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Configuring Microsoft Active Directory for Cisco WAAS Encrypted MAPI Acceleration



Abstract

The most current versions of Exchange-based email solutions from Microsoft (MAPI) contain data encryption at the Remote Procedure Call (RPC) level as a default configuration. Customers that wish to enable Cisco WAAS acceleration for these encrypted email services need to grant Cisco WAAS the permission to participate in this communication. This document will guide users through the configuration of Microsoft Active Directory (AD) to allow Cisco WAAS to accelerate encrypted RPC and MAPI traffic.

Figure 1. Cisco WAAS Encrypted Exchange Architecture



Considerations

Active Directory

This document assumes that the user has familiarity with Windows Active Directory, and has the appropriate Active Directory domain rights to make these changes.

User or Workstation Account

Granting Cisco WAAS permission to accelerate Exchange encrypted email can be done via a User account, or a Workstation (Computer) account.

Method	Benefits	Considerations
User Account	 One User account can be used for all Core WAAS devices. One or multiple User accounts can be used for multiple Exchange email domains. In test environments, the Administrator account can be used. Administrator already has the needed rights. WAAS devices do not need to perform a Domain Join when only User Accounts are used. 	 User account should have a password that does not expire. If password is entered or changed incorrectly, the account could become locked out due to incorrect login attempts.
Workstation account	 Each Core WAAS device will use its own Workstation account. Account is created and password is changed and maintained automatically by WAAS and Active Directory. User and Workstation accounts can be used at the same time for multiple Exchange email domains. 	 All Core WAAS devices must be joined to Active Directory. Only one Workstation account can be used per WAAS device.

Table 1. WAAS individual User account versus WAAS Workstation accounts

It is highly recommended to grant the required WAAS permissions to an Active Directory Group, and then add Workstation or User accounts as required above to that group. This guide will follow this Group-based process.

WAAS Configuration

Once the steps outlined in this document are completed, the next step is to configure WAAS to accelerate encrypted Exchange email (RPC and MAPI). Directions and steps for this configuration are located in the <u>Cisco</u> <u>WAAS 5.0.1 Configuration Guide</u>, located on Cisco.com. These steps are beyond the scope of this document

Configuration Steps

To grant Cisco WAAS permission to accelerate Exchange encrypted email sessions, do the following:

Note: This group is for accounts that WAAS will use to optimize Exchange traffic. Normal users and computers should not be added to this group.

- Step 1. Using an account with "Domain Administrator" privileges, launch the Active Directory Users and Computers application.
- Step 2. A new group is needed. Right-click the Organizational Unit (OU) where you wish to place this group, and

choose new > Group.				
Active Directory Users and Computers				_ 🗆 ×
File Action View Help				
🗢 🔿 📶 🔏 📋 🗙 📴 🤒	è 🛛 🖬 🗏 🐮 🝸 .	2 ⁽ 2		
Active Directory Users and Computers [ADC-N	MAIL.adb Name	Type	Description	▲
王 🧰 Saved Queries	Administrator	User	Built-in account for admini	
🖃 🏭 adbu-exch.local	& Allowed RODC Passw	ord Security Group	. Members in this group can	
🗉 🗎 Builtin	& Cert Publishers	Security Group	. Members of this group are	
Computers	& Denied RODC Passwo	ord R Security Group	. Members in this group can	
🛨 🧾 Domain Controllers	📕 DiscoverySearchMail	oox { User		
ForeignSecurityPrincipals	& DnsAdmins	Security Group	. DNS Administrators Group	
Managed Service Accounts	& DnsUpdateProxy	Security Group	. DNS clients who are permi	
E Microsoft Exchange Security Groups	& Domain Admins	Security Group	. Designated administrators	
Delegate Control	& Domain Computers	Security Group	. All workstations and serve	
Find	& Domain Controllers	Security Group	. All domain controllers in th	
		Security Group	. All domain guests	
New Comp	puter	Security Group	. All domain users	
All Tasks Conta	act	Security Group	. Designated administrators	
View	P I-only	Do Security Group	. Members of this group are	
Inet	DrgPerson 4c1f	4d8b User	5 1	
Refresh msEx	chDynamicDistributionList eator	Own Security Group	. Members in this group can	
Export List msIm	haging-PSPs	User	Built-in account for quest	
Properties	Q Queue Alias	Security Group	. Servers in this group can	
Printe	er ain Co	ontro Security Group	. Members of this group are	
Help User		Security Group	. Designated administrators	
Share	ed Folder 1f05a	927 User		
	SystemMailbox{e0dc	1c29 User		
	K Test1 Tester	User		
	Test2 Tester	User		
	L Toot? Tootor	User		•
Create a new object				

