

INSTALLAZIONE E CONFIGURAZIONE TSM 5.3.2 IN CLUSTER MICROSOFT

REQUISITI PER L'INSTALLAZIONE

- Due macchine in Cluster con Windows 2003 Enterprise Edition
- Microsoft Service Pack 1
- RSM in Cluster Microsoft

INSTALLAZIONE JAVA VIRTUAL MACHINE

!!!ATTENZIONE!!! La seguente installazione va fatta su entrambi i nodi del cluster.

Lanciare il file msjavwu.exe e seguire le indicazioni per l'installazione.

Finita l'installazione sarà necessario un riavvio della macchina.

Adesso procediamo con l'aggiornamento della Virtual Machine lanciando il file msjavx86.exe

A questo punto l'installazione della Virtual Machine è completa.

INSTALLAZIONE TSM 5.3.2

!!!ATTENZIONE!!! La seguente installazione va fatta su entrambi i nodi del cluster.

Copiata la cartella di installazione sulla macchina in questione aprire un finestra DOS e posizionarsi nel seguente punto C:\Temporary\TSM\TSM32\server, quindi lanciare il seguente comando

setup.exe /L1033

La parte finale /L1033 ci permette di installare il prodotto in inglese.



Cliccare su Next



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Fig.3

Lasciare tutto invariato e cliccare su Next

🙀 IBM Tivoli Storage	Manager Server 5.3.2.0 - InstallShield Wizard	×
Setup Type	4	10
Choose the setup ty	pe that best suits your needs.	<u>.</u>
Please select a setu	p type.	
• Complete All p spar	rogram features will be installed. (Requires the most disk ce.)	
C Cu <u>s</u> tom Cho will I	ose which program features you want installed and where they be installed. Recommended for advanced users.	
InstallShield	< Back Next > Cancel	1
invariato e cliccare su	Next	
😽 IBM Tivoli Storage	Manager Server 5.3.2.0 - InstallShield Wizard	×
Ready to Install the	e Program	10
The wizard is ready	to begin installation.	2
Click Install to begin	the installation.	
If you want to revie exit the wizard.	w or change any of your installation settings, click Back. Click Cancel to	

Lasciare tut

🙀 IBM Tivoli Storage Manager Serve	r 5.3.2.0 - InstallSh	ield Wizard	×
Ready to Install the Program			
The wizard is ready to begin installation	n.		
Click Install to begin the installation.			
If you want to review or change any o exit the wizard.	f your installation set	tings, click Back. Cl	ick Cancel to
e i lleti ti			
Instalibhield	< Back	Install	Cancel
			Cancor
	FIG.5		

Cliccare su Install per procedere con l'installazione



Adesso dalla cartella di installazione copiamo la libreria adsmlicn.dll nella seguente posizione

C:\Program Files\Tivoli\tsm\server

INSTALLAZIONE INSTANZA TSM SUL I NODO DEL CLUSTER

!!!ATTENZIONE!!! Assicurarsi che il Virtual Server dell'RSM sia Online. Assicurarsi che il Clutser sia sul nodo dove intendiamo fare l'installazione.

Initial Configuration Task List for Tivoli Storage Manager on TO1CLTN101

×

Select the type of TSM Server configuration that you would like, and then click Start.

Standard configuration

Choose this option if you want to initialize and configure a server that will be optimized for an environment with tape devices and network clients. This option also supports clustering, library sharing, LAN Free, NDMP, and Server Free configuration.

O Minimal configuration

Choose this option if you want to initialize and configure a server to perform a test backup. You can then configure the server manually or continue with the standard configuration.

Tasks to complete	State	Description		
🗹 / Define Environment	Not started	Provide TSM with information on your environment		
🗖 🙆 Configure Performance	Not started	Test your computer's performance and update TSM accordingly		
1 🚳 Server Initialization Not started Initialize an instance of the TSM server				
🗖 🙆 Configure Clustering	Not started	Configure's TSM for a clustering environment		
🗖 🙆 Configure Devices	Not started	Let TSM know which devices you want to use		
🗖 🙆 Configure Nodes	Not started	Register nodes and define TSM policies		
🗖 🙆 Prepare Media	Not started	Label manual device volumes		
🗖 🙆 Prepare Media	Not started	Label autochanger volumes and check them in with TSM		
•		•		
Start Reset	Done	More Information		

