

INSTALLAZIONE E CONFIGURAZIONE ISA SERVER ENTERPRISE COME PROXY SERVER IN LOAD BALANCING

PREREQUISITI

- Installazione Windows 2003 Server Edition Service Pack 1 su entrambi i nodi del Cluster
- Configurazione Indirizzi IP su entrambe le macchine
- Aggancio al dominio di entrambe le macchine
- Creazione di un gruppo ISA Admins su Active Directory e aggiunta dell' utente NetAdmin all'interno.
- Aggiunta dei nomi DNS rispettivamante del Cluster (to1clts006.lab1.prv) e dell'Application Server (to1apls006.lab1.prv)

CONFIGURAZIONE I NODO (to1cltn007.lab1.prv)

Inseriamo all'interno del lettore CD ROM il cd di ISA Server Enterprise Edition poi clicchiamo su **Start**, My Computer ed infine clicchiamo di destro sul lettore cd rom e selezioniamo Open.

					100
■D:\					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	ools <u>H</u> elp				
🔇 Back 👻 🕥 👻 🏂 🔎 Searc	h 🜔 Folders 🛛 🛛	🗟 🕑 🗙 🍤 🖽 -			
Address 🖾 D:\				•	🔁 Go
Name 🔺	Size	Туре	Date Modified	Attributes	
FPC		File Folder	19/01/2005 1.00	R	
Cols		File Folder	19/01/2005 1.00	R	
🥵 autorun.inf	1 KB	Setup Information	19/01/2005 1.00	R	
🕘 ISA2000migrate.htm	53 KB	HTML Document	19/01/2005 1.00	R	
Misa.bmp	664 KB	Bitmap Image	19/01/2005 1.00	R	
isa.ico	13 KB	Icon	19/01/2005 1.00	R	
🛃 ISAAutorun.exe	93 KB	Application	19/01/2005 1.00	R	
🥵 isaautorun.inf	13 KB	Setup Information	19/01/2005 1.00	R	
👔 😰 isastart.chm	208 KB	Compiled HTML Help	19/01/2005 1.00	R	
🗐 License.rtf	157 KB	Rich Text Document	19/01/2005 1.00	R	
🔊 🔊 readme.htm	19 KB	HTML Document	19/01/2005 1.00	R	
11 objects			1,18 MB	😡 My Computer	
		Fig.1			

Apriamo la cartella FPC e lanciamo il file setup.exe



C D:\FPC					<u>- 0 ×</u>
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	ools <u>H</u> elp				- R
🔇 Back 👻 🕤 👻 🦻 Searc	h 🜔 Folders 🛛 🛛	🕸 🌫 💙 🛛 🖽	•		
Address 🛅 D:\FPC				-	🔁 Go
Name 🔺	Size	Туре	Date Modified	Attributes	
Program Files		File Folder	19/01/2005 1.00	R	
System32		File Folder	19/01/2005 1.00	R	
C WINDOWS		File Folder	19/01/2005 1.00	R	
🗿 InstallJoinedServer.ini	4 KB	Configuration Settings	19/01/2005 1.00	R	
🗿 InstallNewArrayAndServer.ini	5 KB	Configuration Settings	19/01/2005 1.00	R	
ManagementServer	3 KB	Configuration Settings	19/01/2005 1.00	R	
InstallStandaloneServer.ini	6 KB	Configuration Settings	19/01/2005 1.00	R	
👜 instmsia.exe	1.486 KB	Application	19/01/2005 1.00	R	
🚭 instmsiw.exe	1.498 KB	Application	19/01/2005 1.00	R	
MS_FPC_Server.msi	2.945 KB	Windows Installer P	19/01/2005 1.00	R	
🔟 setup.bin	100 KB	BIN File	19/01/2005 1.00	R	
🖾 setup.exe	319 KB	Application	19/01/2005 1.00	R	
🥵 setup.ini	62 KB	Configuration Settings	19/01/2005 1.00	R	
🧿 uninstallserver.ini	2 KB	Configuration Settings	19/01/2005 1.00	R	
, 14 objects			6,27 MB	😡 My Computer	
1 1		Fig.2			
	1//				
	\bigcirc				
~					



Ci apparirà la seguente schermata dell'Installer

2





Dopo circa venti secondi ci troveremo di fronte una schermata come in Figura 4



Clicchiamo su Next



Selezionare I Accept the terms in the license agreement e cliccare su Next

_		
Í	😽 Microsoft ISA Server 2004 - Installation Wizard	×
	Customer Information Please enter your customer details.	
	User Name:	
	Organization:	
	Product <u>S</u> erial Number:	
2		
	< <u>B</u> ack <u>N</u> ext >	Cancel

Fig.6

A questo punto inserire (vedi Figura 6):

User Name : Nome Orgazination : Organizzazione

Per quanto riguarda il seriale non c'è bisogno di inserire niente, lo mette il software in automatico. Quindi liccare su Next

Select the scenario that best describes t	his installation.		
Install ISA Server services			
The computer will be an ISA Server an	ray member runr	ning ISA Server servio	es.
) Install <u>C</u> onfiguration Storage ser	rver		
The computer will store the configurati	ion used by ISA o retrieve the co	Server arrays. ISA Se Infiguration.	erver array
Install both ISA Server services	and Configura	tion Storage serve	er
The computer will be an ISA Service an		used to store the ent	erprise
configuration.	ray member and		
Configuration.	ray member and		
 Install ISA Server <u>Management</u> The computer will be used to remotely 	ray member and manage the ISA	. Server enterprise.	
The computer will be an ISA Server an configuration. Install ISA Server <u>Management</u> The computer will be used to remotely	ray member and manage the ISA	Server enterprise.	
The computer will be an ISA Server an configuration.	manage the ISA	Server enterprise.	

A questo punto dobbiamo scelgiere una tra le seguenti opzioni :

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- Install ISA Server Service : installa i servizi sul computer dove è installato l' array ISA Server -
- -
- Install Configuraztion Storage Server : Installa gli Array di ISA Server Install both ISA Server services and Configuration Storage Server (SCONSIGLIATA) : installa contemporaneamente I primi due servizi sopra elencati Install ISA Server Management : Installa la Console di Management per amministrare ISA Server in remoto
- -





Arriviamo alla seguente schermata (Figura 9) e notiamo che verranno installate le seguenti componenti

- Configuration Storage Server
- ISA Serverm Management



Quindi clicchiamo su Next

Quindi selezioniamo Create a new ISA Server enterprise come in Figura 10 e clicchiamo su Next





Ci apparira il seguente messaggio Figura 11 dove ci da delle raccomandazioni e ci dice che verrà installato lo Storage Server

🔂 Microsof	t ISA Server 2004 - Installation Wizard	X
New Ente	rprise Warning	
This com	puter will be configured as a new Configuration Storage server.	
1	For the most effective deployment, we recommend that you create a single enterprise in your organization. Arrays are only managed through the enterprise to which they belong. Creating multiple enterprises makes it difficult to centrally manage all the array computers in your organization. If an enterprise is already defined on a different Configuration Storage server,	
	click 'Back' and select the 'Create a replica of the enterprise configuration' option.	b
	If this is the first Configuration Storage server in your organization, click 'Next' to continue.	
	< <u>B</u> ack <u>N</u> ext > Cancel	
	Fig.11	

Quindi clicchiamo su Next

Adesso all'intermo della schermata di Figura 12 inseriamo il nome dell'Enterprise ES. AUGUSTANET

🙀 Microsoft ISA Server	2004 - Installation Wizard	x
Create New Enterprise	2	
This computer will be co enterprise.	onfigured as a Configuration Storage server for the new	
<u>E</u> nterprise name:	AUGUSTANET	
Description:		
	< <u>B</u> ack <u>N</u> ext >	Cancel

