

## **INSTALLAZIONE E CONFIGURAZIONE SERVER RIS**

## PREREQUISITI

\_

- Installazione Windows 2003 SP1
- Active Directory attiva nel dominio
- DHCP attivo nel dominio di destinazione del server
- Server connesso al dominio
  - Sui DHCP delle varie sottoreti configurare due parametri nelle opzioni del DHCP in questo modo:

opzione 066 "Boot Server Host Name" = nome FDQN del server RIS opzione 067 "Bootfile Name" = OSChooser\i386\startrom.com

## INSTALLAZIONE E CONFIGURAZIONE DEL SERVER

Andare su add/remove componenti di Windows e cliccare su "Remote Installation Service" come da figura:

ndows Components Wizard	
Windows Components You can add or remove components of Windows	Ē
To add or remove a component, click the checkt part of the component will be installed. To see w Details.	pox. A shaded box means that only hat's included in a component, click
Components:	
🔲 🚉 Management and Monitoring Tools	6,3 MB 💻
🔲 불 Networking Services	2,7 MB
🗆 불 Other Network File and Print Services	0,0 MB 🛄
🗹 🖳 Remote Installation Services	2,0 MB
🗖 🖻 Security Confiduration Wizard	21 MB 🗾
Description: Provides the ability to remotely insta client computers.	Il Windows on remote boot enabled
Total disk space required: 6,4 MB	Details
Space available on disk: 5307,3 MB	Decens
< <u>B</u> ack <u>N</u> e	ext > Cancel Help
Fig. 1	

Fare click su Next per far partire l'installazione.

Al termine verrà richiesto di riavviare il sistema, fare click su OK

Dopo il riavvio del server andiamo in Administrative Tools e facciamo click su "Remote Installation Service Setup" come in figura:



Fare click su Next

Adesso specificare dove la Directory dove si caricheranno i sistemi operativi da distribuire, in questo caso lasciamo tutto di default e cliccare su **Next**:

Remote Installation Services Setup Wizard
Remote Installation Folder Location Specify the location for the remote installation folder.
Enter the location in which to create the installation folder structure. The drive cannot be the system drive. The remote installation server should have enough disk space to support multiple installation images. The folder structure must be installed on a drive that is formatted with NTES version 5 or later.
Path: E:\RemoteInstal Browse
< <u>B</u> ack <u>N</u> ext > Cancel
Fig. 3

Sulla finestra seguente mettere il flag come in figura e poi Next:

mputers until you configure it to do so
g clients immediately, select one of both
service
omputers
Z Back Nevt Cancel

Per continuare il setup bisogna caricare una prima immagine del sistema operativo (in questo caso carichiamo Windows 2003 Enterprise Edition English) e dopo potremo caricare le altre immagini. Nel nostro caso il s.o. lo carichiamo da cd ma potremmo anche caricarlo da rete

Remote Installation Services Setup Wizard	×
Installation Source Files Location Specify the location of the Windows installation files.	æ
Enter the path to the CD or network location of the Windows installation	n files.
Path:	Browse
< <u>B</u> ack <u>N</u> ext :	Cancel
Fig. 5	

Cliccare su Next poi ancora su Next

Lai	nguage Mismatch The language of this server does not match that of the client computer.
	The screens provided with the Remote Installation Services component are meant to be a guide to deployment. As such, the minimal number of screen solutions needed were supplied with the product for quick deployment of a single language server.
	The Workstation you have selected to install is of a different language than that of the server. This will require a language selection screen to be added in order for users to access the new image.
	The example MULTILNG.OSC is provided to show you how to make this screen. For more information, see online Help.
	< <u>B</u> ack <u>Next</u> > Cancel
	Fig. 6

Fig. 6

Adesso specifichiamo il nome della directory dove verranno salvati i file, nel nostro caso è W2K3ENTENG e poi Next

Remote Installation Services Setup Wizard	×
Windows Installation Image Folder Name Provide a name for the Windows installation image folder.	<u>B</u>
Type a name for the folder to which the Windows files will be copied on this remote installation server.	
<u>F</u> older name:	
W2K3ENTENG	_
1	
< <u>B</u> ack <u>N</u> ext> C	ancel
Fig. 7	

Di nuovo Next e poi su Finish

2

Review Settings Verify your settings before you o	continue.	Ì.
You specified the following setti	ings for this remote installation server:	
Windows source:	D:	
Image folder:	W2K3ENTENG	
Installation folder:	E:\RemoteInstall	
Other installation image informat	tion:	
Windows version:	5.2	
Image language:	English	
Hardware platform:	x86-based	
To change any of these setting: using these settings, click Finish	s, click Back. To complete the installation of this server n.	
	< Back Finish Can	

A questo punto partirà la configurazione del server RIS.