Fig.6

Lanciamo la Management Console



Fig.7

Clicchiamo su Start



Fig.8

Initia T	Configuration Preferences SM can provide guidance based on your preferences.
Y	ou can get help at any time time during the initial configuration by clicking Help.
lf al	you are new to TSM you may want additional information to be automatically displayed key points in the process.
W	ould you like to have additional information displayed during initial configuration?
	 ♥ Yes ♥ No
T N	P: If you get stuck at any point during this initial configuration procedure click on ext. The wizards will provide reasonable default values.
	< <u>B</u> ack <u>N</u> ext > Cancel Help
	Fig.9
nitial Co	Fig.9
itial Co Site I T	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments.
iitial Co Site I T T	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments.
i <mark>tial Co</mark> Site I T T	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments. SM can be configured for standalone and network environments. (hich type of environment will you be configuring?
itial Co Site I T T	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments. Mich type of environment will you be configuring? Standalone (local machine with one local client) Network (network connected clients)
nitial Co Site I T W W	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments. SM can be configured for standalone and network environments. SM can be configured for standalone and network environments. Thich type of environment will you be configuring? Standalone (local machine with one local client) Standalone (local machine with one local client) Network (network connected clients) P: The Standalone environment only supports a single computer. In a network environment you can install TSM client software on computers throughout your network at then back them up to a TSM server.
nitial Co Site I T W	Fig.9 Infiguration Environment Wizard Environment Information SM supports standalone and network environments. SM can be configured for standalone and network environments. thich type of environment will you be configuring? Standalone (local machine with one local client) Network (network connected clients) P: The Standalone environment only supports a single computer. In a network more more more more more more more more

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

Next



Finish

-)



Cliccare su Cancel



Fig.13

Cliccare su \mathbf{Yes} per passare allo step successivo



Next

2)

Help

	Server Initialization Wizard
	Cluster Environment TSM can be configured to run in a clustered environment
	Microsoft Cluster Server (MSCS) has been detected on this computer.
	Do you want to configure TSM for use in a Windows cluster?
	 Yes No
	< <u>B</u> ack <u>N</u> ext > Cancel Help
elezionare f	Fig.15 NO Cluster e cliccare su Next
	Server Initialization Wizard
	Server Key and Location Information Each server instance has a unique registry key as well as a set of unique files.
	You are configuring TSM server # 1 on this system.
	Server instance key: Server1
	Server base directory: c:\program files\tivoli\tsm\server
	Type in the directory where you would like this server's unique files to be placed.
	Server instance directory:

< <u>B</u>ack

Selezionare il percorso da dare all'instanza del TSM (in questo caso utilizzo il disco E:\)

<u>N</u>ext >

Fig.16

Cancel

Quindi cliccare su Next

Server Initialization Wizard	X
Server Volume Location The location of the initial server volumes can be specified	
Type in the complete path and size for the initial volume o	f each type.
Initial database volume:	Size(MB)
e:\tivoli\tsm\server1\db1.dsm	13
Initial recovery log volume:	Size(MB)
e:\tivoli\tsm\server1\log1.dsm	9
, Initial disk storage pool volume:	Size(MB)
e:\tivoli\tsm\server1\disk1.dsm	4
Automatically create additional DB volumes as nee	eded (recommended)
Automatically create additional Log volumes as new	eded (recommended)
< <u>B</u> ack <u>N</u> ext >	Cancel Help
Fig 17	
	0
Server Initialization Wizard	×
Server Service Logon Parameters The account and password that the server will run under	can be specified.
Which account should the service use when logging on t	o Windows?
The System account	For domain accounts use:
C This account AUGUSTANET\NetAdmin	domain\account_name
	The server cannot access
	Active Directory when logged in under the System
Verify password	account.
When do you want the service to start?	To access Active Directory
Manually when Lexplicitly start the service	in under an account with
O Automatically when Windows boots	Administrative permissions.
(Back Nevt)	Cancel Help