Clicchiamo su Next

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🔂 Microsoft ISA Server 2004 - Installation Wizard	<
Enterprise Deployment Environment	
Are your 15A Server enterprise computers deployed in a single domain or across trusted domains?	
I am deploying in a single domain or in domains with trust relationships	
Select this option if all your ISA Server computers and Configuration Storage servers are in the same domain or in domains with trust relationships.	
\bigcirc I am deploying in a workgroup or in domains without trust relationships	
Select this option if your ISA Server computers and Configuration Storage servers reside in a workgroup or across domains that do not have trust relationships. If you select this option, a server certificate must be installed on this computer.	
Server gertificate: Browse	
Certificate <u>p</u> assword:	
This setting may be modified after Setup. For details, see the Getting Started Guide.	
< <u>B</u> ack <u>N</u> ext > Cancel	

Fig.13

Lasciamo tutto invariato (perchè la macchina è agganciata ad un dominio) Quindi clicchiamo su **Next**

🔂 Microsoft ISA Server 2004 - Installation Wizard	X
Ready to Install the Program	
The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
< <u>B</u> ack [] Cancel	

Fig.14

Microsoft ISA	Server Insta	aller 📃 🗵	1
•	The Installa follows:	ation Wizard is progressing as	
		🖓 Microsoft ISA Server 2004 - Installation Wizard	_ 🗆 X
	core comp	Installing Microsoft ISA Server 2004	
	Additional Co	The program features you selected are being installed.	
	System Initia	Please wait while the Installation Wizard installs Microsoft ISA Server 2004. This may take several minutes.	
		Status:	
		Generating script operations for action:	_
		< <u>B</u> ack <u>N</u> ext >	incel

Fig.15





Lasciamo tutto così com'è e clicchiamo su Finish.

Si aprirà una pagina HTML di conferma avvenuta installazione del Prodotto, chiudiamola.



Adesso clicchiamo sull'icona posta sul desktop Administrative Tools quindi su Services come raffigurato in Figura 17

🐂 Administrative Tools					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> (ools <u>H</u> elp				A
🕒 Back 👻 🌖 👻 ಶ 🔎 Search	h 🌔 Folders 🛛 🖟	s 🕑 🗙 🖌			
Address Administrative Tools	-				T S 60
		-		[
	Size	Type		Attributes	
	2 KB	Shortcut	11/03/2005 10.07	A	
Cluster Administrator	2 KB	Shortcut	15/03/2005 10.32	А	
Component Services	2 KB	Shortcut	11/03/2005 10.04	Α	
Computer Management	2 KB	Shortcut	11/03/2005 10.07	A	
Configure Your Server Wizard	2 KB	Shortcut	11/03/2005 10.07	A	
Data Sources (ODBC)	2 KB	Shortcut	11/03/2005 10.07	А	
🝰 Distributed File System	2 KB	Shortcut	11/03/2005 10.07	А	
🛃 Event Viewer	2 KB	Shortcut	11/03/2005 10.27	А	
뒑 Internet Information Services	2 KB	Shortcut	11/03/2005 11.06	А	
🚔 Licensing	2 KB	Shortcut	11/03/2005 10.07	А	
Policy Local Security Policy	2 KB	Shortcut	15/03/2005 11.58	А	
Manage Your Server	2 KB	Shortcut	11/03/2005 10.07	А	
ReMicrosoft .NET Framework 1	2 KB	Shortcut	11/03/2005 10.04	А	
Removed Microsoft .NET Framework 1	2 KB	Shortcut	11/03/2005 10.04	А	
Network Load Balancing Mana	2 KB	Shortcut	11/03/2005 10.02	А	
Performance	2 KB	Shortcut	11/03/2005 10.07	А	
Remote Desktops	2 KB	Shortcut	11/03/2005 10.03	А	
B Routing and Remote Access	2 KB	Shortcut	11/03/2005 10.02	Α	
Res Services	2 KB	Shortcut	17/03/2005 10.40	А	
Terminal Server Licensing	2 KB	Shortcut	11/03/2005 10.05	A	
Terminal Services Configuration	2 KB	Shortcut	11/03/2005 10.03	A	
Terminal Services Manager	2 KB	Shortcut	11/03/2005 10:03	Δ.	
	2.00				

22 objects

I

Fig.17

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🛛 😼 My Computer

34,3 KB



Si aprirà la seguente schermata (vedi Figura 18)

Services						
File Action View	Help					
$\leftarrow \rightarrow \blacksquare \diamondsuit$						
Services (Local)	🍇 Services (Local)					
	Select an item to view its description.	Name 🛆	Description	Status	Startup Type	Log On As 🔺
		🆓 Help and Support	Enables He	Started	Automatic	Local S
		WHTTP SSL	This servic	Started	Manual	Local S
		🆓 Human Interface D	Enables ge		Disabled	Local S
		🖓 IIS Admin Service	Enables thi	Started	Automatic	Local S
		🖓 IMAPI CD-Burning C	Manages C		Disabled	Local S
		🖓 Indexing Service	Indexes co		Disabled	Local S
		🖓 Internet Connectio	Provides n		Disabled	Local S
		🆓 Intersite Messaging	Enables me		Disabled	Local S
		BIPSEC Services	Provides e	Started	Automatic	Local S
		SASTGCTRL 🖏		Started	Automatic	Networ
		🆓 Kerberos Key Distri	On domain		Disabled	Local S
		Sciense Logging	Monitors a		Disabled	Networ
		🆓 Logical Disk Manager	Detects an	Started	Automatic	Local S
		🏶 Logical Disk Manage	Configures		Manual	Local S
		Service Messenger	Transmits		Disabled	Local S
		Software	Manages s		Manual	Local S
		🆓 Net Logon	Maintains a		Manual	Local S
		SetMeeting Remote	Enables an		Disabled	Local S
		Setwork Connections	Manages o	Started	Manual	Local S
		Network DDE	Provides n		Disabled	Local S
		Network DDE DSDM	Manages D		Disabled	Local S 👻
	Extended Standard	-the				

Fig.18

All'interno di questa schermata possiamo notare scorrendo la barra verticale che è stato installato un servizio ISASTGCTRL (come indicato dalla freccia) .



In Start Programmi apriamo ISA Server come raffigurato in figura seguente



Fig.19

Adesso procediamo alla creazione dell'Array, quindi clicchiamo di destro su Array e selezioniamo New Array



Inseriamo il nome da dare all'Array (Es.TO1ISAA001) e clicchiamo su Next.

New Array Wizard		×
Array DNS Name Type the Domain Name	System (DNS) name of the array.	
Type the DNS name used Server array.	by Firewall clients and Web clients when connecting t	o this ISA
A <u>r</u> ray's DNS name:	to1isaa001.lab1.prv	
	< <u>Back</u> <u>Next</u> >	Cancel
	FIG.21	

Fig.21

Inserire il nome DNS dell'Array. (Es. to1isaa001.lab1.prv) e cliccare su Next.

	New Array Wizard	X
	Assign Enterprise Policy Specify which enterprise policy to apply to this array.	
-	Apply this enterprise policy to the new array:	
	Default Policy	
	Note that the "Default Policy" includes the built-in "Deny All" enterprise rule only. Rules for this policy should be defined in the Array Firewall Policy.	
1		
	< <u>B</u> ack <u>N</u> ext >	Cancel
	Fig.22	

Lasciare tutto invariato e cliccare su Next

 ε



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 $\label{eq:cliccare} {\sf Cliccare} \ {\sf su} \ {\rm \textbf{Finish}} \ {\sf e} \ {\sf attendere} \ {\sf qualche} \ {\sf minuto} \ {\sf fino} \ {\sf alla} \ {\sf fine} \ {\sf della} \ {\sf creazione} \ {\sf dell'Array}.$



Fig.25

Cliccare **OK**.

2



Cliccare su Apply per applicare le modifiche effettuate.

