

Active Directory Authentication Integration

This document provides a detailed explanation of how to integrate Active Directory into the ipConfigure Installation of a Windows 2003 Server for network security. The Active Directory Integration and Installation guide utilizes screen shots of an actual ESM system and includes a numbering methodology to reference screen attributes and reference to registry and database changes. This guide assumes that Active Directory is already installed and being utilized in your network atmosphere. Although this was performed on a Windows 2003 Server, this document can also be used with Windows 2008 Server and Active Directory.

Step 1: Active Directory – Users and Computers – Create New Administrator Group



- 2. Click on New
- 3. Click on Group

Step 2: Active Directory – Users and Computers – Create New Administrator Group – New Object – Group

Group name:	
ESMAdmins	
Scoup name (nre-Windows 20	100):
ESMAdmins	
Group scope	Group type
C Domain local	Security
Global	C Distribution

1. Under Group Name, enter a name to be used for your ipConfigure Administrator's Group

- 2. Leave the Group Scope and Group type defaults
- Click OK

*Note: Do not use the characters ' or & in group names of for users as these will cause Java script errors within the ipConfigure Application.

Step 3: Active Directory – Users and Computers – Verify new Group



1. Verify that the new group has been created

Step 4: Active Directory – Users and Computers – Create New User Group

	ectory Users and Computer	Users 19 objects			
Saved	Queries	Name	Type	Description	
	altin monin Controllers mann Controllers regradeoutly/Principals Diglegate Control Pipel All Tadig Yew New Window from Here	Administrator Administrator Creat/Minis Dread/Winis Domain Computers Domain Administ Domain Computers Constant Constant Constant Motiogherson MiSHO Queue Alast	Security Group Security Group Security Group Security Group Security Group Security Group Security Group Security Group Security Group Security Group	Bub-in account for administering the Members of this group are permittee DMS Administrators Group DMS denies that are permitted to pr Designated administrators of the do all donana controllers in the donana All donana controllers in the donana All donana users Designated administrators of the er Members in this group can modify go Members in this group can work by	e co d to erfor main to t to t
	Refresh Export Ust Properties Help	Printer User Shared Folder Takaer, Dr wrweutz RAS and IAS Servers real Schema Admins	Security Group User User Security Group Security Group	ID an account for guine access to IDS Worker Process Group Built-in account for anonymous acce Built-in account for anonymous accesses Servers in this group can access ret Designated administrators of the sc	ess t ess t note frema

- 1. Right Click on Users
- 2. Click on New
- 3. Click on Group

*Note: You can add multiple User Groups to ipConfigure. Examples: ESMSecurity, ESMteachers, ESMNurses, Nurses

The ESM in front of Security and teachers is just to help identify what those groups were created for.

Step 6: Active Directory – New Group Verify

Active Directory Users and Computer	Users 21 objects		
E Saved Queries	Name	Type	Description
Duto	Admin	Security Group	
- Computers	Administrator	User	Built-in account for administering the co
Domain Controllers	Cert Publishers	Security Group	Members of this group are permitted to
🗄 🦲 ForeignSecurityPrincipals	ConsAdmins .	Security Group	DNS Administrators Group
Lisers	DrisUpdateProvy	Security Group	DNS clients who are permitted to perfor
10/22 20	Domain Admins	Security Group	Designated administrators of the domain
	Domain Computers	Security Group	All workstations and servers joined to t
	Contain Controllers	Security Group	All domain controllers in the domain
	Comain Guests	Security Group	All domain guests
	Domain Users	Security Group	All domain users
	Enterprise Admins	Security Group	Designated administrators of the enter
	CSMAdmins .	Security Group	
	CESMUSIERS .	Security Group	
	Group Policy Creator Owners	Security Group	Members in this group can modify group
	Suest.	User	Built-in account for guest access to the
	TIIS_WPG	Security Group	IIS Worker Process Group
	2 JUSR_DPC-VMW011	User	Bult-in account for anonymous access t
	THAM_IPC-WW011	User	Built-in account for anonymous access t
	RAS and IAS Servers	Security Group	Servers in this group can access remote
	Schema Admins	Security Group	Designated administrators of the schema
	2 Strick	User	

- 1. Verify that the new Users Group has been Completed
- 2. Open up the new Administrators Group

*Note: For this training purpose, the ESMAdmins was the group created.