 $\label{eq:selection} \ensuremath{\mathsf{Selectionare}}\ \ensuremath{\mathsf{l'opzione}}\ \ensuremath{\mathsf{Manually}}\ \ensuremath{\mathsf{when I}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{start}}\ \ensuremath{\mathsf{the service}}\ \ensuremath{\mathsf{e}}\ \ensuremath{\mathsf{clcc}}\ \ensuremath{\mathsf{e}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{start}}\ \ensuremath{\mathsf{the service}}\ \ensuremath{\mathsf{e}}\ \ensuremath{\mathsf{clcc}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{start}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{start}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{start}}\ \ensuremath{\mathsf{explicity}}\ \ensuremath{\mathsf{explicit$

erver Name and Passw The server name and pa	ord ssword is used in TSM server-to-server communications.	
What name would you lik	e to assign to this server?	
Server name	to1apls002	
Certain TSM features sur data movement and serv	ch as library sharing, LAN free data movement, Server free er-to-server communications require a server password.	
🔲 Specify server pa	ssword (recommended)	
Specify server particular part	ssword (recommended)	
Specify server pa Password Verify password	ssword (recommended)	
Specify server pa Password Verify password	ssword (recommended)	

Assegnare un nome al Server Name (Es. TO1APLS101) quindi cliccare su Next



Fig.20

Finish





OK per terminare l'installazione

Device Configuration Wizard		×	
	Welcome to the Device Configuration Wizard		
	This wizard will help you to configure devices for use with TSM.		
Car	To continue, click Next.		
111 10 10 10 10 10 10 10 10 10 10 10 10			
	< <u>B</u> ack [<u>Next</u> >] Cancel Help		
	Fig.22		

Cliccare su Cancel

ANRU1125I Image: Second se

Fig.23

Cliccare su Yes



Cliccare su Cancel

-)



Cliccare su Yes



Cliccare su Done

-2)



INSTALLAZIONE INSTANZA TSM SUL II NODO DEL CLUSTER

Sul I Nodo apriamo un prompt di DOS quindi digitiamo il comando

Quindi selezioniamo il BINARY_PATH_NAME e copiamolo. **!!!ATTENZIONE!!!** Se avete seguito attentamente la procedura il percorso è il seguente:

C:\PROGRA~1\Tivoli\tsm\Server\dsmsvc.exe

Adesso sul II Nodo apro una finestra di DOS e scrivo il seguente comando (bisogna rispettare gli spazi!!!!)

sc create "TSM Server1" binPath= "C:\PROGRA~1\Tivoli\tsm\Server\dsmsvc.exe" DisplayName= "TSM Server1"

Adesso nei Services dovrebbe comparire il servizio TSM Server1



COMPLETAMENTO INSTALLAZIONE CLUSTER TSM

Per comodità lavoriamo sul I Nodo quindi spostiamo il Virtual Server qui.

🚰 Cluster Administrator - [T01CLT5101)	(.)]				_ 🗆 ×
📸 Eile <u>V</u> iew <u>W</u> indow <u>H</u> elp					_ 8 ×
E-G TO1CLTS101	Name	State	Owner	Resource Type	Description
TOICLTSI01 Groups Cluster Virtual Server 1 Resources Cluster Configuration Resource Types Networks LAN Connection 1 Network Interfaces TOICLTNI01 Active Groups Network Interfaces TOICLTN102 Active Groups Active Groups Active Resources Network Interfaces Network Interfaces Network Interfaces Network Interfaces Network Interfaces Network Interfaces	Name	State Online Online Online Online	Owner T01CLTN101 T01CLTN101 T01CLTN101 T01CLTN101	Resource Type Generic Service IP Address Network Name Physical Disk	Description
	•				
For Help, press F1					
		Fig.27			
Apriamo il Cluster Administ	trator				

Apriamo il Cluster Administrator

New R	esource		
		P Addre Name: Description: Resource type: Group: Dan this resou To continue, click	ss 2 IP Address 2 IP Address IP Address Virtual Server 1 rce in a separate Resource Monitor Next. Back Next >
		Fig.28	

In corrispondenza del Virtual Server 1 creiamo una nuovo risorsa come in Figura 28.