ISA Server 2004 Enterprise Edition			
Eile <u>A</u> ction <u>V</u> iew <u>H</u> elp			
 ● ●			
 Microsoft Internet Security and Accele Enterprise Enterprise Policies Default Policy Enterprise Networks 	Microsoft Internet Security & Acceleration Server 20 Enterprise Edition	04 Configuration Storage	: Server: T01CLTN007.lab1.prv
Enterprise Add-ins	Name A	Address Ranges	Description
E - Control TOURSAA001	👆 📲 External		Represents all computers not included in an
	👆 Local Host		Represents the computers running ISA Ser
	👆 Quarantined VPN Clients		Represents the client computers connected
	👆 VPN Clients		Represents the client computers connected
Done			
Done	Eig 2	7	
	Fig.2		

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Clicchiamo col tasto destro su Enterprise Network per aggiungere la rete di appartenenza della macchina sulla quale stiamo procedendo con l'installazione di ISA Server. Selezioniamo New, quindi Enterprise Network...

TOICLINNO7 - VMware	Workstation		
File Edit View VM T	eam Windows Help		
			~
TOINETS001	TOTNETSUUT		
TO1CLTN007	The Asting Using Using		
TO1CLTN008			
	Microsoft Internet Security and Accele Enterprise Enterprise Policies Default Policy	Microsoft Intermet Security & Acceleration Server2004 Enterprise Netw Enterprise Netw Enterprise Editori En	orks
	Enterprise Networks	Networks Network Sets Network Rules	
	Enterprise Add-Ins	Name Address Ranges Description	
	TO1ISAA001	*External Represents all computers not included in any other network in the enterprise and in	
		and a second sec	
		specify the IP address ranges to include in this network.	
		Address ranges:	
		Start Address End Address Add Range	
		Edt	
		Remove	
		<u>Heinove</u>	n
			<
			U
		Courte Darks Devel	
	👌 Start 🛛 🚱 🥭 👘 🖾 ISA Ser	rver 2004 Ente	🛃 🚯 14.28
]			
		Fig.28	

Fig.28

Inseriamo il nome da attribuire (Es. Enterprise Network 001) e clicchiamo su Next

Address ranges:		
Start Address	End Address	Add Range
		<u>E</u> dit
		<u>R</u> emove
1		

Fig.29



Specify the range of IP addresses:					
Start address: End address:					
10 . 1 . 0 . 0 10 . 1 . 3 . 0					
OK Cancel					

Inseriamo il range da noi prescelto e clicchiamo **OK**.

Inseriamo il range	da noi prescelto e clicchiamo	o OK .	· X ·
New	Network Wizard		X
,	Network Addresses Specify the IP address range	es to include in this network.	
A	ddress ranges:		
E	Start Address	End Address	Add Range
	10.1.0.0	10.1.3.0	<u>E</u> dit
			Bemove
		< <u>B</u> ack	Next > Cancel
Clicchiamo su Nex	rt.	Fig.31	



Per terminare l'installazione cliccare su Finish.

-))

ISA Server 2004 Enterprise Edition	h	
File Action View Help		
)	
Microsoft Internet Security and Accele Comparise Comparise Policies Comparise Policy Comparise Networks	Microsoft: Internet Security & Acceleration Server 2004 Enterprise Edition	Storage Server: TO1CLTN007.lab1.prv
Enterprise Add-ins	Apply Discard To save chan	ges and update the configuration, click Apply.
E I Arrays	Networks Network Sets Network Rules	
	Name Address Ranges	Description
		3.0
	ternal	Represents all computers not included in any othe
		Represents the computers running ISA Server se
	and the second s	Represents the client computers connected to IS/
	with the second	Represents the client computers connected to IS/
Done	2	
	Fig.33	

Cliccare su **Apply** per applicare le modifiche.



Selezioniamo Networks (sotto Configuration) e cliccando di destro su Internal selezioniamo Properties.

Internal Properties	<u>? ×</u>
Auto Discovery General	Firewall Client Web Proxy CARP NLB Addresses Domains Web Browser
Name:	Internal
Description (optional):	Network representing the internal network.
Scope:	Array
	UK L'ancel <u>Apply</u>
	Fig.35

Selezioniamo Firewall Client.

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Disabilitiamo tutto come in Figura precedente e clicchiamo OK.

ISA Server 2004 Enterprise Edition					
<u>File Action View H</u> elp					
← → 🗈 💽 😫 🔮 🦻) 📀				
Hicrosoft Internet Security and Accele	Microsoft Internet Security & Acceleration Server 20 Enterprise Edition	₁₀₄ Configuration Storage Serve	er: TO1CLTN007.lab1.	prv	
Enterprise Networks	Apply Disca	To save changes and update	the configuration, click ,	Apply.	
E- 🛃 Arrays	Networks				
Monitoring Firewall Policy (TO1ISAA0C Virtual Private Networks (V Onfiguration	Edge Fire	ewall			
Constant File Servers Attended Cache Add-ins General	Intern Networks Network Sets	Local Host al Network	VPN Clients Net External Network (Internet)	work	
	Name A	Address Ranges	Enterprise Networks	Where Defined	Descrij
	Networks				
	🔇 External	🖾 IP addresses external to the I		Local	Built-in
	👍 Internal			Local	Networ
	👍 Local Host	🖾 No IP addresses are associat		Local	Built-in
	👍 Quarantined VPN Clients	📖 No IP addresses are currently		Local	Built-in
	lients 😂 VPN Clients	$\ensuremath{\boxtimes}$ No IP addresses are currently		Local	Built-in
<u>۱</u>	•				Þ
Dope					

Fig.37

V

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Clicchiamo su Apply



In Network Rules rinominare Internet Access in Rule 1

Microso Inter Acce Enterpri	oft net Security & leration Server 2004 Ise Edition	nfiguratior	ı Storage Ser v er: T	O1CLTN007.lab1.p	irv	
1	Apply Discard	To save cha	nges and update the	configuration, click A	pply.	
Networ	ks					_
	Edge Firewall VPN Clients Network VPN Clients Network Local Host					
/ Network	s Y Network Sets Y <u>Networl</u>	<u>c Rules</u>	Veb Chaining	1	1	
0 *	Name	Relation	Source Networks	Destination Net	Where Defined	Des
Local Net	work Rules					
1	Local Host Access	Route	👍 Local Host	🔹 All Networks (Local	
□ _ 2	VPN Clients to Internal Netw.	Route	👍 Quarantined line VPN Clients	_म Internal	Local	
⊟ <u>6</u>]3	Rule 1	NAT		🎯 External	Local	
Enterpris	e Network Rules					
•						F
			Fig.39			

Clicchiamo su Apply per applicare le modifiche effettuate.



Clicchiamo col tasto destro su Enterprise, selezioniamo Properties quindi Assign Roles.

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	AUGUSTANET Properties	? X	
	General Assign Roles		
	Users and groups allowed to a to monitor arrays in the domai	ccess Configuration Storage servers and n:	
	Name	Role	
	LAB1\NetAdmin	ISA Server Enterprise Administ	
	<u>A</u> dd	Edit Remove	
	Name		
	Help about roles for domain ar	Edity Remoye ad workgroup members OK Cancel Apply	
Clicchiamo su Add .	Administration Delegatio	Fig.41	
	<u>G</u> roup or User:	Browse	
	Role:		
	Role Description		
		OK. Cancel	

Clicchiamo su Browse per aggiungere il gruppo ISA Admins.

Select User or Group	? ×
Select this object type:	
User or Group	Object Types
Erom this location:	
lab1.prv	Locations
Enter the object name to select (<u>examples</u>):	
ISA Admins (ISA Admins@lab1.prv)	<u>C</u> heck Names
	X
Advanced	OK Cancel
Fig.43	

Selezioniamo l'Active Directory dalla quale vogliamo pescare il gruppo (Es. lab1.prv) e quindi selezioniamo il gruppo creato in precedenza (Es. ISA Admins). Clicchiamo **OK**.

Administratio	n Delegation		?×
<u>G</u> roup or User:			
LAB1\ISA Admins			Browse
<u>R</u> ole:			
ISA Server Enterp	rise Administrator		-
Role Description Has full control c permissions to a:	ver the enterprise ssign all roles to ot	and all array config her users and group	urations, and is.
		ОК	Cancel
	Fiç	J.44	

Selezioniamo la Role (Es. ISA Server Enterprise Administrator) e clicchiamo OK.