2

Una volta completata possiamo caricare gli altri s.o. che ci servono. Ad esempio carichiamo Windows XP SP2 English

Clicchiamo di nuovo su "Remote Installation Service Setup" e poi su Next e poi ancora Next su questa scheramata:

Remote Installation Services Setup Wizard
Remote Installation Services Options Select one of the options below
Select one of the following options:
C Check this remote installation server for errors This option ensures this server is functioning correctly. If errors are detected, you may be prompted to insert the Windows Professional or Server CD.
< <u>B</u> ack <u>N</u> ext > Cancel

Fig. 9

Carichiamo il nuovo CD e facciamo click su Next:

0

Inseriamo questo nome di directory dove verrà memorizzato il s.o. come da figura:

	Windows Installation Image Folder Name Provide a name for the Windows installation image folder.
	Type a name for the folder to which the Windows files will be copied on this remote installation server.
	<u>F</u> older name:
	WINXPSP2ENG
	< <u>B</u> ack <u>N</u> ext > Cancel
	Fig. 10
icora su <b>Ne</b>	Fig. 10
icora su <b>Ne</b>	Fig. 10 xt.
ncora su <b>Ne</b> esta finestr	Fig. 10 xt. a scegliamo la prima opzione:
ncora su <b>Ne</b> esta finestr <b>Rer</b>	xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard
ncora su <b>Ne</b> esta finestr <b>Re</b> r	Fig. 10         xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard         Previous Client Installation Screens Found Setup found an existing set of Client Installation wizard screens.
ncora su <b>Ne</b> esta finestr <b>Re</b> r	Fig. 10         xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard         Previous Client Installation Screens Found Setup found an existing set of Client Installation wizard screens.         Only one set of client installation screens per language can exist. How do you want to proceed?
ncora su <b>Ne</b> esta finestr <b>Re</b> r	Fig. 10         xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard         Previous Client Installation Screens Found Setup found an existing set of Client Installation wizard screens.         Only one set of client installation screens per language can exist. How do you want to proceed?         Image: Setup Setup Client Installation screens, and rename the old ones with a .bak extension
ncora su <b>Ne</b> esta finestr Rei	Fig. 10         xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard         Previous Client Installation Screens Found Setup found an existing set of Client Installation wizard screens.         Only one set of client installation screens per language can exist. How do you want to proceed?         Image: Only one set of client installation screens, and rename the old ones with a .bak extension         Image: Only one set of client installation screens, and rename the old ones with a .bak         Image: Only one set of client installation screens, and rename the old ones with a .bak
ncora su <b>Ne</b> resta finestr Rei	xt.         a scegliamo la prima opzione:         mote Installation Services Setup Wizard         Previous Client Installation Screens Found Setup found an existing set of Client Installation wizard screens.         Only one set of client installation screens per language can exist. How do you want to proceed?         Image: Setup Setu
ncora su <b>Ne</b> lesta finestr Rer	st.   a scegliamo la prima opzione:   mote Installation Services Setup Wizard   Previous Client Installation Screens Found   Setup found an existing set of Client Installation wizard screens.   Only one set of client installation screens per language can exist. How do you want to proceed?   Image: Previous Client Installation screens, and rename the old ones with a .bak restension   Image: Use the new client installation screens, and goverwrite the old ones   Image: Use the new client installation screens, and goverwrite the old ones
ncora su <b>Ne</b> nesta finestr Rei	Fig. 10   xt.   a scegliamo la prima opzione:   mote Installation Services Setup Wizard   Previous Client Installation Screens Found   Setup found an existing set of Client Installation wizard screens.   Only one set of client installation screens per language can exist. How do you want to proceed? I Use the new client installation screens, and rename the old ones with a .bak extension Use the new client installation screens, and geneme the old ones Use the new client installation screens, and geneme the old ones Use the new client installation screens, and geneme the old ones Use the new client installation screens, and geneme the old ones Use the new client installation screens, and geneme the old ones Use the old client installation screens I use the old client installation screens
ncora su <b>Ne</b> lesta finestr Rei	st.   a sceglamo la prima opzione: <b>Inter Installation Services Setup Wizard Previous Client Installation Screens Found</b> Setup found an existing set of Client Installation wizard screens.   Only one set of client installation screens per language can exist. How do you want to proceed?   Image: Step Provide the new client installation screens, and rename the old ones with a .bak extension   Image: Step Provide the new client installation screens, and gverwrite the old ones   Image: Step Provide the old client installation screens
ncora su <b>Ne</b> lesta finestr Rei	Fig. 10   xt.   a scegliamo la prima opzione:   mote Installation Services Setup Wizard   Previous Client Installation Screens Found   Setup found an existing set of Client Installation wizard screens.   Only one set of client installation screens per language can exist. How do you want to proceed? I Use the new client installation screens, and rename the old ones with a .bak extension Use the new client installation screens, and gverwrite the old ones Use the old client installation screens I use the old client installation screens
ncora su <b>Ne</b> lesta finestr Rei	Fig. 10   xt.   a scegliamo la prima opzione: <b>Previous Client Installation Screens Found</b> Setup found an existing set of Client Installation wizard screens.   Only one set of client installation screens per language can exist. How do you want to proceed?   • Use the new client installation screens, and rename the old ones with a .bak extension   • Use the new client installation screens, and gverwrite the old ones   • Use the new client installation screens, and gverwrite the old ones

