

DVMS on Network behind DSL Router

Single Fixed IP Address

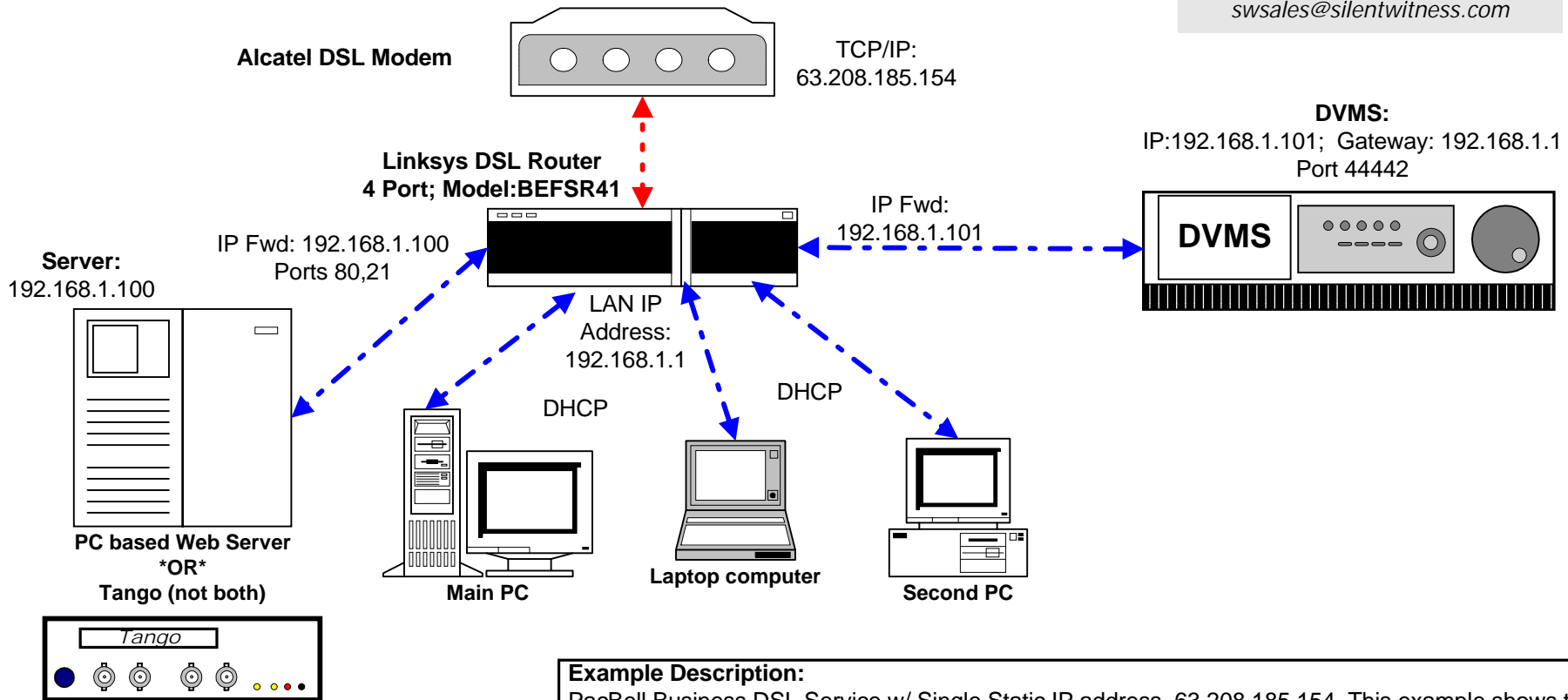
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Example Description:

PacBell Business DSL Service w/ Single Static IP address, 63.208.185.154. This example shows that you can connect several Network devices served from a single IP address. Here we see that 3 regular PCs have full internet and email access behind a protective Router/Firewall. Additionally, you could run a PC based Webserver, and a single DVMS behind this same Router. The Router is assigned the main IP address, and acts as DHCP server to regular client PCs. The Webserver has it's own fixed IP address, assigned by the Router as 192.168.1.100. Whenever a Websurfer wishes to access the website server, it comes into address 63.208.185.154. All requests to 154 on Port 80 (standard WWW port #), the Router uses IP Forwarding feature to route all Port 80 requests to IP address 192.168.1.100.

