Permissions Guide
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1. Overview

This document is the one-stop solution to all your permissions-related questions and lists all the necessary privileges and permissions for reporting, monitoring, and auditing your Exchange Server, Exchange Online tenant, and Skype for Business Server.

2. List of permissions required to perform specific tasks in Exchange Reporter Plus

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Required privileges</th>
</tr>
</thead>
</table>
| Essential Data Gathering - This is a mandatory task for all tasks | LDAP Read privilege over all GC Objects
  |                                                                           | Invoke-Command Powershell privilege                                                  |
|                                             | WMI Query privilege                                                                  |
|                                             | Database files Read privilege                                                        |
| Exchange Server Distribution List Membership| LDAP Read privilege                                                                  |
|                                             | View-Only Recipients RBAC                                                            |
| Exchange Server Mailbox Account Properties  | LDAP Read privilege                                                                  |
|                                             | View-Only Recipients RBAC                                                            |
| Exchange Server Public Folder Properties    | LDAP Read privilege                                                                  |
|                                             | View-Only Recipients RBAC                                                            |
| Exchange Server Traffic Logs               | LDAP Read privilege                                                                  |
|                                             | Message Tracking log folder access                                                   |
| Exchange Server OWA Logs Failed OWA Logs   | LDAP Read privilege                                                                  |
|                                             | IIS logs folder access                                                               |
|                                             | View-Only Recipients RBAC for Active Sync Reports                                   |
| Exchange Server Mailbox Permission         | LDAP Read privilege                                                                  |
|                                             | View-Only Recipients RBAC                                                            |
| Exchange Server Distribution Group Permission| LDAP Read privilege                                                                 |
|                                             | View-Only Recipients RBAC                                                            |
3. Configuring domain permissions

The first step in configuring domain permissions is to create a new user account called erpServiceAcc under the Domain Users group, and add this user to the Event Log Readers group. Then, provide read permissions for the Exchange Server container and Domain Partitions container as explained below:

A. Follow the steps given below to provide read permissions to the Exchange Server container:

1. Open the **ldp.exe** file that acts as a lightweight directory access protocol client and connect to the primary domain controller.
2. Apply a bind connection using administrative credentials to give permission to the \texttt{erpServiceAcc} account. (you may select a different user name as well).

3. Open the configuration \texttt{Tree View}.

4. Right-click on \texttt{CN=Microsoft Exchange,CN=Services,CN=Configuration,DC=exrp,DC=local} > \texttt{Advanced} > \texttt{Security Descriptor}. 

\textbf{www.exchangereporterplus.com}
B. Follow the steps given below to provide read permissions to the Domain Partition container:

1. Open the ldp.exe file that acts as a lightweight directory access protocol client and connect to the primary domain controller.

2. Apply a bind connection using administrative credentials to give permission to the erpServiceAcc account.

5. In the bottom-left corner, select the **Access Control Entries (ACE)** option and add a **Trustee**.

6. Add erpServiceAcc as a **Trustee**.
3. Open the configuration Tree View.

4. Right-click on **CN=Microsoft Exchange, CN=Services, CN=Configuration, DC=exrp, DC=local** > **Advanced > Security Descriptor**.

5. In the bottom-left corner, select the **Access Control Entries (ACE)** option and add a **Trustee**.

6. Add **erpServiceAcc** as a Trustee.
4. Configuring folder read permission for message tracking, IIS logs, and database files

A. Configuring the traffic log path

1. Log in to the Exchange Server (mailbox role). Select **Computer Management**.

2. Navigate to **System Tools > Shared Folders > Shares**.

3. Create a new share, and choose the folder path as **C:\Program Files\Microsoft\Exchange Server\V15\TransportRoles\Logs**.

![Create A Shared Folder Wizard](image)

4. Provide the **Share name** as **T$** and click **Next**.

5. You can provide read-only access or full permissions, or you can customize user permissions as per your requirement.

![Create A Shared Folder Wizard](image)
6. Navigate to \Program Files\Microsoft\Exchange Server\V15\TransportRoles\Logs.