X

Step 3. Name the new group, and ensure the group is a Universal, Security Group.

New Object - Group	×
Create in: adbu-exch.local/Users	
Group name:	
WAAS-AD-Readers	
Group name (pre-Windows 2000):	
WAAS-AD-Readers	
Group scope C Domain local C Global C Universal Group type Security C Distribution	
ОК Са	ncel

Step 4. After the group is created, return to the **Active Directory Users and Computers** window. Select **View** >



Step 5. Right-click the root of the domain, and choose Properties.



Step 6. Click the Security tab, and then press the Add button under Group or User Names.

General Managed By Object Security Attrib	ute Editor		
Group or user names:			
& Everyone			
& SELF			
Authenticated Users			
Representation Management (ADBU-EXCH\Or	ganization N	lanage	•
Ac	Ha l	Remove	. 1
		Homove	<u> </u>
Permissions for Everyone	Allow	Deny	
Full control			4
Read			
Write			
Create all child objects	님	님	
Delete all child objects	<u> </u>		•
For special permissions or advanced settings, clic	k j	Advanced	1
Advanced.			
Leam about access control and permissions			
OK Cancel	Apply	Ηe	ip.

Step 7. Enter the name of the group that was entered in **Step 3**, and press **OK**.

Select Users, Computers, Service Accounts, or Groups	? X
Select this object type:	
Users, Groups, or Built-in security principals	Object Types
From this location:	
adbu-exch.local	Locations
Enter the object names to select (<u>examples</u>):	
WAAS-AD-Readers	Check Names
Advanced OK	Cancel

Step 8. The group entered in **Step 3** should now show in the **Group or User Names** list. Click on the group to select it. Then, scroll down in the **Permissions for *Group Name*** pane, until the permissions **Replicating Directory Changes** and **Replicating Directory Changes All** are visible. Check **Allow** to allow both of these permissions, and press **OK**.

lbu-exch.local Properties
General Managed By Object Security Attribute Editor
Group or user names:
Administrators (ADBU-EXCH\Administrators) Access (ADBU-EXCH\Pre-Wind Incoming Forest Trust Builders (ADBU-EXCH\Incoming Forest Tr ENTERPRISE DOMAIN CONTROLLERS WAAS-AD-Readers (ADBU-EXCH\WAAS-AD-Readers)
Add Remove Permissions for WAAS-AD-Readers Allow Deny
Read only replication secret synchronization
Rearing Directory Changes Image: Comparison of the com
Replicating Directory Changes In Filtered Set Image: Construction of the set of the se
OK Cancel Apply Help

Step 9. User or Workstation (Computer) accounts now need to be added to this group for WAAS to use to optimize Exchange encrypted email. To add an account, right click on the account you wish to add, and select the **Member Of** tab. Click the add button, and pick the group used above in **Step 3**. Press **OK**.

Step 10. After adding the User or Workstation (Computer) accounts to the group, the Active Directory configuration is now complete. All remaining configuration for Encrypted Exchange acceleration is performed on the WAAS Central Manager and/or devices themselves.

For More Information

For Cisco WAAS Exchange encrypted email configuration steps, see the <u>Cisco WAAS 5.0.1 Configuration Guide</u> on Cisco.com.

For more information Cisco WAAS, see http://www.cisco.com/go/waas



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