Step 5: Active Directory – Users and Computers – Create New Administrator Group – New Object – Group

roup name: ESMUsers	
iroup name (pre- <u>W</u> indows 20	000):
ESMUsers	
Group scope	Group type
C Domain local	
Global	C Distribution

1. Under Group Name, enter a name to be used for your ipConfigure Administrators Group

- 2. Leave the Group Scope and Group type defaults
- 3. Click OK

*Note: Do not use the characters ' or & in group names or for users as these will cause Java script errors within the ipConfigure Application.

Step 7: Active Directory – Adding Users to the Administrators Group

aged By
ESMAdmins
Group type
• Security
C Distribution
705X
<u></u>
-
Cancel Apply

1. Click on the Members Tab

Step 8: Active Directory – Adding Users to the Administrators Group

MAdmins Propert	ies	?
General Members	Member Of Managed By	
Members:		
Name	Active Directory Folder	
Add 1	Bemove	
	<u>Tieniove</u>	
		1
	LIK Epinool	Annu

1. Click Add...

Step 9: Active Directory – Adding Users to the Administrators Group

sers or Uther objects	Object Typ
om this location:	
ocTest.com	Location
nter the object names to select (<u>examples</u>):	
trick Strickland (strick.strickland@ipcTest.con	비 <u>Check Na</u>

- 1. Type in the users name that you want to add to the
- Administrators Group.
- 2. Click on Check Name
- 3. Click OK

*Note: You can add multiple users at the same time.

Step 10: Active Directory – Adding Users to the Administrators Group

💈 Strick Strickland	ipcTest.com/Users	

- 1. Verify that the User is added.
- 2. Click OK

*Note: For multiple users, click Add... and repeat

Step 11: Active Directory – Adding Users to the Users Group

Active Directory Users and Compute	Users 21 objects		
B Saved Queries	Name	Type	Description
Ci Dubo	Admin	Security Group	
Concellers	1 Administrator	User	Built-in account for administering the co
(a) Domain Controllers	Cert Publishers	Security Group	Members of this group are permitted to
E G ForeignSecurityPrincipals	CrisAdmins .	Security Group	DNS Administrators Group
Lows Down	DrusupdatePrany	Security Group	DNS clients who are permitted to perfor
	Domain Admins	Security Group	Designated administrators of the domain
	Domain Computers	Security Group	All workstations and servers joined to t
	Domain Controllers	Security Group	All domain controllers in the domain
	Domain Guests	Security Group	All domain guests
	Domain Users	Security Group	All domain users
	Enterprise Admins	Security Group	Designated administrators of the enter
	CESMAdmins .	Security Group	
	CESMUSIONS	Security Group	
	Group Policy Creator Owners	Security Group	Members in this group can modify group
	Guest	User	Built in account for guest access to the
	STIS_WPG	Security Group	IIS Worker Process Group
	2 JUSP_BPC-VMW011	User	Built-in account for anonymous access t
	TWAM_IPC-VMW011	User	Built-in account for anonymous access t
	RAS and IAS Servers	Security Group	Servers in this group can access remote
	Scheme Admins	Security Group	Designated administrators of the schema
	C suck	User	

1. Open up the new Users Group

*Note: For this training purpose, ESMUsers was the group created.

Step 13: Active Directory – Adding Users to the Users Group

MUsers Propertie	25	?
aeneral Members	Member Of Managed By	
Members:		
Name	Active Directory Folder	
Add	<u>H</u> emove	
Add	Bemove	

1. Click on Add...

Step 12: Active Directory – Adding Users to the Users Group

MUsers Properties		<u>?</u> ×
General Members Member Of N	fanaged By	
ESMUsers		
Group name (pre- <u>W</u> indows 2000):	ESMUsers	
Description: ipConfigure Use	rs Group	
E- <u>m</u> ail:		
Group scope	Group type	
C Domain local	Security	
Global	C Distribution	
C <u>⊔</u> niversal		
Notes:		
		-
		-
1		
	JK Cancel	Apply

1. Click on the Members Tab

Step 14: Active Directory – Adding Users to the Users Group

	<u> </u>
Select this object type:	
Users or Other objects	Qbject Types
From this location:	<u></u>
ipcTest.com	Locations
Enter the object names to select (<u>examples</u>):	
Enter the object names to select (<u>examples</u>): Chris Darville (Chris Darville@ipcTest.com)	
Enter the object names to select (<u>examples</u>): Chris Darville (Chris Darville@ipcTest.com)	

1. Type in the users name that you want to add to the users group.

2. Click on Check Names

3. Click OK

*Note: You can add multiple users at the same time.

Step 15: Adding Directory – Adding Users to the Users Group

ESMUsers Properties		? ×
General Members	Member Of Managed By	
Members:		
 Name	Active Directory Folder	
Chris Darville	ipcTest.com/Users	
A <u>d</u> d	<u>R</u> emove	
	OK Cancel	Apply

- 1. Verify that the User is added.
- 2. Click OK

*Note: For multiple users, go back to the previous step.