7. Right-click the MessageTracking folder and select Properties.

8. Click Edit, add erpServiceAcc, and delegate read privileges to the user.

Configuring the traffic log path in Exchange Reporter Plus:

1. Log in to Exchange Reporter Plus as an administrator.


3. Go to Traffic Log Path and click Edit Path.

4. Update the path to T:\MessageTracking.

5. Click the save icon.
B. Configuring the IIS log path

1. Log in to the Client Access Server. Select the Computer Management option.

2. Navigate to System Tools > Shared Folders > Shares.

3. Create a new share, and choose the folder path as C:\inetpub\logs.

4. Provide the Share name as W$ and click Next.

5. Navigate to C:\inetpub\logs. Right-click the W3SVC1 folder and go to Properties.

6. Click Edit, add erpServiceAcc, and delegate read privileges to the user.

Configuring the OWA (IIS) log path in Exchange Reporter Plus:

1. Log in to Exchange Reporter Plus as an administrator.


3. Go to OWA (IIS) Log path and click Edit Path.

4. Update the path to W:\LogFiles\W3SVC1. Also, update Failed Request (IIS) Log Path to W:\FailedReqLogFiles\W3SVC1.

5. Click the save icon.
C. Configuring the information store path

1. Log in to the Client Access Server. Select the **Computer Management** option.

2. Navigate to **System Tools > Shared Folders > Shares**.

3. Create a new share and choose the folder path as `C:\Program Files\Microsoft\Exchange Server\V15\Mailbox\Mailbox database Name`.

4. Provide the **Share name** as M$ and click **Next**.

5. You can customize the permissions to be given to the user or simply delegate read-only permissions for all users.

6. Navigate to `C:\Program Files\Microsoft\Exchange Server\V15`. Right-click the Mailbox folder and go to Properties.

7. Click **Edit**, add **erpServiceAcc**, and delegate read privileges to the user.
Configuring the database (information store) path in Exchange Reporter Plus:

1. Log in to Exchange Reporter Plus as an administrator.


3. Go to Database path and click the edit icon.

4. Update the database path for all databases in the selected server in the format M:\<DB Name>\<DB Name>.edb.

5. Click Update.

6. Repeat these steps for all mailbox servers.
5. Configuring permissions required for content reports

The data required for content reports is collected from Exchange Web Services. To bind and retrieve information from any mailbox, the user service account used must have full access permissions to that mailbox.

To give full access permissions to the user account, navigate to Exchange Admin Center > Mailboxes > <Name of the mailbox> > mailbox delegation > Full Access. Add the erpServiceAcc user here.

Execute the command below in Exchange PowerShell to equip the user with calendar folder permissions required for the content reports.

```
add-mailboxfolderpermission -identity <roommailboxname>:\calendar -user erpserviceacc -accessrights reviewer
```
6. Permissions required for backup restoration and archiving

The user or service account created for this purpose (here, the `erpServiceAcc` user) must have **full access** permissions to the Exchange Reporter Plus installation folder. (By default, the product is installed under `C:\ManageEngine\Exchange Reporter Plus`.)

7. Configuring permissions required for auditing and monitoring

The user or service account configured (`erpServiceAcc`) should be a member of the **Domain Admins** group for **auditing**. Otherwise, the user needs to enable the auditing function manually. Refer to the links given below for more detailed information on how to configure Exchange Server and domain controllers for auditing.

**Configuring Exchange Server auditing:**


**Configuring default domain controller auditing:**


**Configuring object level auditing:**

In Exchange Reporter Plus, Exchange Server monitoring is done using remote PowerShell sessions by executing Exchange health commandlets, so it’s vital that the created user or service account (erpServiceAcc) has permission to execute these commandlets in PowerShell. Follow the steps given below to delegate the necessary role for advanced auditing and monitoring:

1. Create a new role group called ERP in the Exchange Admin Center.

2. Assign the following roles to this ERP role group:
   - Monitoring
   - View-Only Audit Logs
   - View-Only Configuration
   - View-Only Recipients

3. Add `erpServiceAcc` as a member of the ERP role group.

**8. Permissions for Powershell command execution**

Exchange Reporter Plus uses the remote invoke-command script in PowerShell to get reports on various services under Exchange. This remote invoke-command script requires permissions for the destination server (remote machine).