Cancel



Fig.29

< <u>B</u>ack

 $\underline{N}ext >$

Clicchiamo su Next

0

_			
D	ependencies		
	IP Address 2 Dependencies are resources which Specify the dependencies for this re	must be brought online by the cluster : source.	service first.
	A <u>v</u> ailable resources:	Resource <u>d</u> ependen	cies:
5	Resource Resc Generic Service 1 Gene Physical Disk 2 Phys	Add -> <- Bemove	Reso
		< <u>B</u> ack <u>N</u> ext >	Cancel

Next

TCP/IP Address	Parameters				
	dress 2				
A <u>d</u> dress:	10 . 70 . 0 . 252				
<u>S</u> ubnet mask:	255 . 255 . 252 . 0				
Network:	LAN Connection 1		•		
Enable Net	BIOS for this address				X
					ľ
		< <u>B</u> ack	Finish	Cancel	

Fig.31

Inseriamo l'indirizzo IP, la Subnet Mask e disabilitiamo in NetBios

Quindi clicchiamo su Finish

-2)

New Resource		
	Name: Description: Resource type: Group: Bun this resource To continue, click	Name 2 NetworkName 2 Network Name Virtual Server 1 virtual Server 1
	Eig 20	Back Next > Cancel

In corrispondenza sempre del Virtual Server 1 creiamo una seconda risorsa come in Figura 32.



Aggiungiamo come dipendenza la risorsa IP Address 2 e clicchiamo su Next

Notwork N	ama Daramatara
NELWORKING	ame Parameters
L.	NetworkName 2
N <u>a</u> me:	T01APLS101
⊡ <u>D</u> NS	S Registration Must Suc

NetworkName 2	
Name: T01APLS101	
 ☑ DNS Registration Must Succeed ✓ Enable Kerberos Authentication 	
	X
	\sim
< <u>B</u> ack Finish Cancel	
Fig.35	1

Fig.35

Inseriamo il nome e abilitiamo il Kerberos, quindi clicchiamo su Finish.

!!!ATTENZIONE!!! Prima di far partire la risorsa ricordiamoci di aggiungere in Active Directory il computer TO1APLS101 e delegarlo al Cluster.

I	New Resource	0.0	
	_	Generic	Service 2
		Na <u>m</u> e:	Generic Service 2
		Description:	
		Resource <u>t</u> ype:	Generic Service
		<u>G</u> roup:	Virtual Server 1
	i in the second se	☐ <u>R</u> un this resou	rce in a separate Resource Monitor
		To continue, click	Next.
		<]	Back <u>N</u> ext > Cancel

Fig.36

Adesso sempre in corrispondenza del Virtual Server 2 aggiungiamo la risorsa del TSM come mostrato in Figura 36

Possible Owners Generic Service 2 Possible owners are nodes in the o Specify the possible owners for this	luster on which this resource can be brought o resource.	nline.
Available nodes:	Possible <u>o</u> wners:	
Name	Add -> <- Remove	
	< <u>B</u> ack <u>N</u> ext > C	ancel

Fig.37

Come possible Owners specifichiamo entrambe i nodi visto che il Servizio TSM è stato precedentemente installato

Quindi clicchiamo su $\ensuremath{\textbf{Next}}$

2

di clicchiamo s	su Next			
D	ependencies			
	Generic Service 2 Dependencies are resources which Specify the dependencies for this r	n must be brought o esource.	online by the cluster servic	e first.
	A <u>v</u> ailable resources:	F	Resource <u>d</u> ependencies:	
	Resource Resc		Resource	Resc
		<u>A</u> dd -> <- <u>H</u> emove	Generic Service 1 D IP Address 2 NetworkName 2 D Physical Disk 2	Gene IP Ac Netw Phys
4			•	F
		< <u>B</u> ack	<u>N</u> ext >	Cancel
		FIG.38		

Come dipendenze aggiungiamo il disco, l'IP e il Network Name come mostrato in Figura sovrastante.

Generic Service Parameters		
Service name: TSM Serve	r 1	
Start parameters:		
Use Network Name for comp	uter name	
	< <u>B</u> ack <u>N</u> ext >	Cancel

Il nome da dare al Servizio è TSM Server1. (Bisogna fare attenzione a scrivere il nome esattamente) Quindi clicchiamo su **Next**

A questo punto aggiungiamo la seguente chiave da replicare

SOFTWARE\IBM\ADSM\CurrentVersion\Server\Server1

Quindi clicchiamo su Finish

Per testare il tutto faccio un Bring Online del Generic Service 2.

Se il servizio TSM Server 1 è stato installato anche sul II Nodo del Cluster è possibile fare un Move Group per verificare il buon funzionamento.



