

Experiment-5

Implement Firewall for an Organization

Date: 11/9/24

AIM

Implement a firewall for an organization.

PROCEDURE

Step-1: Login to Kali Linux, open terminal and find the IP address.

Step-2: In Windows open Command Prompt and find the IP address.

Step-3: First block the IP packets using Kali Linux. Check whether IP packets are blocked using ping command in Windows Operating System.

Step-4: Unblock the IP packets. Check whether IP packets are unblocked using ping command in Windows Operating System.

Step-5: Block the port number. To check port is blocked, open any browser in windows operating system and run the IP address of Kali Linux.

Step-6: Unblock the port number. To check port is unblocked, by open any browser in windows OS and run the IP address of Kali Linux.

SOURCECODE

\$ open vmware . click on open virtual machine .

Enter username and password as Kali .

Go to terminal

\$ ifconfig

Note down the inet address : 192.168.164.138

\$ sudo service apache2 start

Password for kali : kali
~~\$ sudo Service mysql start~~
 check ip address for windows in command prompt
 Go to Command prompt
~~ipconfig /all~~
~~ipconfig /all~~
 Note the IP address which is there in vmnet8 IP address : 192.168.164.1 (IP address of windows)

Connect windows and kali by

> ping 192.168.164.138

There we can get the output like we can observe the replies from Linux.

→ In VMware terminal type the command to block
~~q3t q1t q2t q3t q4t q5t q6t q7t q8t q9t q10t q11t q12t q13t q14t q15t q16t q17t q18t q19t q20t q21t q22t q23t q24t q25t q26t q27t q28t q29t q30t q31t q32t q33t q34t q35t q36t q37t q38t q39t q40t q41t q42t q43t q44t q45t q46t q47t q48t q49t q50t q51t q52t q53t q54t q55t q56t q57t q58t q59t q60t q61t q62t q63t q64t q65t q66t q67t q68t q69t q70t q71t q72t q73t q74t q75t q76t q77t q78t q79t q80t q81t q82t q83t q84t q85t q86t q87t q88t q89t q90t q91t q92t q93t q94t q95t q96t q97t q98t q99t q100t q101t q102t q103t q104t q105t q106t q107t q108t q109t q110t q111t q112t q113t q114t q115t q116t q117t q118t q119t q120t q121t q122t q123t q124t q125t q126t q127t q128t q129t q130t q131t q132t q133t q134t q135t q136t q137t q138t q139t q140t q141t q142t q143t q144t q145t q146t q147t q148t q149t q150t q151t q152t q153t q154t q155t q156t q157t q158t q159t q160t q161t q162t q163t q164t q165t q166t q167t q168t q169t q170t q171t q172t q173t q174t q175t q176t q177t q178t q179t q180t q181t q182t q183t q184t q185t q186t q187t q188t q189t q190t q191t q192t q193t q194t q195t q196t q197t q198t q199t q200t q201t q202t q203t q204t q205t q206t q207t q208t q209t q210t q211t q212t q213t q214t q215t q216t q217t q218t q219t q220t q221t q222t q223t q224t q225t q226t q227t q228t q229t q230t q231t q232t q233t q234t q235t q236t q237t q238t q239t q240t q241t q242t q243t q244t q245t q246t q247t q248t q249t q250t q251t q252t q253t q254t q255t q256t q257t q258t q259t q260t q261t q262t q263t q264t q265t q266t q267t q268t q269t q270t q271t q272t q273t q274t q275t q276t q277t q278t q279t q280t q281t q282t q283t q284t q285t q286t q287t q288t q289t q290t q291t q292t q293t q294t q295t q296t q297t q298t q299t q300t q301t q302t q303t q304t q305t q306t q307t q308t q309t q310t q311t q312t q313t q314t q315t q316t q317t q318t q319t q320t q321t q322t q323t q324t q325t q326t q327t q328t q329t q330t q331t q332t q333t q334t q335t q336t q337t q338t q339t q340t q341t q342t q343t q344t q345t q346t q347t q348t q349t 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q516t q517t q518t q519t q520t q521t q522t q523t q524t q525t q526t q527t q528t q529t q530t q531t q532t q533t q534t q535t q536t q537t q538t q539t q540t q541t q542t q543t q544t q545t q546t q547t q548t q549t q550t q551t q552t q553t q554t q555t q556t q557t q558t q559t q560t q561t q562t q563t q564t q565t q566t q567t q568t q569t q570t q571t q572t q573t q574t q575t q576t q577t q578t q579t q580t q581t q582t q583t q584t q585t q586t q587t q588t q589t q590t q591t q592t q593t q594t q595t q596t q597t q598t q599t q600t q601t q602t q603t q604t q605t q606t q607t q608t q609t q610t q611t q612t q613t q614t q615t q616t q617t q618t q619t q620t q621t q622t q623t q624t q625t q626t q627t q628t q629t q630t q631t q632t q633t q634t q635t q636t q637t q638t q639t q640t q641t q642t q643t q644t q645t q646t q647t q648t q649t q650t q651t q652t q653t q654t q655t q656t q657t q658t q659t q660t q661t q662t q663t q664t q665t q666t q667t q668t q669t q670t q671t q672t q673t q674t q675t q676t q677t q678t q679t q680t q681t q682t q683t q684t q685t q686t q687t q688t q689t q690t q691t q692t q693t q694t q695t q696t q697t q698t q699t q700t q701t q702t q703t q704t q705t q706t q707t q708t q709t q710t q711t q712t q713t q714t q715t q716t q717t q718t q719t q720t q721t q722t q723t q724t q725t q726t q727t q728t q729t q730t q731t q732t q733t q734t q735t q736t q737t q738t q739t q740t q741t q742t q743t q744t q745t q746t q747t q748t q749t q750t q751t q752t q753t q754t q755t q756t q757t q758t q759t q760t q761t q762t q763t q764t q765t q766t q767t q768t q769t q770t q771t q772t q773t q774t q775t q776t q777t q778t q779t q780t q781t q782t q783t q784t q785t q786t q787t q788t q789t q790t q791t q792t q793t q794t q795t q796t q797t q798t q799t q800t q801t q802t q803t q804t q805t q806t q807t q808t q809t q810t q811t q812t q813t q814t q815t q816t q817t q818t q819t q820t q821t q822t q823t q824t q825t q826t q827t q828t q829t q830t q831t q832t q833t q834t q835t q836t q837t q838t q839t q840t q841t q842t q843t q844t q845t q846t q847t q848t q849t q850t q851t q852t q853t q854t q855t q856t q857t q858t q859t q860t q861t q862t q863t q864t q865t q866t q867t q868t q869t q870t q871t q872t q873t q874t q875t q876t q877t q878t q879t q880t q881t q882t q883t q884t q885t q886t q887t q888t q889t q890t q891t q892t q893t q894t q895t q896t q897t q898t q899t q900t q901t q902t q903t q904t q905t q906t q907t q908t q909t q910t q911t q912t q913t q914t q915t q916t q917t q918t q919t q920t q921t q922t q923t q924t q925t q926t q927t q928t q929t q930t q931t q932t q933t q934t q935t q936t q937t q938t q939t q940t q941t q942t q943t q944t q945t q946t q947t q948t q949t q950t q951t q952t q953t q954t q955t q956t q957t q958t q959t q960t q961t q962t q963t q964t q965t q966t q967t q968t q969t q970t q971t q972t q973t q974t q975t q976t q977t q978t q979t q980t q981t q982t q983t q984t q985t q986t q987t q988t q989t q990t q991t q992t q993t q994t q995t q996t q997t q998t q999t~~