The DVMS has it's own assigned IP address of 192.168.1.101. Whenever an Internet RAS user wishes to access DVMS, the request comes to the main IP address 63.208.185.154. All requests to 154 on Port 44442 (the open port # that DVMS/RAS requires) are routed to IP address 192.168.1.101. Note that Port 44442 must be open through the Router/Firewall to allow RAS communication. See other important recommendations on 3rd page.

Legend

Unprotected Ethernet



Firewall Ethernet - Cat 5



File: DVMS-DSL-Router.a.vsd

By: SWilber 12/2002

DVMS on Network w/ DSL Router

Multiple Fixed IP Addresses

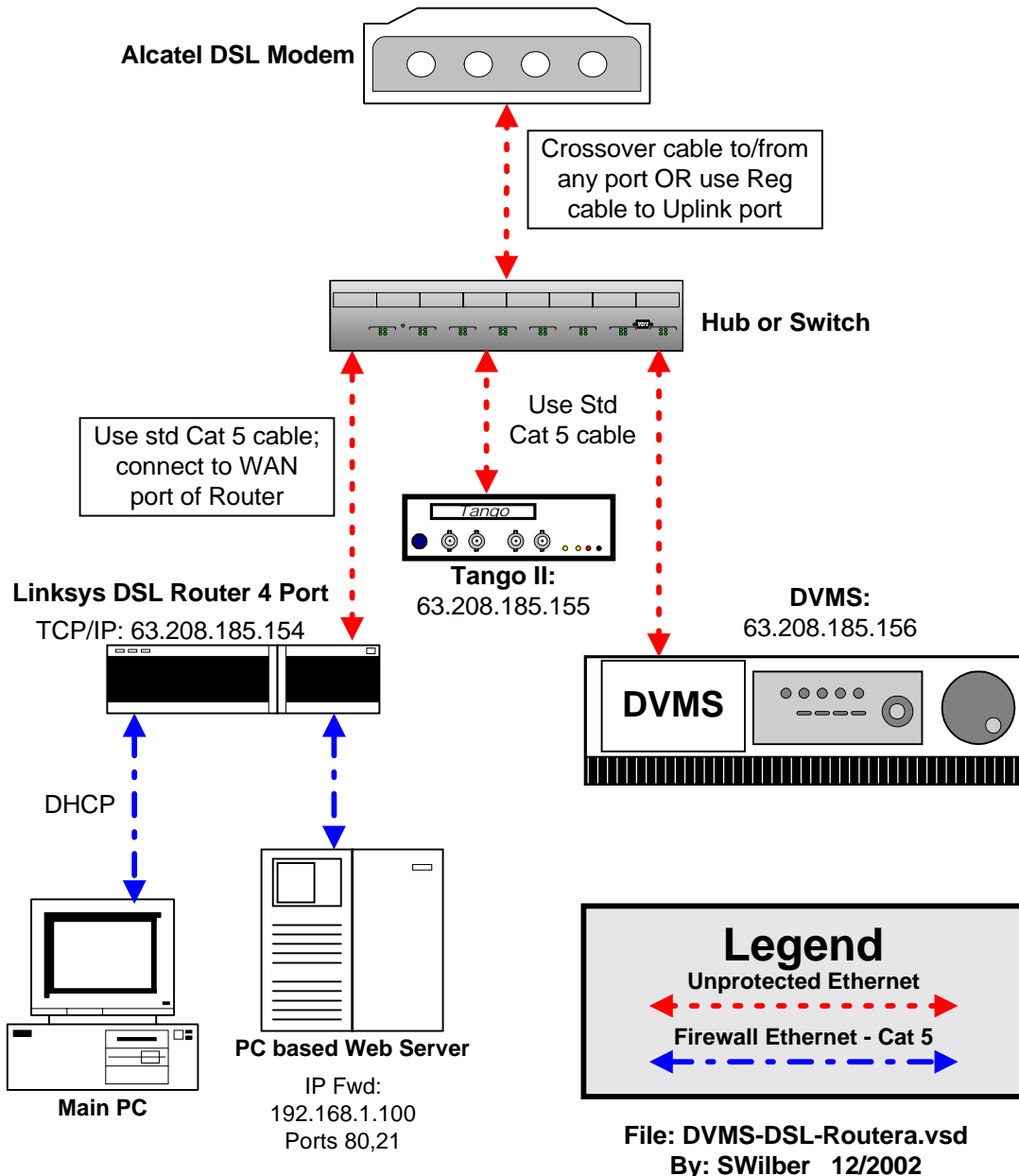
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Example Description:

PacBell Business DSL Service w/ 5 Static IPs, 63.208.185.154. to 158. This example shows that you can connect several Network CCTV devices and firewall protected PCs to a single DSL connection. DSL modem connects to 8 port Switch, with DVMS, Tango & Linksys Router configured as clients, each w/ unique fixed IP. Router prgmed w/ 1st IP, and acts as DHCP server to a client PC. Exceptions are PC based Web Server, which has fixed IP assigned by the Router.

Here we see that the regular PC has full internet and email access behind a protective Router/Firewall. The neighbouring Webserver has it's own fixed IP address, assigned by the Router as 192.168.1.100. Whenever a Websurfer wishes to access the website server, it comes into address 63.208.185.154. All requests to 154 on Port 80 (standard WWW port #), the Router uses IP Forwarding feature to route all Port 80 requests to IP address 192.168.1.100.

The DVMS has it's own assigned IP address of 63.208.185.156. Whenever an Internet RAS user wishes to access DVMS, the request comes directly to that address, since it's not behind the Router. Note that Port 44442 must be open through the ISP to allow RAS communication. Tango is setup like DVMS, and has it's own unique IP address.

Installation Notes:

re: Figure 1

Important! The DVMS Gateway address needs to be set specifically in order to allow remote connection. In one real world example, the DVMS Gateway needed to be set to the same address as the LAN IP address, as specified in the Linksys main SETUP screen. If it is set different, RAS users from the Internet won't be able to connect, but internal LAN PC's can.

Example: Router Network Settings, Linksys SETUP screen:

LAN IP address: 192.168.1.1
Subnet Mask: 255.255.255.0

WAN IP address:
Enable Specify IP address
IP: 63.208.185.154
Subnet: 255.255.255.254
Default Gateway: 63.208.185.153
DNS Primary:206.13.29.12
DNS Secondary: 206.13.30.12
Login: Disable

DHCP Screen:
If enabled, make sure the starting IP address is above the internal IP address assigned by the router. For example, if the DVMS IP is 192.168.1.101, have the DHCP starting address at1.120

ADVANCED/FILTERS screen:
SPI: Disabled
Block WAN request: Enabled
Multicast Pass: Disabled
IPSec Pass: Disabled
PPTP pass: Disabled
Remote management: enabled
Remote upgrade: Disabled
MTU: Disabled

ADVANCED/FORWARDING Screen:
Service Port range: 44442-44442 Protocol: TCP, IP address:
192.168.1.101

Program these settings if you wish to use IP Forwarding to allow access to DVMS. Note that DVMS requires only Port 44442 to be open in order to access via DVMS RAS software.

ADVANCED/Dynamic Routing:
Working Mode: Gateway
Dynamic Routing TX, RX disabled

ADVANCED/DMZ Host:
IP address: 192.168.1.101

Program these settings if you wish to use DMZ to allow access to DVMS. You should probably use either IP Forwarding OR DMZ mode, but not both. To Disable the DMZ IP address set the last set of numbers to "0"; "192.168.1.0".

DVMS Network Settings

Example:

System Setup/Remote Access:
Remote Access: Enable
IP address: 192.168.1.101
Subnet: 255.255.255.0
Gateway: 192.168.1.1
Method: IEEE802.3 (Ethernet)
Baud rate: N/A
Remote Control setup: N/A

File: DVMS-DSL-Routera.vsd
By: SWilber 12/2002