Step 17: ESM 5.x – License Agreement

🛱 ipConfigure ESM 5.4 Setup 🛛 🗙
End-User License Agreement Please read the following license agreement carefully
ipConfigure Inc. End User License Agreement
C I agree to the terms in the License Agreement
C I $\underline{d}o$ not agree to the terms in the License Agreement
Advanced Installer
< <u>B</u> ack <u>N</u> ext > Cancel

- 1. Select " I accept the terms in the License Agreement"
- 2. Click Next >

Step 16: ESM 5.x Setup Wizard



1. Click Next >

🙀 ipConfigure ESM 5.4 Setup		×
System Components Select the components to be installed		2
Full Install Management Server		
Advanced Installer	< Back	Cancel

1. Click Next >

*Note: This training document is demonstrating how to install a server to be both a Management Server and Archive Server. If you plan on having multiple servers and do not want to use this main server as an archive server, then right click on the Archive Server and select do not install.

Step 18: ESM 5.x – System Components Installation

Step 19: ESM 5.x - SQL Database Connection

🙀 ipConfigure ESM 5.	4 Setup 🗙
SQL Server	
Configure SQL Con	nection
Database Server:	(local)
Port:	1433
	☑ Trusted Connection.
SQL Username:	
SQL Password:	
Advanced Installer	
	< <u>Back</u> <u>N</u> ext > Cancel

- 1. Enter Server name or IP address
- 2. Enter Port number
- 3. Check the 'Trusted Connection' box if your connection is trusted

4. If your connection is not trusted, unclick 'Trusted Connection' box and enter SQL Username and SQL Password.

*Note-Only need to fill out SQL boxes if connection is not trusted

5. Click: Next >

Step 21: ESM 5.x – System Properties

👹 ipConfigure ESM 5.4	Setup	×
ESM System Proper Values required to c	r ties onfigure ipConfigure ESM 5.4	
System Title Text:	ipConfigure ESM 5.4	_
Management Server:	192.168.xxx.xx	
Archive Server:	192.168.xxx.xx	
Advanced Installer		
	< Back Next > Car	ncel

- 1. Enter Management Server IP Address.
- 2. Enter Archive Server IP

*Note: The IP Address is the server you are installing ipConfigure on.

Step 20: ESM 5.x – Active Directory Integration

🛃 ipConfigure ESM 5.4 Setup	×
Authentication Values required to configure authentication for ipConfigure ESM 5.4	
Internal Authentication Active Directory	
Active Directory Settings Fully Qualified Domain Name: ipctest.com Active Directory Group for ESM System Admins: IPCTEST\ESMAdmins The Active Directory group needs to exist and the initial User ID that will be used to administer the system needs to be a member of this group. Advanced Installer	
Advanced Installer < Back Cancel	

- 1. Choose 'Active Directory'
- 2. Enter the Fully Qualified Domain Name (Pre-Windows 200 Domain Name)
- 3. Enter the Active Directory Group for ESM System Admins (Ex. NetBios\Group Name Ipctest\ESMAdmins
- To get this information, it is on the Users Properties Account Tab

Step 22: ESM 5.x – Select Folder

🚏 ipConfigure ESM 5.4 Setup	×
Select Folder This is the folder where ipConfigure ESM 5.4 will be installed.	2
Select the path where ipConfigure ESM 5.4 will store the User Interface files Archive Video. Typically should be on the largest attached volume.	and store
To install in this folder, click "Next". To install to a different folder, enter it be "Browse".	ow or click
Eolder:	
C:\ipConfigure\	Browse
Advanced Installer	
< Back Next >	Cancel

- 1. Browse to the hard drive that ipConfigure will be installed to.
- 2. Click Next >

Step 23: ESM 5.x – Ready to Install

🚏 ipConfigure ESM 5.4 Setup	×
Ready to Install The Setup Wizard is ready to begin the ipConfigure ESM 5.4 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.	
Advanced Installer	

1. Click Install

Step 24: ESM 5.x - Status

M 5.0 Setup	Constanting one			×
istalling ESM 5.0				\mathfrak{S}
Please wait while the Set minutes.	up Wizard installs	ESM 5.0. Thi	s may take sever	al and a second s
Status:				
ced Installer				
		< <u>B</u> açk,	Next >	Cancel
	1 5.0 Setup stalling ESM 5.0 Please wait while the Setu minutes. Status:	1 5.0 Setup stalling ESM 5.0 Please wait while the Setup Wizard installs minutes. Status: ced Installer	stalling ESM 5.0 Please wait while the Setup Wizard installs ESM 5.0. Thi minutes. Status: ced Installer	stalling ESM 5.0 Please wait while the Setup Wizard installs ESM 5.0. This may take severa minutes. Status: ced Installer

An informational screen that will let you see the progress of the installation.