INSTALLAZIONE INTERFACCIA WEB

!!!ATTENZIONE!!! La seguente installazione va fatta su entrambi i nodi del cluster.

Procediamo con la creazione delle cartelle

- C:\Program Files\Tivoli\tsm\server\webhelp
- C:\Program Files\Tivoli\tsm\server\webimage

Adesso all'interno delle seguenti cartelle scompattare i seguenti file .zip

- 52admin_help_en.zip (in webhelp)
- 52admin_images.zip (in webimage)

Dal file 52admin_idl.zip prelevare il file windows.idl e copiarlo nel seguente percorso

C:\Program Files\Tivoli\tsm\server

Quindi rinominare il file in dmsserv.idl

!!!ATTENZIONE!!! Stoppare il la risorsa TSM prima di procedere con il seguente Step come mostrato in Figura sottostante

🖏 TSM Server1			Manual	Local System
TSMReptSvc 🖏	IBM Tivoli S		Automatic	Local System
🖏 Uninterruptible Pow	Manades a		Manual	Local Service
		Fig.40		

Adesso apriamo un finestra di DOS e posizionamoci sulla cartella C:\ProgramFiles\Tivoli\tsm\server e lanciamo il seguente comando

dsmserv runfile dsmserv.idl

Se la registrazione è andata a buon fine dovremmo visualizzare i seguenti messaggi:

ANR46931 Interface Driver information will be loaded in quiet mode: Only

warning and error messages will be displayed.

ANR49801 Auditing Interface Driver definitions.

ANR49831 Auditing Interface Driver Groups. ANR49851 Auditing Interface Driver Group Members.

ANR49851 Additing Interface Driver Gloup Members

ANR49861 Auditing Interface Driver Classes. ANR49881 Auditing Interface Driver Complex Class containers.

ANR49981 Additing Interface Driver Complex Cla ANR49911 Auditing Interface Driver Tasks.

ANR49911 Additing Interface Driver Tasks. ANR49921 Auditing Interface Driver Task Members.

ANR49921 Auditing Interface Driver Task Members. ANR49891 Auditing Interface Driver Operations.

ANR49891 Additing Interface Driver Operations. ANR49901 Auditing Interface Driver Operation Parameters.

ANR49301 Additing interface Driver audit completed - definitions are consistent.

IIIATTENZIONEIII Sul secondo nodo del Cluster l'installazione dell'interfaccia Web del TSM è identica, ricordiamoci solo di spostare il Virtual Server sul nodo in questione.

Per richiamare l'interfaccia web è necessario inserire il seguente path in Internet Explorer

http://to1apls101:1580/





SPOSTAMENTO DEI FILE DEL DB

Questa operazione è facoltativa (ma è vivamanet consigliata). Consiste nello spostare i DB all'interno di un disco opportuno.

Ipotizziamo di avere tre dischi a diposizione :

- F:\ Disco per i DB
- G:\ Disco per i LOG
- H:\ Disco per la Cache

All'interno dei seguenti dischi creiamo la seguente struttura di Directory



Adesso dall'interfaccia Web del TSM andare nel seguente percorso



Fig.42

In questo punto definire i DB che vogliamo creare (il nome deve essere del tipo DB1.dsm) Creati i DB procediamo con l'extend degli stessi.

Modifichiamo i Trigger portando la % a 10.



SPOSTAMENTO DEI FILE DI LOG

Questa operazione è facoltativa (ma è vivamanet consigliata). Consiste nello spostare i file di LOG all'interno di un disco opportuno.

Adesso dall'interfaccia Web del TSM andare nel seguente percorso



Fig.43

Facciamo la stessa cosa che abbiamo fatto per i file del DB.

•

CREAZIONE DEI DISCHI DI CACHE

Bisogna creare i dischi in base al numero di cassette disponibili.

