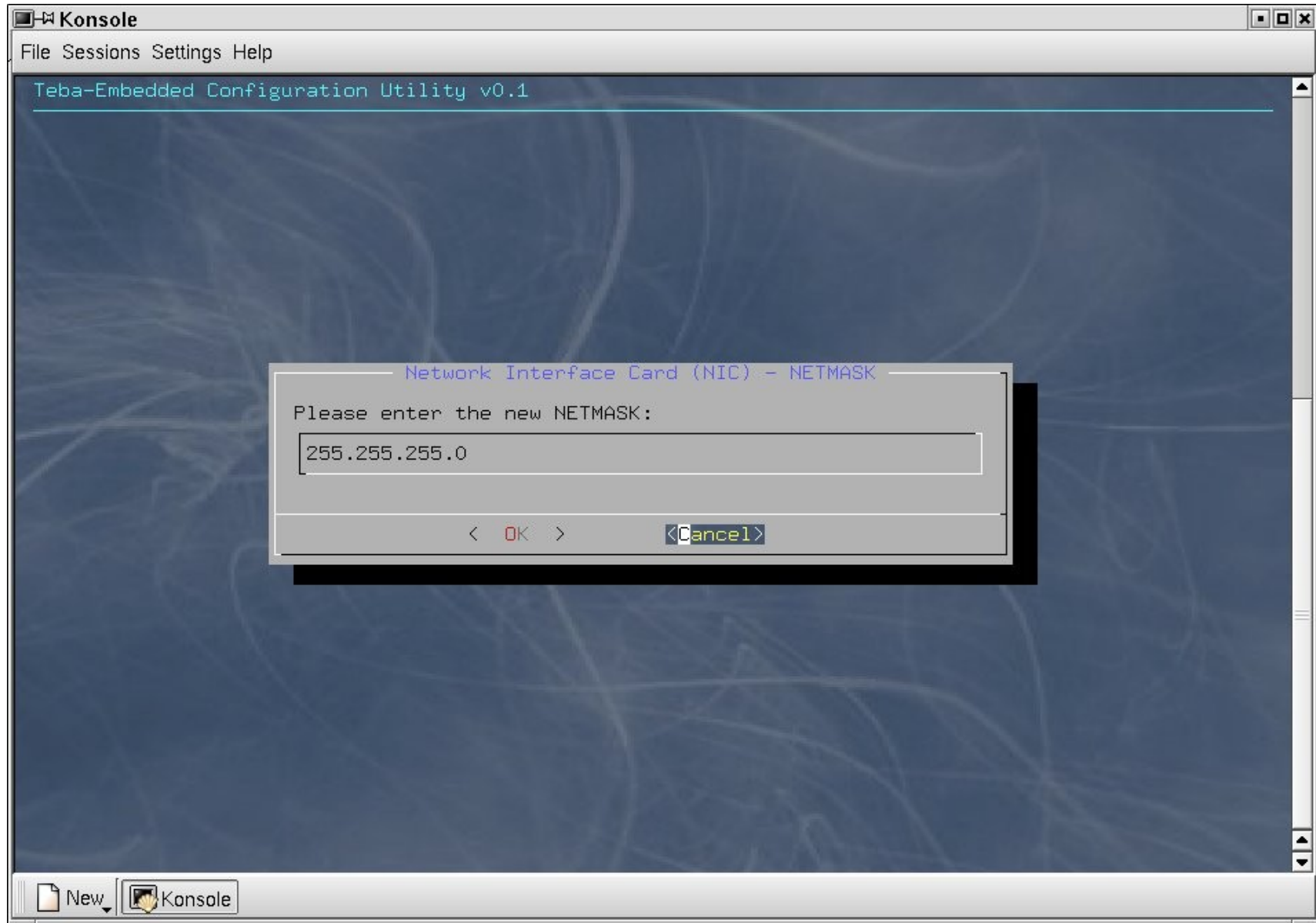


Embedded-Gateway Yönetim - 2





Embedded-Gateway Yönetim - 3





Embedded-Gateway Yönetim - 4



Konsole

File Sessions Settings Help

Teba-Embedded Configuration Utility v0.1

```
Memory Statistics
total:      used:      free:      shared:  buffers:  cached:
Mem: 59121664 16265216 42856448      0    413696 9977856
Swap:      0          0          0
MemTotal:      57736 kB
MemFree:       41852 kB
MemShared:      0 kB
Buffers:        404 kB
Cached:        9744 kB
SwapCached:      0 kB
Active:        4880 kB
Inactive:      7992 kB
HighTotal:      0 kB
HighFree:       0 kB
```

< EXIT >

New Konsole



Embedded-Gateway - emWare



emGateway - Galeon

File Edit View Tab Settings Go Bookmarks Tools Help

Back Stop 100 http://192.168.0.15/em/

Postaci Wel x Index of ftp x emGateway x

emGateway™ Manager **emWare®**

User: admin

Device Locator

By Device GUI By Device Alias Search

Information

Administration

Device Access Servers

- DAS: LOCALHOST
 - Information
 - Status
 - Devices
 - Administration
 - emFlash
 - DLM: emNet

Message Routers

Help

Change User Password

Logoff

Device Access Servers

What's This?