Fig. 11

Poi next e poi su Finish.



Adesso dobbiamo cambiare alcuni settaggi del RIS server in Active Directory: andiamo sul dominio e clicchiamo Propertis sulla macchina che fa da RIS Server come in figura:



Fig. 12

Clicchiamo su Advaced Settings e poi su Customize sulla finestra che si apre:

•

🍜 Active Directory Users and Comp	uters							_ 8 ×
🎻 Eile Action Yiew Window He	lp							_ 8 ×
⇔ → 🗈 📧 🐰 💼 🗙 😭	🕅 🖪   😫	12 📅 🖄 💎 🍕	1					
4 Active Directory Users and Computer	Server Computer	Accounts 1 objects						
🗈 🧰 Saved Queries	Name	Туре	Description					
Image: Service	TO15M5300	T015M5300-Remote New Clients Image Select a Client computer n Generate client c Guername Example: John St	L'escription     Services Pro     Tools     Tools     Tools     Tools      ming format for neve cabron in the directory service w     will be created.     aming format     omputer names using:	v client computers, shere client computers v client computers to the client computer to the client	?×	? X .ocation stall trol the ars.		
		JOHNSMI12	nith's computer would be hame	1.	-			
Computer Acc	ount Generation			×		"Verify		
Using the follo computer and User's first nar User's last nar User's last nar User's logon n Ethernet MAC Incremental nu n characters of (example: %4F n digits of the Type the cust Eormat: Sample: Th UC	count cleaneration wing variables, you es for new installation ne: address of compute umber: if the indicated field irist = first 4 charactu- field padded with ze om naming format yo SIUsername%R en name generated f HNSMI12	can create a format for nns: ar's network adapter: ars of the user's first nar ros ou want to use: or John Smith (usernam	automalically generating custor %First %Last %Username %MAC %# %nField ae) %OnField e: JOHNSMI) is: 	A service		er		
<u>۲</u>								
🏄 Start 🛛 🚱 🥌 🛛 🏹 Active	e Directory User.	•						🛃 🔯 10.25

Fig. 13

Cambiamo i settaggi del Format in questo modo:

	Computer	Account Generation		X			
	Using the computer (	following variables, you can create a format for auto names for new installations:	matically generating custom				
User's first name: %First							
	User's last	t name:	%Last				
	User's log	on name:	%Username				
	Ethernet N	AC address of computer's network adapter:	%MAC				
	Increment	al number:	%#				
	n characters of the indicated field: %nField (example: %4First = first 4 characters of the user's first name)						
	n digits of the field padded with zeros %0nField						
	Type the custom naming format you want to use:						
	<u>F</u> ormat:	T01CLTN\$%#					
	Sample:	Sample: The name generated for John Smith (username: JOHNSMI) is:					
		T01CLTN12					
			OK Cancel				

Fig. 14

Nella sezione "Client Account Location" modifichiamo i seguente parametri:





()



Dobbiamo adesso rinominare il file E:\RemoteInstall\OSChooser\welcome.osc in .bak