For this, you need to add the erpServiceAcc user as a member of the built-in Administrators local group or the Remote Management Users security group (this group is created by default starting from PowerShell 4.0). This group also has access to WMI resources via management protocols (e.g., WS-Management).

A user can be added to the Administrator or Remote Management Users group using the Computer Management option under the Exchange Admin center:
A. Security Descriptor of a PowerShell session

Another easy way to give a user access to remote PowerShell without including the user account to the local security group is by modifying the security descriptor of the current Windows PowerShell session on the local computer. This method will allow you to quickly grant temporary (until the next restart) remote connection rights to a user via PowerShell.

The following command displays the list of current permissions a service account has:

```
Set-PSSessionConfiguration -Name Microsoft.PowerShell-showSecurityDescriptorUI
```

In this dialog window, add a user or group and grant them Execute (Invoke) permissions.

After you save the changes, the system will prompt for confirmation and restart of WinRM service.

Tip: If you need to provide such permissions on multiple computers, you can use Group Policy. To do this, assign the GPO to the computers you need, and add the new Remote Management Users group to the Computer Configuration > Windows Settings > Security Settings > Restricted Groups policy. Users or groups that need to be granted access to WinRM can be added to the policy.
9. Permissions required for storage reports (WMI access permissions)

It's necessary for the user or service account created to have Domain admin permissions in order to have access to WMI. Alternatively, you can also follow the steps given below to equip the users with just enough permissions for WMI access if they don't have the domain admin rights.

1. Create a non-admin domain user in Active Directory.
   a. Navigate to Active Directory Users and Computers.
   b. Click Users > New User.
   c. Enter the mandatory user details. Type the first name as erpServiceAcc.

2. Add the user to the following groups: Event Log Readers, Performance Log Users, and Distributed COM Users.

3. Create a new Group Policy in the Group Policy Management console.

4. Assign rights to the created users.
   a. Right-click the created Group Policy and click Edit.
   c. Right-click the specific right and then click Properties. The rights to be granted are as follows:
      - Act as part of the operating system
      - Log on as a batch job
      - Log on as a service
      - Replace a process level token
      - Manage Auditing and Security Log Properties
   d. Enable Define these policy settings, click Add User or Group, select the created user, and click Apply.

5. Enforce the created Group Policy and run gpupdate\force in the Command Prompt.
6. Grant **WMI Namespace Security Rights** and **COM Permissions** to the user.
   
a. In the domain controller from which the logs are to be collected, open the **Run** command and type `wmimgmt.msc` to open the WMI Management Console.

b. Right-click **WMI Control (Local)** and click **Properties**.

c. In the WMI Control Properties pop-up that opens, click the **Security tab**.

d. In the Security tab, expand the **Root NameSpace** and select **CIMV2 Namespace**.

e. Click the Security button that appears on the bottom right corner to open the **Security for ROOT\CIMV2**.

f. Click **Add** and select the created user.

g. The user now needs to be granted permissions. To do this, click the user and check the **Allow** boxes beside all required permissions.

h. Apply the permissions given below and click **OK** to exit the WMI Management console.

   i. Execute Methods
   
   ii. Enable Account
   
   iii. Remote Enable
   
   iv. Read Security

7. Grant **COM permissions** to the created user.

   a. In the domain controller from which the logs are to be collected, navigate to Start **Administrative Tools Component Services**.

   b. Expand the Computers folder and navigate to **My Computer Properties COM SECURITY**.
c. Under Access Permissions, click **Edit Limits** and add the created user by clicking **Add**.

d. Grant all the permissions and click **OK**.