	Dala		
LAB1\NetAdmin	ISA Server En	terorise Adminish	
LAB1\ISA Admins	ISA Server En	terprise Administ	
			>
<u>A</u> dd	. <u>E</u> dit <u>R</u> e	emove	
Isers (mirrored acco	unts) allowed to monitor arrays	in workgroups:	
Name	unts) allowed to monitor arrays Role	; in workgroups;	
Isers (mirrored accoi	unts) allowed to monitor arrays Role	in workgroups:	
Isers (mirrored accor Name	unts) allowed to monitor arrays Role	n workgroups:	
Isers (mirrored accor Name Add.	unts) allowed to monitor arrays Role Edit, Ri	emove	

Selezioniamo l'utente NetAdmin e eliminiamolo.

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Quindi clicchiamo su OK.



WWW.CHIATTORAFFAELE



Fig.46

Clicchiamo su Apply per applicare le modifiche.



Selezioniamo Networks quindi passiamo alla modalità Proxy. (Single Network Adapter)



Fig.48

-2)

Ne	twork Template Wizar	ď			x
	Export the ISA Server Use the export featu	r Configuration ure to backup your curr	ent ISA Server	configuration.	
	Changing the network configura	work configuration will o tion and firewall policy	overwrite the cu rules.	rrent	
	Before changing the export feature as a backup. You any time to revert	he network configuration e to save the current I can import the exporte back to this configurat	on, we recomme 5A Server config d configuration I ion.	nd using juration file at	
	Export				
			< <u>B</u> ack	<u>N</u> ext >	Cancel
licchiamo su Ne	ext	Fig.	49	<u>}</u>	
Nel	work Template Wizard Internal Network IP A Define the IP addres address ranges asso	d Addresses ises for this network, Yi iciated with a network &	ou can add IP ac adapter, and pri	ddress ranges, 3 vate IP ranges.	
	These IP addresse It is recommende	es are predefined for tl ed that you do not modi	ne single networ fy these setting	k adapter confi s.	guration.
	Address range <u>s</u> :				
	Start Address 0.0.0.1	End Address 126.255.255	5.255		<u>A</u> dd
	128.0.0.0	255.255.255	5.254		<u>E</u> dit
					<u>R</u> emove
1					
			< <u>B</u> ack	<u>N</u> ext >	Cancel
		Fig.	50		

Lasciamo tutto invariato e clicchiamo su Next



Fig.52

Clicchiamo su Finish

Internet Security & Acceleration Server 2004 Enterprise Edition	
Apply Discard To save changes and update the configuration, click Apply.	
Networks	
Single Network Adapter	
Local Host External Network (Internet) Network Sets Network Rules Web Chaining	
O A Name Relation Source Networks Destination Net Where Defined	Des
📮 1 Local Host Access Route 👍 Local Host 🏤 All Networks (Local	
E 🗐 2 VPN Clients to Internal Netw Route 👍 Quarantined 👍 Internal Local	
E 🖉 3 Rule 1 NAT 🚣 Internal 🔮 External Local 4 Quarantined S VPN Clients	
Enterprise Network Rules	
	_
Eia 52	Ŀ

Fig.53

Clicchiamo su Apply per applicare le modifiche.

0

Quindi chiudiamo ISA Server e riavviamo il server.



Procediamo con la seconda parte dell'installazione.

Dal CD lanciamo il Setup.exe precedentemente utilizzato.



<u>Back</u> <u>N</u>ext >

Fig.55

Selezioniamo Modify e clicchiamo su Next

Cancel

🙀 Microsoft ISA Server 2004 - Installati	on Wizard
Component Selection	
The selected features will be installed.	
Click on an icon in the list to view or modify h	now a feature is installed.
ISA Server ISA Server	This feature requires 9357 KB on your hard drive. It has 1 of 1 subfeatures requires 64 MB on your hard drive.
Help	< <u>B</u> ack <u>N</u> ext > Cancel
	Fig.56
Selezionimo il componente ISA Server e clicchiamo su N	lext
Fig Microsoft ISA Server 2004 - Installat	
Specify the Configuration Storage server the server.	and the credentials for connecting to
Configuration Storage server (type the FC	DN):
to1cltn007.lab1.prv	Browse
Connection Credentials	e logged on user
C Connect using this <u>a</u> ccount:	
User name:	
Password:	
	< Back Next > Cancel

Inseriamo il nome della macchina su cui è installato il Configuration Storage Server (in questo caso inseriamo il nome DNS della macchina in questione)

Clicchiamo su Next

	Array Membership	
	Select the array membership for this ISA Server computer.	
	🔿 <u>C</u> reate a new array	
	Create a new array and add this ISA Server computer to that array. To create an array, you must have ISA Server Enterprise Administrator privileges.	
	• Join an existing array	
	Add this ISA Server computer to an existing ISA Server array. To join an existing array, you must have ISA Server Array Administrator privileges.	
	< Back Next > Cancel	
	g	
oniamo I	opzione Join an existing Array e clicchiamo su Next	
oniamo I	'opzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard	×
oniamo I	'opzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array	×
oniamo I	 'opzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. 	×
oniamo I	 'opzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. 	×
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join.	×
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. Array name:	×
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. Array name: Browse	×
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. Array name: To celert an array, you must have array administrative privileges for the	2
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Image: Microsoft ISA Server 2004 - Installation Wizard Join Existing Array Specify the array this ISA Server computer will join. Array name: Image:	×
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Image: Image	2
oniamo I	Yopzione Join an existing Array e clicchiamo su Next Image: Image	×
oniamo I	Array name: Image: To select an array, you must have array administrative privileges for the specified array.	×
oniamo I	Provide Join an existing Array e clicchiamo su Next	X
oniamo I	Proposition an existing Array e clicchiamo su Next Image:	×

0

Fig.59

Clicchiamo Browse e selezioniamo l'Array creato in precedenza (TO1ISAA001) e clicchiamo Next

52			ພພພ	.CHIATTORA	FFAELE.
f	🖁 Microsoft ISA Server 2004 - Install	ation Wizard			×
	Configuration Storage Server Authe	ntication Option	15		
	Select how the ISA Server computer wi	I authenticate to th	ne Configuration St	orage server.	
	 Windows authentication This ISA Server computer and the C in the same domain or in trusted do sealed). 	Configuration Stora mains. The connec	ge server it will con tion will be encrypte	nect to reside ed (signed and	
	C Authentication over SSL encrypted	channel			
	This ISA Server computer and the C reside in trusted domains, or either trust the Certificate Authority (CA) Configuration Storage server.	Configuration Stora computer is part ol which issued the so	ge server it will con f a workgroup. This erver certificate to	nect to do not computer must the	K
	Use an existing trusted root CA	certificate			•
	C Install a trusted root CA certifica	ate			
			Brow	se,	
	For details about installing certificate	es, see the Getting	Started Guide.		
		< <u>B</u> ack	<u>N</u> ext >	Cancel	L
		Fig.60			
Lasciamo tutto	invariato e clicchiamo su Next				
í	🖥 Microsoft ISA Server 2004 - Installa	ation Wizard		ĺ	×
	Services Warning				
	During installation, some services runnin restarted or disabled.	ng locally on this co	mputer may be		
	Services that will be restarted during i	nstallation:			
	SNMP Service				
	Network News Transfer Protocol (NNT	Έ)			
	115 Admin Service World Wide Web Publishing Service				
	Services that will be disabled during in	stallation:	- (7)		
	Internet Connection Firewall (ICF) / Ir IP Network Address Translation	nternet Connection	Sharing (ICS)		
		< <u>B</u> ack	Next >	Cancel	1
		Fig.61			-

Clicchiamo su Next

🙀 Microsoft ISA Server 2004 - Installation Wizard	X	
Ready to modify the program		
The wizard is ready to modify your installation.		
Click Install to begin the installation.		
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.		
		5
< <u>B</u> ack <u>Install</u> Cancel		

Clicchiamo su Install per procedere con l'installazione di ISA Server.