Step 25: ESM 5.x – Installation Finished



Step 26: Active Directory – User Properties

Member Ur	Dial-in	Envir	ronment	Sessions
Remote control	Terr	ninal Service	es Profile	COM+
General Address	Account	Profile	Telephones	Organizatio
User logon name:				
strick.strickland		@ipcT	est.com	-
User logon name (pre	e- <u>W</u> indows 20)00):		
IPCTEST\		strick.s	trickland	
1				
the first second s	1	T .		
Logon Hours	Log On	<u>Io</u>		
Logon Hours Account is locked Account options: User must char User cannot ch Password neve	Log On d out nge password nange password er expires	I at next logo	on	
Logon Hours Account is locker Account options:	Log On d out nge password nange passwor er expires d using revers	I at next logo ord	on	
Logon Hours Account is locker Account gptions: User must char User cannot ch Password neve Store password Account expires	Log On d out nge password nange passwo r expires d using revers	I at next logo ord ible encrypt	on	<u>*</u>
Logon Hours Account is locker Account options: User must char User cannot ch Password neve Store password Account expires Never Discussion	Log On diout nge password ange password ange password ar expires di using revers	I at next logo ord ible encrypt	on	×
Logon Hours Account options: User must char User cannot ch Password neve Store password Account expires Never End of:	Log On d out nge password ange password er expires d using revers Saturday	I at next logo ord ible encrypti	on ion 24, 2010	*

Open up the properties in Active Directory for a User that was assigned to the new ipConfigure Administrators Group

1. Select the Account Tab

To get the correct login for ipConfigure, the user will be using the User Logon Name and the domain, it's the Windows 2003 or 2008 credentials.

Strick.strickland@ipctest.com

*Note: It has to be the full address to login or the login will fail.

Step 27: ESM – Administrator Login



- 1. Enter the User ID and password
- 2. Click Log In

Step 28: ESM - Login Successful



If you get this screen after logging in with your credentials, then the installation was a success.

Step 29: ESM - Link to Server



Step 30: ESM – Link to Server

Please enter the IP address for the remote server. 192.168.100.240

OK Cancel

- 1. Right Click on Placeholder Building
- 2. Click on Link to Server

1. Use the same IP address of the server that was just installed.

Step 31: ESM – Add Server Volume

Reporting	
Defaults	
Devices	
🖃 😚 Global Devic	es
E 😵 Placehol	der Campus
🗖 🥎 Plac	eholder Building
<u> </u>	Placeholder Building Remote
L	Incation Server Archive
	Add Server Volume
	Rename
	1 1 100 000 000 10 10 200
	Reset to Default
	Reset to Default Properties

- 1. Right Click on Location Server Archive
- 2. Click Add Server Volume

Step 32: ESM – Add Server Volume

Cilinco	pfigure_Archive
01,000	
OK	Cancel

 When adding the location that the Archive Files will be located, please include the full path to the location.
 Click OK

*Note: You can have more than one Server Volume on the same server, if you have multiple hard drives that you want to store information to, and then add another Server Volume with the correct drive path.

The location on this screen shot is an example, your archive server may be on a different hard drive.

Step 33: ESM – Active Directory – Adding Group

Defaults Devices Groups Groups Add Open	Reporting		
Devices Groups	Defaults		
Groups	Devices		
	Groups		
Add Ontaria	Groups		1
ipctes Add Group	L ipctes	Add Group	

*Note: A user will not be able to log into the site until you add the Group(s) that were added in Active Directory.

You can have numerous User Groups within ipConfigure.

Step 34: ESM – Active Directory – Adding Group

octest\F	SMUsers
ок	Cancel

For this documentation, the ESMUsers group was added to Active Directory.

*Note: Leave off the suffix for the domain portion.

You can name the groups whatever you want, then add the people into those groups.

Step 35: ESM – Adding Rights to User Groups



After the User Group is added, you can assign them the rights that you want them to have by placing a checkmark in the boxes.

*Note: A box without a checkmark will not be accessible. This is also true for the users in the Administrative Group that was created.

tep 36: ESM – User Login



After the groups are setup, have a user other than the administrator login to make sure that the Active Directory and ipConfigure Integration is successful.