E poi il file E:\RemoteInstall\OSChooser\multilng.osc nel file welcome.osc che deve essere uguale a questo testo:

<OSCML> <META KEY=ENTER HREF="LOGIN"> <META KEY=F3 ACTION="REBOOT"> <TITLE> Client Installation Wizard Multilanguage Welcome </TITLE> <FOOTER> Select a language and press [ENTER] to continue </FOOTER> <BODY left=5 right=75> <BR> < BR >Select a language from the list below. The language you select determines which language-specific operating system choices and tools are offered for installation. < BR ><FORM ACTION="WELCOME"> <SELECT NAME="LANGUAGE" SIZE=4> <OPTION VALUE="ENGLISH"> English <OPTION VALUE="ITALIAN"> Italian </SELECT> </FORM> <BR> </BODY> </OSCML>

A questo punto per automatizzare il più possibile l'installazione del Sistema Operativo dobbiamo modificare il file .osc aggiungendo questo parametro in ognuno di questi files:

## <META ACTION=AUTOENTER>

I files da modificare sono:

- E:\RemoteInstall\OSChooser\English\welcome.osc
- E:\RemoteInstall\OSChooser\English\login.osc
- E:\RemoteInstall\OSChooser\English\warning.osc
- E:\RemoteInstall\OSChooser\English\install.osc
- E:\RemoteInstall\OSChooser\Italian\welcome.osc
- E:\RemoteInstall\OSChooser\Italian\login.osc
- E:\RemoteInstall\OSChooser\Italian\warning.osc
- E:\RemoteInstall\OSChooser\Italian\install.osc

Nel file E:\RemoteInstall\OSChooser\English\login.osc dobbiamo modificare questo parametro (anche nel file E:\RemoteInstall\OSChooser\Italian\login.osc)

&nbsp&nbspUser name: <INPUT NAME="USERNAME" MAXLENGTH=255> &nbsp&nbspPassword: <INPUT NAME="\*PASSWORD" TYPE=PASSWORD MAXLENGTH=20><BR>

In questo modo

&nbsp&nbspUser name: <INPUT NAME="USERNAME" VALUE="RisAdmin" MAXLENGTH=255> &nbsp&nbspPassword: <INPUT NAME="\*PASSWORD" VALUE="Laboratory.1" TYPE=PASSWORD MAXLENGTH=20><BR>

Questo utente RisAdmin deve essere preventivamente incluso nei Domain Admins in Active Directory

Inoltre bisognerà creare un gruppo di utenti che avranno la delega per aggiungere/cancellare computer nella OU "Workstation Computer Accounts".

Modifichiamo ancora il file di installazione di Windows XP:

iI file E:\RemoteInstall\Setup\English\Images\WINXPSP2ENG\i386\templates\ristndrd.sif deve essere rinominato in .bak e sostituito dal file preparato precedentemente iI file E:\RemoteInstall\Setup\Italian\Images\WINXPSP2ITA\i386\templates\ristndrd.sif deve essere rinominato in .bak

il file E:\RemoteInstall\Setup\Italian\Images\WINXPSP2ITA\i386\templates\ristndrd.sif deve essere rinominato in .bak e sostituito dal file preparato precedentemente

Copiare anche nella directory i386 di tutti i sistemi operativi il file.inf e .sys relativi alla scheda di rete che è installata sul pc.



A livello della directory i386 creare una struttura di directory in questo modo:

\\$oem\$\\$1\drivers

\Audio \Nic \Chipset \Video

Dopo averla creata è possibile inserire tutti i drivers di tutto l'hardware su cui si vuole installare i sistemi operativi. Se c'è la necessità di aggiungere nuove periferiche (tipo modem) create una nuova cartella in \\$oem\$\\$1\Drivers\Modem.

Se si crea questa nuova cartella bisogna editare il file ristndrd.sif in questo modo:

andare nella sezione [Unattended]

OemPnpDriversPath = Drivers\Nic; Drivers\Audio; Drivers\Video; Drivers\Chipset; Drivers\Modem

A questo punto prima di fare partire l'installazione del sistema operativo dobbiamo prepare gli harddisk in due partizioni: C e D tutte e due entrambe formattate NTFS

Una volta preparato il disco di potrà far partire l'installazione da rete premendo F12 dal pc in questione.

Dopo aver instalato il sitema operativo è consigliabile disabilitare il Network Service Boot.