🚟 Microsoft Internet Securit	ty and Acceleration Server 2004 🛛 🗙
	Installation Wizard Completed
Microsoft Internet Security & Acceleration Server 2004	The Installation Wizard completed successfully.
	Invoke ISA Server Management when the wizard closes
	Click Finish to exit the wizard.
	Finish
	Fig.63

Cliccare **Finish** per terminare l'installazione.



CONFIGURAZIONE LOAD BALANCING I NODO

All'interno di **Network Connections** cliccare di destro su la connessione da configurare in Load Balancing, quindi selezionare **Properties**.

Selezioniamo l'opzione Network Load Balancing e clicchiamo su Properties.

etwork Load Balancing Pro	perties	? ×
Cluster Parameters Host Par	ameters Port Rules	
Cluster IP configuration		
IP <u>a</u> ddress:	10 . 1 . 1 . 17	
<u>S</u> ubnet mask:	255 . 255 . 255 . 0	
Eull Internet name:	to1clts006.lab1.prv	
Network address:	03-bf-0a-01-01-11	
□ <u>U</u> nicast • <u>Multica</u>	as <u>t</u> I <u>G</u> MP multicast	
Allow remote control -		
Remote password:	•••••	
<u>C</u> onfirm password:	• • • • • • • • • • • • •	
	ОК	Cancel

Fig.64

All'interno della scheda **Cluster Parameters** inseriamo l'indirizzo IP del Cluster quindi la Subnet e il nome DNS (Es. to1clts006.lab1.prv).

Network Load Balancing Properties		<u>? ×</u>
Cluster Parameters Host Parameters	Port Rules	1
Priority (unique host identifier): 1 Dedicated IP configuration IP <u>a</u> ddress:	10.1.1.15	
Subnet mask: 2	55 . 255 . 255 . 0	
Default state: St ■ Retain suspended state after co	arted v	
	ОК	Cancel
	Fig.65	

0

All'interno della scheda Host Parameters settare il Priority a 1 quindi inserire l'IP Address reale della macchina in questione e la subnet e selezionare l'opzione Retain suspended state after computer reastarts.

ſ	Cluster Parameters Host Parameters Port Rules Defined port rules:
	Add Edit Remove Port rule description TCP and UDP traffic directed to any cluster IP address that arrives on ports 0 through 65535 is balanced equally across all members of the cluster. Client IP addresses are used to assign client connections to a specific cluster host. OK Cancel



All'interno della scheda Port Rules clicchiamo su Add per aggiungere una nuova regola.

Add/Edit Port Rule	<
Cluster IP address 10 . 1 . 1 . 18 or □ <u>A</u> ll	
Port range <u>F</u> rom: 8080 <u>+</u> T <u>o</u> : 8080 <u>+</u>	· ×
Protocols	
Filtering mode	
Load weight: 50 📰 or 🔽 Equal)
O <u>S</u> ingle host <u>H</u> andling priority: <u>1</u> <u></u> ≢	
O <u>D</u> isable this port range	
OK Cancel	
Fig.67	

Settiamo tutto come in Figura sovrastante e clicchiamo **OK** (configurazione per to1apls006.lab1.prv)

	-	
	- 1	
100	- C.	

Add/Edit Port Rule	
Cluster IP address	
Port range <u>F</u> rom: 0 <u>+</u> T <u>o</u> : 65535 <u>+</u>	
Protocols O ICP O UDP O Both	• ×
Filtering mode O Multiple host Affinity: O None O Single O Class C Load weight: 50	0,
O Single host Handling priority:	
Disable this port range	
OK Cancel	

6

Modifichiamo la regole già esistente come in Figura sovrastante.

 \bigcirc

IP address 10.1.1.15 10.1.1.17 10.1.1.18		Subnet mask 255,255,255,0 255,255,255,0 255,255,255,0		
[<u>A</u> dd	<u>E</u> dit	Remo <u>v</u> e	
De <u>f</u> ault gateways: -		1		
Gateway		Metric		
	Add	Edit	Remove	
Automatic metric				
j∙ H <u>a</u> comade modile		_		

Fig.69

All'interno di Advanced TCP/IP Setting aggiugiamo gli indirizzi IP del Cluster e dell'Application Server.



POST CONFIGURAZIONE DEL I NODO



Fig.70

Sotto Arrays Selezionare Firewall Policy (TO1ISAA001) e spostandosi sulla destra cliccare di destro su Array Servers e selezionare Properties.

Array Servers Properties		? ×
General		
∑ <u>N</u> ame: A Computers, address rang set:	rray Servers es and subnets included in this computer	
Name	IP Addresses	
📒 to1cltn007.lab1.prv	10.1.1.15	
(<u>Add</u>)	Edit Deļete	
Desc <u>ri</u> ption BL (optional): ac ar	lt-in computer set comprised of the IP dresses of the ISA Server computers in thi ay	5
Scope: An	ау	
	OK Cancel <u>A</u> p	ply
	Fig.71	

Aggiungere il secondo nodo (Es. to1cltn008) quindi cliccare OK





Adesso a livello Enterprise sempre all'interno di Network Objects selezionare Replicate Configuration Storage cliccare di destro e selezionare Properties.

Replicate Configuration 9	torage servers Properties	? ×
General		
Name:	Replicate Configuration Storage servers	
Computers, address rar <u>s</u> et:	iges and subnets included in this computer	
Name	IP Addresses	
📕 to1cltn007.lab1.pr	v 10.1.1.15	
to1cltn008.lab1.pr	v 10.1.1.16	R.
Add	Delete	_
Description (optional):	All Configuration Storage servers that are eplicated with the local Configuration Storage server	e
Scope: E	nterprise	
	OK Cancel Ap	ply
	Fig.73	

Aggiungere entrambi i nodi di ISA Server come mostrato in Figura sovrastante quindi cliccare OK.

Microsoft Internet Security and Acceleration Definition Definition Definition	Microsoft Internet Security & Acceleration Server 2004 Enterprise Edition	torage Server: TO1CLTN007.lab	1.prv Fi	rewall Policy (TO115AA001)
Enterprise Networks Enterprise Add-ins Arrays	Apply Discard To save chang	es and update the configuration, clic	k Apply.	
TOIISAA001	Firewall Policy			Toolbox Tasks Help
Monitoring	Order A Policy Name	Action Protocols	From / Listener	Protocols
Virtual Policy (TOTISAAUUT)	Enterprise Policy Rules Applied Before Array Fire	wall Policy		Users 🛞
E-X Configuration				Content Types 🛞
Servers				Schedules (2)
A Carbe	Firewall Policy Rules			Network Objects
Add-ins				
🛅 General	Enterprise Policy Rules Applied After Array Firew	all Policy		
 General General	Last Enterprise Default rule	S Deny 🎎 All Traffic	👍 All Networks (Networks Enterprise Networks Computers Address Ranges Subnets Computer Sets Anywhere Replicate Configuration Sto Array Servers IPsec Remote Gateways Remote Management Comp UR. Sets Domain Name Sets Web Listeners
	•		F	



A livello Array, all'interno di Network Objects selezionare Managed ISA Server Computers Properties , cliccare di destro e selezionare Properties.

Managed ISA Server C	omputers Properties	? ×
General		1
Name:	Managed ISA Server Computers	
Computers, address (<u>s</u> et:	anges and subnets included in this computer	• X ·
Name	IP Addresses	
	10.1.1.0-10.1.1.31	S.
Ad <u>d</u>	Edit Delete	_
Desc <u>r</u> iption (optional):	Built-in computer set comprised of computers allowed to connect to this array's Configuration Storage server.	
Scope:	Array	
	OK Cancel Ap	ply
	Fig.75	

Cancellare la rete e procedere all'inserimento dei singoli nodi di ISA Server.