INSTALLAZIONE LICENZA

-)

Server Administration - Microsoft Internet Explorer				_ 8 ×
Elle Edit View Favorites Iools Help				
Sack + O + ≥ 2 (A) > Search ★ Favorites @ > > > >				
Agdress en http://to1apls101:1580/SignOnPost			<u> </u>	Links "
Tivoli Storage Manager Server Version 5, Release 3, Level 2.0				171 o
Connected to TO1APLS101 as ADMIN		[Options:	- 8
	Register License 💌			
Deration view				
Network view				
Direct view				
A dministrators	Last License Audit	2006-01-23 14:29:00.000000		
	Number of TDP for Oracle in use	0		
- III Server Status	Number of TDP for Oracle in try buy mode	0		
License Information	Number of TDP for MS SQL Server in use	0		
	Number of TDP for MS SQL Server in try buy mode	0		
	Number of TDP for MS Exchange in the huw mode	0		
- Restartable Restore Sessions	Number of TDP for Lotus Notes in use	0		
United Servers	Number of TDP for Lotus Notes in try buy mode	U		
E Groups	Number of TDP for Lotus Domino in use	0		
	Number of TDP for Lotus Domino in try buy mode	0		
	Number of TDP for Informix in use	0		
Automation	Number of TDP for Informix in try buy mode	0		
H Server Storage	Number of TDP for SAP R/3 in use	0		
E State Recovery Manager	Number of TDP for SAP R/3 in try buy mode	0		
	Number of TDP for ESS in use	0		
	Number of TDP for ESS in try buy mode	0		
	Number of TDP for ESS R/3 in use	0		
	Number of TDP for ESS R/3 in try buy mode	0		
	Number of TDP for EMC Symmetrix in use	0		
	Number of TDP for EMC Symmetrix in try buy mode	0		
	Number of TDP for EMC Symmetrix R/3 in tax buy mode	0		
	Number of TDP for WAS in use	0		
	Number of TDP for WAS in try huy mode	0		
	Is IBM System Storage Archive Manager in use ?	No		
	Is IBM System Storage Archive Manager licensed ?	No		-
One			Sucal intranet	
	Fig.44			
	-			
Aprire l'interfaccia Web quindi selezionare Server				
	License Information			
Quindi dal menu a tendina selezioniamo Register Lice	ense			
Register License				Hel
License File	C:\Program Files\Tivoli\tsm\server*			
Number to Lice	nse 500			
Sten 1 of 1			Finish	Cance
Nup I VI I			1 111311	Cuncer
	Fig.45			

Inserire la seguente stringa C:\Program Files\Tivoli\tsm\server*.lic

Come number di Licence inseriamo 500.

!!!ATTENZIONE!!! Ci accorgiamo che l'installazione è andata a buon fine se in E:\ c'è il file NODELOCK



AGGIUNTA DELLA LIBRERIA SU RSM

!!!ATTENZIONE!!! La seguente configurazione va fatta su tutti e due i nodi del Cluster. Per aggiungere la libreria all'RSM bisogna seguire i seguenti passaggi:



In **Computer Management**, selezionare **Media Pools** e cliccando di destro creare un nuovo **Media Pool** denominato Tivoli Storage Manager come in figura sottostante

General S	ecurity	1
<u>N</u> ame:	Tivoli Storage manager	
<u>D</u> escription	n:	
Туре:	Application-specific	
_ Media in	formation	
Con	tains <u>o</u> ther media pools	
C Con	tains media of <u>type:</u>	
2.5	' Avatar Floppy 🗾	
Allocatio	n / Deallocation policy	
🗖 Drav	v <u>m</u> edia from Free media pool	
🗖 Retu	rn media to Free media pool	

•

Nel campo Security rimuovere l'utente NetAdmin.





Al disotto del Media Pool creato inseriamo un altro Media Pool chiamato Server1, al disotto del quale creiamo un altro Media Pool con nome CHANGERO.

Nella creazione del CHANGERO facciamo attenzione a selezionare DLT e spuntare le prime due opzioni (vedi Figura 48)

reate a New	Media Pool Properties	? ×
General Sec	surity	
<u>N</u> ame:	CHANGERO	
Description:		
Туре:	Application-specific	
⊢ Media info	rmation	`````````````````````````````````
C Contai	ns <u>o</u> ther media pools	
Contai	ns media of type:	■ [] , •]
DLT	_	
Allocation	/ Deallocation policy	
🔽 Drawy	<u>m</u> edia from Free media pool	
Return	nmedia to Free media pool	
🔲 Limit re	allocations	
	,	
	ОК С	ancel
	Fig.48	
)	



Sempre al disotto del Media Pool Server1 creiamo un altro Media Pool denominato Import (Figura 49) al disotto del quale creiamo un Media Pool DLT (Figura 50).