Request timed out

Request timed out

Request timed out

→ In VMware terminal type command to unblock.

→ sudo iptables -D INPUT -s 192.168.164.1 -j DROP

→ Go to Command prompt

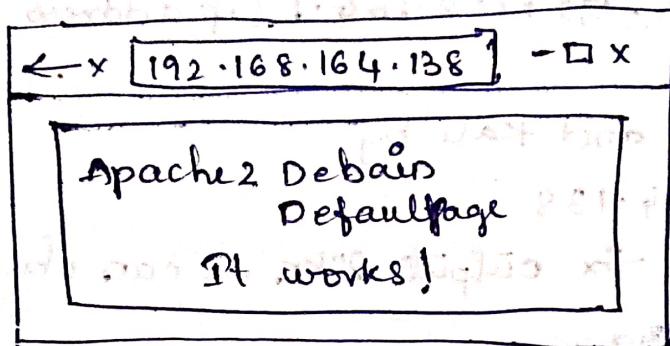
> ping 192.168.164.138

Pinging 192.168.164.138 with 82 bytes of data:

Reply from 192.168.164.138: bytes = 32 time < 1ms TTL=64

Reply from 192.168.164.138: bytes = 32 time < 1ms TTL=64

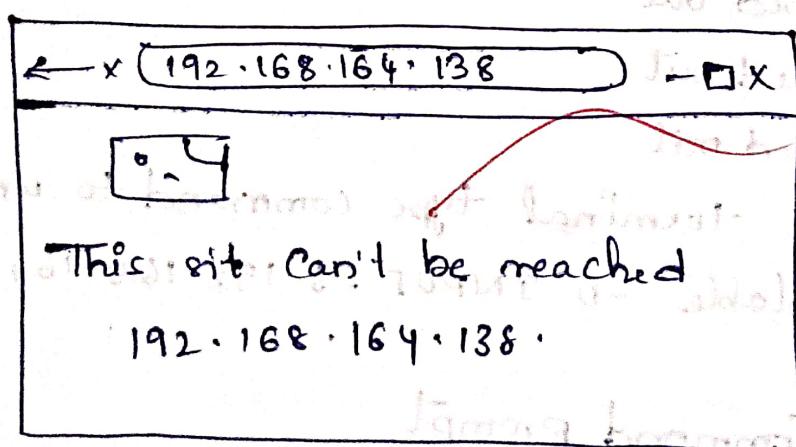
⇒ Go to browser and type in tab 192.168.164.138
which the ip address of linine.



⇒ In vmWare Type Command

```
[root@VM-OptiPlex-5070 ~]# sudo iptables -A INPUT -s 192.168.164.1 -p tcp  
-d 192.168.164.138 --sport 80 -j DROP
```

⇒ Go to browser and again type the same IP address you typed before then you can see the output like below.



OUTPUT

→ In VMware type command

```
$ sudo iptables -I INPUT -s 192.168.164.1 -p tcp  
-destination -port 80 -j DROP
```

⇒ Again type the IP address in browser tab.