 $\overline{}$

neral		
Name:	Managed ISA Server Computers	
Computers, address ran set:	ges and subnets included in this comp	outer
Name	IP Addresses	
to1cltn008.lab1.prv	10.1.1.16	
Ad <u>d</u>	Edit Deļete	
Description B (optional): a	uilt-in computer set comprised of com lowed to connect to this array's onfiguration Storage server.	puters
Scope: Ar	ray	
	OK Cancel	
	Fig.76	

Inserire i due nodi di ISA Server come mostrato in Figura sovrastante.

•

Microsoft* Internet Security Acceleration Ser Enterprise Edition	/& Ver ₂₀₀₄ Configurati	ion Storage Server:	TO1CLTN007.lab	1.prv
	Discard To save o	hanges and update th	e configuration, clic	k Apply.
Firewall Policy				
Order 🔺 Policy	Name	Action	Protocols	From / Listener
Enterprise Policy Rules	Applied Before Array	/ Firewall Policy		
Firewall Policy Rules				
Enterprise Policy Rules	Applied After Array I	Firewall Policy		
📝 Last Enterprise	Default rule	🚫 Deny	🜉 All Traffic	🛬 All Networks (

Cliccare Apply per applicare le modifiche effettuate.

 \bigcirc



CONFIGURAZIONE II NODO (to1cltn008.lab1.prv)

Inseriamo all'interno del lettore CD ROM il cd di ISA Server Enterprise Edition poi clicchiamo su Start , My Computer ed infine clicchiamo di destro sul lettore cd rom e selezioniamo Open.

₩D:\					
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	ools <u>H</u> elp				1
🔇 Back 🝷 🕥 👻 🏂 🔎 Searc	h 🜔 Folders 🏼 🛛	🕏 🌶 🗙 🍤 🔛	•		
Address 🖾 D:\				-	🔁 Go
Name 🔺	Size	Туре	Date Modified	Attributes	
FPC		File Folder	19/01/2005 1.00	R	
tools		File Folder	19/01/2005 1.00	R	
🧿 autorun.inf	1 KB	Setup Information	19/01/2005 1.00	R	
🔊 🙆 ISA2000migrate.htm	53 KB	HTML Document	19/01/2005 1.00	R	
📲 isa.bmp	664 KB	Bitmap Image	19/01/2005 1.00	R	
🖾 isa.ico	13 KB	Icon	19/01/2005 1.00	R	
😼 ISAAutorun.exe	93 KB	Application	19/01/2005 1.00	R	
🥵 isaautorun.inf	13 KB	Setup Information	19/01/2005 1.00	R	
💕 isastart.chm	208 KB	Compiled HTML Help	19/01/2005 1.00	R	
📕 License.rtf	157 KB	Rich Text Document	19/01/2005 1.00	R	
🔊 🔊 🖉 🖉	19 KB	HTML Document	19/01/2005 1.00	R	
11 objects			1,18 MB	Ny Computer	
<u> </u>	20	Fig.78			

 \bigcirc



Apriamo la cartella FPC e lanciamo il file setup.exe

🗁 D:\FPC					<u>- 0 ×</u>
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> o	ools <u>H</u> elp				
🔇 Back 🝷 🕤 🖌 🏂 Search 🌔 Folders 🛛 🕼 🎯 🗙 🏹 🛄 ▾					
Address 🛅 D:\FPC				•	🔁 Go
Name 🔺	Size	Туре	Date Modified	Attributes	
Program Files		File Folder	19/01/2005 1.00	R	
C System32		File Folder	19/01/2005 1.00	R	
		File Folder	19/01/2005 1.00	R	
📑 InstallJoinedServer.ini	4 KB	Configuration Settings	19/01/2005 1.00	R	
📑 InstallNewArrayAndServer.ini	5 KB	Configuration Settings	19/01/2005 1.00	R	
InstallNewManagementServer	3 KB	Configuration Settings	19/01/2005 1.00	R	
InstallStandaloneServer.ini	6 KB	Configuration Settings	19/01/2005 1.00	R	
🚰 instmsia.exe	1.486 KB	Application	19/01/2005 1.00	R	
🚰 instmsiw.exe	1.498 KB	Application	19/01/2005 1.00	R	
MS_FPC_Server.msi	2.945 KB	Windows Installer P	19/01/2005 1.00	R	
🖬 setup.bin	100 KB	BIN File	19/01/2005 1.00	R	
🖾 setup.exe	319 KB	Application	19/01/2005 1.00	R	
🤒 setup.ini	62 KB	Configuration Settings	19/01/2005 1.00	R	
🧿 uninstallserver.ini	2 KB	Configuration Settings	19/01/2005 1.00	R	
14 objects			6,27 MB	😼 My Computer	
	$\sim \Omega$	Fig.79			

igodol



- I accept the terms in the license agreement
- C I do not accept the terms in the license agreement

< Back	Nevt 5	Cancel
	<u>Mexc</u> >	
F ' A 4		

Fig.81

Accettare la licenza e cliccare su Next

-2

2.					
	🙀 Microsoft ISA Server 2004 - Instal	lation Wizard			X
	Customer Information				
	Please enter your customer details.				
	<u>U</u> ser Name:				
	Organization:				
		7			
					•
		< <u>B</u> ack	<u>N</u> ext >	Cancel	
		Fig.82			
iare tutto	invariato e cliccare su Next	-			
			U.		24
	Microsoft ISA Server 2004 - Instal	llation Wizard			<u> </u>
	Setup Scenarios				
	Select the scenario that best describes	; this installation.			
	C				
	Install ISA Server services The computer will be ap ISA Server a	arrau member ruppir	a ISA Server ceru	icec	
	The computer will be an 15A Server a	array member runni	ig ISA Server Serv	1065.	
	Install Configuration Storage s	erver			
	The computer will store the configura	ation used by ISA Se	erver arrays. ISA S	5erver array	
	computers will connect to this server	r to retrieve the con	nguration.		
	🔿 Install b <u>o</u> th ISA Server service	s and Configurati	ion Storage serv	/er	
	The computer will be an ISA Server a	array member and u	sed to store the e	nterprise	
	configuration.				
	C Install ISA Server Managemen	t			
	The computer will be used to remote	ly manage the ISA S	Server enterprise.		
		< <u>B</u> ack	<u>N</u> ext >	Cancel	

Selezionare la seconda opzione come mostrato in Figura sovrastante, quindi ${\bf Next}$

	tion Wizard		×
Component Selection			
The selected features will be installed.			
Click on an icon in the list to view or modify	how a feature is	installed.	
ISA Server ISA Server	hare	Feature Descrip Controls access between netwo	otion and traffic rks.
Configuration Storage serve	er	This feature red your hard drive subfeatures sel subfeatures red hard drive.	quires 15 MB on . It has 0 of 1 ected. The quire 0 KB on your
Install to:			Changer
			grange
Help Space	< <u>B</u> ack	Next >	Cancel
	Fig.84		
tutto invariato e cliccare Next	5	\mathbf{O}	
🖶 Microsoft ISA Server 2004 - Installa	tion Wizard		×
Enterprise Installation Options			
Are you creating a new enterprise or rep Configuration Storage server?	licating an existin	g enterprise config	uration to this
C Create a n <u>e</u> w ISA Server enterp	rise		
Use this option to create a new ISA S computer will become a Configuration	erver enterprise (Storage server ti	during installation. " hat arrays can use.	This
• Create a replica of the enterpris	e configuration	9	
		ttings stored on a	
Use this option to copy the enterprise Configuration Storage server to this o by providing a replica of the enterpris use this Configuration Storage server	e configuration sel computer. This op ce configuration. I 7.	tion enhances fault SA Server arrays c	tolerance an also
Use this option to copy the enterprise Configuration Storage server to this o by providing a replica of the enterpris use this Configuration Storage server	e configuration sel computer. This op e configuration. I	tion enhances fault SA Server arrays c	tolerance an also

0

Fig.85

Selezionare la seconda opzione visto che stiamo procedenso con l'installazione della Replica della prima macchina.

