

Troubleshoot "ADSync RunDiff" Error in the AD Connector Logs

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Introduction

This document describes how to troubleshoot the "ADSync RunDiff" error in the Active Directory (AD) Connector logs.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on Cisco Umbrella.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Problem

You see errors similar to these in the AD Connector logs:

```
ADSync RunDiff error: System.Runtime.InteropServices.COMException (0x80070005): Access is denied.\x0D\x
```

There are two scenarios where this issue can happen:

1. .NET 3.5.1 SP1 is not installed.
2. The user is missing replicate directory changes and read permissions. One symptom of this is if the OpenDNS_Connector user account can read the AD tree via LDIFDE, but the connector still returns "Access is denied."

Solution

To add the necessary **Replicate Directory Changes** and **Read** permissions, complete these steps:

1. Open the Active Directory Users and Computers snap-in.
2. On the **View** menu, select **Advanced Features**.
3. Right-click the domain object, and then select **Properties**.
4. On the **Security** tab, if the desired user account (**OpenDNS_Connector** or **Cisco_connector**) is not listed, select **Add**. If the desired user account is listed, continue to step 7.
5. In the **Select Users, Computers, or Groups** dialog, select the desired user account, and then select **Add**.
6. Select **OK** to return to the **Properties** dialog.
7. Select the desired user account.
8. Select the **Replicating Directory Changes** and **Read** check boxes from the list.
9. Select **Apply >OK**.
10. Close the snap-in.

General Managed By Object Security Attribute Editor

Group or user names:

- CREATOR OWNER
- SELF
- Authenticated Users
- SYSTEM
- OpenDNS_Connector ([REDACTED])
- Enterprise Read-only Domain Controllers ([REDACTED])

Add... Remove

Permissions for OpenDNS_Connector

	Allow	Deny
Replicating Directory Changes	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Replicating Directory Changes All	<input type="checkbox"/>	<input type="checkbox"/>
Replicating Directory Changes In Filtered Set	<input type="checkbox"/>	<input type="checkbox"/>
Replication synchronization	<input type="checkbox"/>	<input type="checkbox"/>
Run Protect Admin Groups Task	<input type="checkbox"/>	<input type="checkbox"/>

For special permissions or advanced settings, click Advanced.

Advanced

OK Cancel Apply Help

Advanced Security Settings for [redacted]

Owner: Administrators ([redacted] Administrators) [Change](#)

Permissions Auditing Effective Access

For additional information, double-click a permission entry. To modify a permission entry, select the entry and click Edit (if available).

Permission entries:

Type	Principal	Access	Inherited from	Applies to
Allow	Pre-Windows 2000 Compatib...	Special	None	Descendant InetOrgPerson o...
Allow	Pre-Windows 2000 Compatib...	Special	None	Descendant Group objects
Allow	Pre-Windows 2000 Compatib...	Special	None	Descendant User objects
Allow	SELF	Special	None	All descendant objects
Allow	Cloneable Domain Controller...	Allow a DC to create a ...	None	This object only
Allow	OpenDNS_Connector (Open...	Replicating Directory ...	None	This object only
Allow	Enterprise Read-only Domain...	Replicating Directory ...	None	This object only
Allow	Domain Controllers ([redacted])	Replicating Directory ...	None	This object only
Allow	Key Admins ([redacted])		None	This object and all descandan...
Allow	Enterprise Key Admins ([redacted])		None	This object and all descandan...
Allow	Administrators ([redacted])	Replicating Directory ...	None	This object only

Add

Remove

Edit

Restore defaults

OK

Cancel

Apply


Permission Entry for [REDACTED]

Principal: OpenDNS_Connector (OpenDNS_Connector@[REDACTED]) [Select a principal](#)

Type: Allow

Applies to: This object only

Permissions:

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Full control | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> List contents | <input type="checkbox"/> Create MS |
| <input type="checkbox"/> Read all properties | <input type="checkbox"/> Delete MS |
| <input type="checkbox"/> Write all properties | <input type="checkbox"/> Create ms |
| <input type="checkbox"/> Delete | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> Delete subtree | <input type="checkbox"/> Create ms |
| <input checked="" type="checkbox"/> Read permissions | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> Modify permissions | <input type="checkbox"/> Create ms |
| <input type="checkbox"/> Modify owner | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> All validated writes | <input type="checkbox"/> Create ms |
| <input type="checkbox"/> All extended rights | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> Create all child objects | <input type="checkbox"/> Create ms |
| <input type="checkbox"/> Delete all child objects | <input type="checkbox"/> Delete ms |
| <input type="checkbox"/> Create Computer objects | <input type="checkbox"/> Create nis |
| <input type="checkbox"/> Delete Computer objects | <input type="checkbox"/> Delete nis |
| <input type="checkbox"/> Create Contact objects | <input type="checkbox"/> Create nis |
- 

If the issue is related to .NET 3.5.1 SP1 not installed, [download it from the Microsoft website.](#)