SEMINAR NR 1- RC- Timofte Carmen

1. SERVICII INTERNET

Model ISO/OSI	Model TCP/IP
7. Nivel aplicație	4. Aplicatie: HTTP
6. Nivel prezentare	TELNET, FTP, SMTP,
5. Nivel sesiune	TFTP, FINGER,
	LOGIN SHELL etc.
4. Nivel transport	3. Transport: TCP, UDP
3. Nivel rețea	2. Rețea: IP, ARP,
	RARP, ICMP
2. Nivel legatura de date	1. Subrețea
1. Nivel fizic	

TCP/IP Protocol **OSI 7 Layer Model** Application 7 Layer **Application Layer** telnet FTP DHCP TFTP 6 Layer **Presentation Layer** HTTP SMTP DNS SNMP 5 Layer TCP UDP Transport 4 Layer **Transport Layer** Internet **Network Layer** 3 Layer ICMP ARP RARP IP **DataLink Layer** 2 Layer **Network Interface Physical Layer** 1 Layer

All People Seem To Need Data Processing







2. Conectare la retea:

- hardware:
 - pl de retea
 - echipam de interconectare: hub, switch, router

-conectare router, setari wifi

- mediu de transmisie: unde, fibra optica (lumina), coaxial, UTP
- *software:*
 - driver -> configurat
 - protocol de comunicatie -> TCP/IP (soft pt TCP/IP în-"C:\Windows\System32\drivers\tcpip.sys" instalat automat)-> alegere IPv4 şi/sau IPv6 -> configurat
 - ipconfig
 - ipconfig /all
 - tracert
 - ripe.net
 - client de conectare la retea
 - servicii

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3. Client/Server

Program server	SO Server	Calc Server
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Program client SO WS Calc WS

Serviciu	Client	Protocol	Port	Server
Internet				
Web	Browser	HTTP	80	IIS, httpd, apache
		HTTPS	443	etc
Conectare la	Com. telnet	TELNET	23	telnetd
distanța	ssh/putty	SSH	22	sshd
	browser			
Transfer de fişere	Com. ftp	FTP	21	IIS, ftpd
	Programe spec.			
	browser			
Poșta electronică	Com. mail	SMTP	25	IIS, sendmaild
	Programe spec.	POP3	110	pop3d
	browser			

Apel comun: URL -> vezi scheme URL seminar online (<u>https://carment.ase.ro/rc/sem/iis.html</u>)

4.

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a. Serviciul de Web

1.1.1 Server-ul Web IIS – sub Win

- 0- Instalare : Apps and Features ----Win Features on, alegeti IIS, (Adaugati **Basic Authentification** si **Centralized SSL Certificate Support...**) sau Microsoft Web Platform Installer
- 1- Identificare server Web: http://localhost
- 2- Serviciul: IIS started: Services ->WWW Publishing Service status *running*
- 3- Procesul: w3wp.exe
- 4- Directorul: C:\inetpub\wwwroot\ -pag pornire *iistart.htm*
- 5- Portul: $80 \implies$ comanda:
 - netstat –a –n /more; netstat –a –n –o/more (pt PID); netstat –a –n –o/ findstr "80" (pt PID si afisare doar a conexiunilor portului 80); netstat –a –n –o -b/more (cu drept de power shell admin-pt numele aplic care ruleaza)

- 6- Configurare server Computer Management\Services and Appls\IIS Manager
- 7- Creare **site-uri virtuale:** cu porturi diferite, IP, header- *cu pagina de pornire* (dir_site_gr10xx)– apel <u>http://localhost:port</u>
- 8- Creare **directoare virtuale**: din consola administrare, din sharing *cu browsing* (*dir_virt_gr10xx*), apel <u>http://locahost:port/alias</u>
- 9- Creare site-uri virtuale cu SSL- port diferit -443, (dir_s_ssl_10xx, https, 443 => 443xx), SSL Settings –Client certificates –accept; cu browsing/ fisier diferit de pornire, acces: <u>https://localhost:port_ssl/</u>
- 10- Acces cu cont si parola la site-ul creat cu SSL:
 - creare user: gr10xx/passw gr10xx; (din Computer Mgmt\ Local Users and Groups\Users\New User...)
 - Edit Permissions/Security/Edit/Add.../ se adauga userul creat pt folderol dir_s_ssl_10xx;
 - Authentication\Anonymous –disable, Basic Auth enabled; adaugati userul creat;
 - Testare; retestare din New Incognito Windows.

Evaluare 0.5p:

- 1. Server IIS implicit (print screen cu browser, dir, port, proces)
- 2. Server virtual port 80xx, cu fis de pornire index.html
- 3. Dir virt +drept de browsing
- 4. Server virt SSL port 443XX
- 5. ---,,---- + acces cu cont si parola (user 1077/pass 1077)→ + incognito tab

1.1.2 Server-ul Web Apache – sub Win/ Unix