🛃 Microsoft ISA Server 2004 -	Installation Wizard		×	
Locate Configuration Storage	e Server			
Specify the Configuration Stora connecting to the server.	age server to replicate and t	he credentials for		
Configuration Storage server (t	ype the FQDN):			
to1cltn007.lab1.prv		Br <u>o</u> wse		
Connection Credentials	entials of the logged on user unt:			ς.
<u>U</u> ser name:				
Password:				
	·			
	< <u>B</u> ack	<u>N</u> ext >	Cancel	
	Fig.86			

Inserire come Configuration Storage Server il nome DNS del primo nodo (to1cltn007.lab1.prv)

1	Microsoft ISA Server 2004 - Installation Wizard	×
	ISA Server Configuration Replicate Source Select the location from which the initial ISA Server configuration will be replicated.	
	You can replicate the initial ISA Server configuration from the Configuration Storage server over the network, or copy it from backup files. Replicating over a network using slow links (10 Mbps or less) may take a long time, particularly if the enterprise has a large number of arrays.	
	Replicate over the network Select this option when replicating over a fast network.	
	Copy from the restored backup files Select this option to optimize setup time on a network with slow links, or when your enterprise has a large number of arrays.	
	Restored data folder: Browse,	
	< <u>B</u> ack <u>N</u> ext > Cancel	
	Fig.87	

Lasciare tutto invariato e cliccare $\ensuremath{\textbf{Next}}$

Microsoft ISA Server 2004 - Installation Wizard	
Enterprise Deployment Environment	
Are your ISA Server enterprise computers deployed in a single domain or across trusted domains?	
I am deploying in a single domain or in domains with trust relationships	
Select this option if all your ISA Server computers and Configuration Storage servers are in the same domain or in domains with trust relationships.	
I am deploying in a workgroup or in domains without trust relationships	
Select this option if your ISA Server computers and Configuration Storage servers reside in a workgroup or across domains that do not have trust relationships. If you select this option, a server certificate must be installed on this computer.	1
Server <u>c</u> ertificate: Br <u>o</u> wse	
Certificate password:	
This setting may be modified after Setup. For details, see the Getting Started Guide.	
N	_
< <u>B</u> ack <u>N</u> ext > Cancel	
Fig.88	
e le impostazione cliccare Next	
Microsoft ISA Server 2004 - Installation Wizard	
Ready to Install the Program	
The wizard is ready to begin installation.	
Click Install to begin the installation.	
If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
r Dadu	
< <u>B</u> ack <u>Install</u> Cancel	
	Microsoft 15A Server 2004 - Installation Wizard Are your 15A Server enterprise computers deployed in a single domain or across trusted domains? I an deploying in a gingle domain or in domains with trust relationships? Select this option if all your 15A Server computers and Configuration Storage servers are in the same domain or in domains with trust relationships. I an deploying in a gordgroup or in domains without trust relationships. Select this option if your 15A Server computers and Configuration Storage servers reside in a workgroup or across domains that do not have trust relationships. If you select this option, a server certificate must be installed on this computer. Server gertificate: Drgwse This setting may be modified after Setup. For details, see the Getting Started Guide. Age (Next > Cancel Fig.88 I and the Program The witzerd is ready to begin installation. Click Install the Program The witzerd is ready to begin installation. I you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard. Age (Install Cancel)

Per procedere con l'installazione cliccare su Install

0

Attendere qualche minuto fino al completamento dell'installazione.

🚟 Microsoft Internet Securit	and Acceleration Server 2004	<u><</u>
	Installation Wizard Completed	
Internet Security & Acceleration Server 2004	The Installation Wizard completed successfully.	
	Invoke ISA Server Management when the wizard closes	
	Click Finish to exit the wizard.	
		_
	(Finish	

Cliccare su Finish

Adesso procediamo con la seconda parte dell'installazione. Lanciamo il **Setup.exe** dal CD ROM



Cliccare Next

👘 Micros	soft ISA Se	rver 2004 - Install	ation Wizard			×
Progra	m Mainten	ance				
Modif	y, repair, or	remove the program				
⊙ <u>e</u> Í	todify	hange which program ustom Selection dialo	i features are insta g used to change tl	lled. This option dis he way features ar	plays the e installed.	
C R	egair R C	epair installation erro prrupt files, shortcuts	rs in the program. , and registry entri	This option fixes mi ies.	ssing or	
C B	emove	emove Microsoft ISA	Server 2004 from y	your computer.		
			< <u>B</u> ack	<u>N</u> ext >	Cancel	
			Fig.92	77,		
elezionare Modify e c	liccare Nex	t		0		_
侵 Micros	oft ISA Se	rver 2004 - Install	ation Wizard			×
The se	lected featur	es will be installed.				
Click on	an icon in th	e list to view or modif	y how a feature is	installed.		
	ISA S	erver Advanced Logging erver Management all Client Installation S age Screener	5hare	Feature Descrip Installs Microsol (MSDE) used to historical log dai	otion T Data Engine view and to filter ta.	
	Confi	guration Storage serv	'er	This feature rec your hard drive	juires 64 MB on	

Fig.93

Aggiungere all'installazione il pacchetto ISA Server e cliccare su ${\bf Next}$

nfiguration Storage ser	ver (type the FQ	DN):			
o1cltn007.lab1.prv			Br <u>o</u> ws	e	
Connection Credentials					
• Connect using the	credentials of th	ie logged on usei	,		
_					
Connect using this	: <u>a</u> ccount:				
<u>U</u> ser name:	I				
Password:					

Inserire come Configuration Storage Server il nome DNS del primo nodo quindi Next

	🙀 Microsoft ISA Server 2004 - Installation Wizard	X
	Array Membership	
	Select the array membership for this ISA Server computer.	
	O <u>C</u> reate a new array	
	Create a new array and add this ISA Server computer to that array. To create an array, you must have ISA Server Enterprise Administrator privileges.	
	• Join an existing array	
	Add this ISA Server computer to an existing ISA Server array. To join an existing array, you must have ISA Server Array Administrator privileges.	
1		
	< <u>B</u> ack <u>N</u> ext > Cancel	
	Fig.95	

Selezionare la seconda opzione e cliccare su $\ensuremath{\textbf{Next}}$

 ε

🚰 Microsoft ISA Server 2004 - Installation Wizard	×
Join Existing Array	
Specify the array this ISA Server computer will join.	
Array name: TO1ISAA001 Browse Browse Description Description Specified array.	
< <u>B</u> ack <u>N</u> ext > Cancel	
Fig.96	

Selezionare l'Array creato in precedenza (con il tasto Browse) e cliccare Next

🔂 Microsoft ISA Server 2004 - Installation Wizard	X
Configuration Storage Server Authentication Options	
Select how the ISA Server computer will authenticate to the Configuration Storage server.	
 Windows authentication This ISA Server computer and the Configuration Storage server it will connect to reside in the same domain or in trusted domains. The connection will be encrypted (signed and sealed). 	
Authentication over SSL encrypted channel This ISA Server computer and the Configuration Storage server it will connect to do not reside in trusted domains, or either computer is part of a workgroup. This computer mus trust the Certificate Authority (CA) which issued the server certificate to the Configuration Storage server.	E
💿 Use an existing trusted root CA certificate	
 Install a trusted root CA certificate 	
Browse For details about installing certificates, see the Getting Started Guide.	
< <u>B</u> ack <u>N</u> ext > Cancel	
Fig.97	

Lasciare tutto invariato e cliccare Next

 \mathbb{C}

	🙀 Microsoft ISA Server 2004 - Installation Wizard	X
	Services Warning	_
	During installation, some services running locally on this computer may be restarted or disabled.	
	Services that will be restarted during installation:	
	FTP Publishing Service FTP Publishing Service Network News Transfer Protocol (NNTP) IIS Admin Service World Wide Web Publishing Service	
	Services that will be disabled during installation:	
	Internet Connection Firewall (ICF) / Internet Connection Sharing (ICS) IP Network Address Translation	
	< Dark Martha Correct	1
	<u> Back</u> <u>Mext ></u> Cancel	
ccare Next	Fig.98	
	🔂 Microsoft ISA Server 2004 - Installation Wizard	X
	Ready to modify the program	
	The wizard is ready to modify your installation.	
	Click Install to begin the installation.	
	If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
	< <u>B</u> ack Install Cancel	
	Fig.99	

 ϵ

Cliccare su Install per procedere con l'installazione e attendere qualche minuto fino al completamento.