eate a New M	ledia Pool Properties ? >	×
General Secu	irity	
<u>N</u> ame:	Import	
Description:		
Туре:	Application-specific	
Media inforr	nation s <u>o</u> ther media pools	$\ \cdot \langle$
 Contain 	s media of <u>type</u> :	K .
Unkno	wn	
Allocation /	Deallocation policy edia from Free media pool media to Free media pool allocations	
	OK Cancel	
ò	Fig.49	

Create a New Media Pool Properties	×
General Security	-
Name: DLT	
Description:	
Type: Application-specific	
Media information	1
C Contains other media pools	
Contains media of type:	
Allocation / Deallocation policy	
Draw media from Free media pool	
<u>R</u> eturn media to Free media pool	
Limit reallocations	
OK Cancel	
Fig.50	

•

 \mathbf{S}



Alla fine di tutte le operazioni dovremmo avere un struttura come mostrato in Figura 51



Alla fine di tutto bisogna lanciare il file TSM Tape OMID.reg che va a scrivere nel registro di sistema le seguenti chiavi

[HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\NTMS\OMID\Tape\TSM] "Description" = "Tivoli Storage Manager Media Label Library"

"Path"="C:\\Program Files\\Tivoli\\tsm\\server\\adsmrsm.dll"

A questo punto è necessario riavviare la macchina.





Fig.52

Sotto Object View, Server Storage, Device Classess quindi selezioniamo Generic Tape Device Classess.

<u>©</u>			WU	UW.CHIATTORA	FFAELE.IT
Quindi selezioniamo un Define Devi	ce Class e inseriamo	o quanto segue	9:		
Define Device Class					Help
				-	
	Device Class Nam	e GENCLASS1			
	Library Name	CHANGER0			
	Mount Limit	2			
	Mount Retention	5			
	Estimated Capacit	у			
	Mount Wait	10			
Step 1 of 1					Finish Cancel
		Fig.53			-
		-			
Library Name: CHANGER0			0		
Mount Limit: 2					

A questo punto definiamo la libreria inserendo da riga di comando il seguente comando:

define library CHANGER0 libtype=RSM mediatype=DLT

Quindi per verificare se tutto è andato a buon fine editiamo il seguente comando

query library

dovremmo ottenere le seguenti righe :

Retention: 5 Wait: 10

Library Name: CHANGERO Library Type: RSM ACS Id: Private Category: Scratch Category: WORM Scratch Category: External Manager: RSM Media Type: DLT Shared: No LanFree: ObeyMountRetention:

A questo punto procediamo con la creazione dello Storage Pool. Sotto Storage Server Object View, Server Storage, Storage Pools quindi selezioniamo Sequential Access Storage Pools.



Dal Menù a tendina definiamo lo Storage Pool inserendo solo i seguenti campi (vedi Figura 54) :

Define Sequential Access Storage Pool

Help

Finish Cancel

Storage Pool Name	GENPOOL1
Device Class	GENCLASS1
Description	
Media Access Status	READWRITE -
Maximum Size Threshold	
Next Storage Pool	▼
High Migration Threshold	
Low Migration Threshold	
Collocate?	○YES ©NO ○FILESPACE
Reclamation Threshold	
Maximum Scratch Volumes Allow	ed 0
Delay Period for Volume Reuse	0
Reclaim to storage pool	
Migration Delay	
Migration Continue	OYES ONO
Copy Storage Pool(s)	
Continue Copy on Error?	O YES ONO
CRC Data	OYES ONO
Storage Pool Data Format	NATIVE ONONBLOCK ONETAPPDUMP OCELERRADUMP ONDMPDUMP
Overflow Location	

Step 1 of 1

Fig.54

Storage Pool Name : GENPOOL1 Device Class : GENCLASS1

Quindi Finish

DEFINIZIONE POLICY

Definiamo 5 Policy Domains e definiamo per tutte il Set1

Nella Management Class rispettiamo il seguente specchietto:

•

Policy 1 \rightarrow Class 1 Policy 2 \rightarrow Class 2 Policy 3 \rightarrow Class 1, Class 2 Policy 4 \rightarrow Class 3 Policy 5 \rightarrow Class 1, Class 4

Ricordiamoci di specificare la Class di Default