Status for DAS: LOCALHOST

DAS Information

DAS port	28552
DAS host	LOCALHOST
Base path	/var/lib/em/

emGateway Information

emGateway port	28551
emGateway host	localhost
emGateway username	admin

Resource Information/Utilization

Sockets

Socket timeout (ms)	120000
Current sockets accepted	1
Total sockets accepted since startup	1

Threads

Maximum thread count	256
Minimum free threads	2
Maximum free threads	4
Initial thread count	2
Current thread count	3
Free thread count	2

Requests

Maximum outstanding requests	1024
Current outstanding requests	0
Requests being processed	1

Handles

[Allocated handles by user](#)

Total handles allocated	1
-------------------------	---

License Information

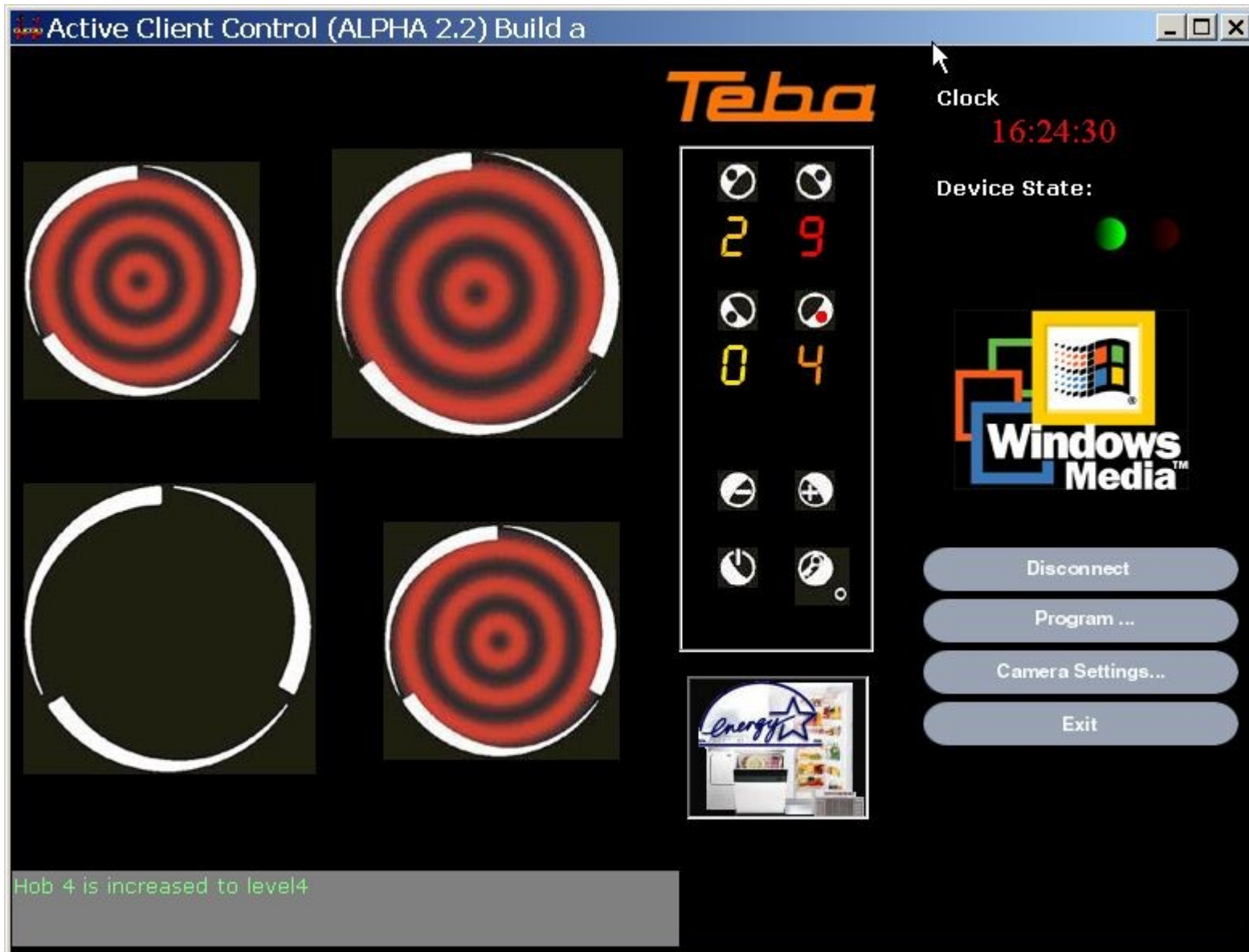
Total licenses	5
----------------	---

Log Information

Log path	/var/log/em/
Maximum log size	-1
Log device transactions	Disabled



Embedded-Gateway – Uygulama





TeBa



Proje'nin Embedded-Linux kısmı ile ilgili sorularınız için;

- × Murat Demirten <murat@debian.org>
- × Project Group 2 <pg2@teba.com>