2

Adesso andiamo sul I nodo (to1cltn007.lab1.prv) e cliccando di destro su TO1ISAA001 selezionare Properties.

1	ZN.
5	2

01ISAA001 Properties		? ×	1			
General	General Policy Settings					
Configuration Storage	ntra-Array Credentials	Assign Roles 🏻 🗍				
Specify the Configuration Storag configuration. When the specifie will be used.	array e alternate server					
Configuration Storage server (en	ter the FQDN):					
T01CLTN007.lab1.prv		<u>B</u> rowse				
Alternate Configuration Storage s	erver (optional):		۰X			
to1cltn008.lab1.prv		Browse				
Check the Configuration Storage						
15 seconds		\bigcirc				
Select the authentication type us	en ISA Server					
and the Configuration Storage se	rver:					
Windows authentication						
To save these settings, this computer must be able to connect to the specified Configuration Storage servers.						
	Fig. 102					

Nella Scheda **Configuration Storage** aggiungere all'interno del campo **Alternate Configuration Storage Server** (optional) il II nodo di ISA Server (Es. to1cltn008.lab1.prv), quindi **OK**.

•

Microsoft Interne Accelei Enterprise E	ration Server2004 Configuration Storage Server: T01CLTN007.lab1.prv
	Discard To save changes and update the configuration, click Apply.
ietting St	arted
	Getting Started with ISA Server 2004 Enterprise Edition In a multi-server array, a dedicated network adapter is required on each array member for intra-array communication in Network Load Balancing deployments, and provides enhanced security in other scenarios. Read about configuring and securing the intra-array communication. Follow these steps to set up this ISA Server array.
	Define Networks for your ISA Server Array Create your ISA Server array Internal network and network layout. Use network rules to specify NAT or route relationships between the networks in the array. Specify if network load balancing and CARP will be applied to the array networks.
2	View and Create TO1ISAA001 Firewall Policy Rules Create rules defining how ISA Server allows secure access to Internet sites, corporate e- mail, network servers, services and websites inside and outside your corporate network. Use the system policy editor to define how ISA Server enables the infrastructure necessary to manage network security and connectivity. Read about system policy
3	Define How ISA Server Caches Web Content Define a cache drive and then accelerate Web performance by specifying how Web content is downloaded to the cache and how often objects in the cache are updated.
4	Configure VPN Access Enable and configure a secure virtual private network (VPN) for remote client access to the Internal network.
	Fig.103

Cliccare Apply per confermare le modifiche effattuate

0



CONFIGURAZIONE LOAD BALANCING II NODO

All'interno di **Network Connections** cliccare di destro su la connessione da configurare in Load Balancing, quindi selezionare **Properties**.

Selezioniamo l'opzione Network Load Balancing e clicchiamo su Properties.

Network Load Balancing Proper	ties	? ×	
Cluster Parameters Host Paramet	ters Port Rules		
Cluster IP configuration		 	
IP <u>a</u> ddress:	10 . 1 . 1 . 17		
<u>S</u> ubnet mask:	255 . 255 . 255 . 0		
<u>F</u> ull Internet name:	to1clts006.lab1.prv		
<u>N</u> etwork address:	03-bf-0a-01-01-11		
Cluster operation mode © Unicast © Multicast	IGMP multicast		
Bemote password			
<u>C</u> onfirm password:	•••••		
		Cancel	
	F ¹ 404	Cancer	

Fig.104

All'interno della scheda **Cluster Parameters** inseriamo l'indirizzo IP del Cluster quindi la Subnet e il nome DNS (Es. to1clts006.lab1.prv).

Network Load Balancing Prope	rties	? ×
Cluster Parameters Host Parame	eters Port Rules	
Priority (unique host identifier):	2 🕂	
Dedicated IP configuration		
IP <u>a</u> ddress:	10 . 1 . 1 . 16	
<u>S</u> ubnet mask:	255 . 255 . 255 . 🚺	
Initial host state		
Default state:	Suspended 🗾	
<u>R</u> etain suspended state a	fter computer restarts	
	ОК	Cancel
	Fig.105	

()

All'interno della scheda Host Parameters settare il Prioriry a 2 quindi inserire l'IP Address reale della macchina in questione e la subnet e selezionare l'opzione Retain suspended state after computer reastarts. Visto che è il secondo nodo conviene mettere come Default State Suspended per evitare casini con Load Balancing.

•

Netw	ork Load Balanc	ing Prop	erties					?)	×
Clu	ister Parameters H	Host Para	meters	Port Rule	es				
D	efined port rules:								
	Cluster IP address All	Start 0	End 65535	Prot Both	Mode Multiple	Priority	Load Equal	Affinity Single	
									k
	Ded esta de se à Ke				<u>A</u> dd	<u>E</u> dit		<u>R</u> emove	•
	Fort rule descriptio TCP and UDP traf 65535 is balanced used to assign clie	n fic directe l equally a nt connec	d to any icross all ctions to	cluster IF members a specific	enderess the of the clust of the clust cluster hos	at arrives c er. Client I st.	n ports I P addre	0 through sses are	
_						OK		Cancel	i
				Fig.10	06	, ,			

Fig.106

All'interno della scheda Port Rules clicchiamo su Add per aggiungere una nuova regola.

1	Add/Edit Port Rule
	Cluster IP address 10 . 1 . 1 . 18 or □ <u>A</u> ll
	Port range <u>F</u> rom: 8080 <u>*</u> T <u>o</u> : 8080 <u>*</u>
	Protocols
	Filtering mode
	Load weight: 50 🚔 or 🔽 Equal
	◯ <u>S</u> ingle host <u>H</u> andling priority: 1 🚍
	O Disable this port range
	OK Cancel

Fig.107



Settiamo tutto come in Figura sovrastante e clicchiamo **OK** (configurazione per to1apls006.lab1.prv)

Add/Edit Port Rule	
Cluster IP address or	
Port range <u>F</u> rom: 0 🕂 To: 65535 🕂	• X
Protocols	
Filtering mode	
○ <u>M</u> ultiple host Affinity: ○ None ⓒ Single ○ Class C	
Load weight: 50 🚊 or 🔽 Equal	
O <u>S</u> ingle host <u>H</u> andling priority: <u>1</u> <u></u>	
Disable this port range	
OK Cancel	
Fig.108	

Modifichiamo la regole già esistente come in Figura sovrastante.

	-	-	
		- 1	
1.0		-2	
N 1	L,		

Advanced TCP/IP Setting	s	<u>? ×</u>
IP Settings DNS WINS	5 Options	
IP addresses		
IP address 10.1.1.16 10.1.1.17 10.1.1.18	Subnet mask 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0 255.255.255.0	Remove
Default gateways:	Metric	
	Add Edit	Remove
Automatic metric		
	ОК	Cancel

All'interno di Advanced TCP/IP Setting aggiugiamo gli indirizzi IP del Cluster e dell'Application Server.

Finita la configurazione aprimao una Shell di DOS e digitiamo i seguenti comandi

 $\overline{\}$

nlb query

Dovremmo leggere Host Stopped

Adesso digitiamo in successione

nlb resume

nlb start

Se proviamo a digitare di nuovo

nlb query

notiamo che la macchina risulta agganciata al Cluster di Load Balancing.

 \bigcirc

Network Load Balancing Prope	rties	? ×
Cluster Parameters Host Parame	eters Port Rules	
Priority (unique host identifier):	2	
IP address:	10 . 1 . 1 . 16	
<u>S</u> ubnet mask:	255.255.255.0	
Initial host state Default state: ☑ <u>R</u> etain suspended state a	Started T	
	OK	Cancel
	Fig.110	

Fig.110

Settiamo in Network Load Balancing Properties, quindi in Host Parameters Started.

•

Come mostrato in figura sovrastante