RoomWizard Exchange Connector 6.1.0

NTLM Connector Configuration Guide
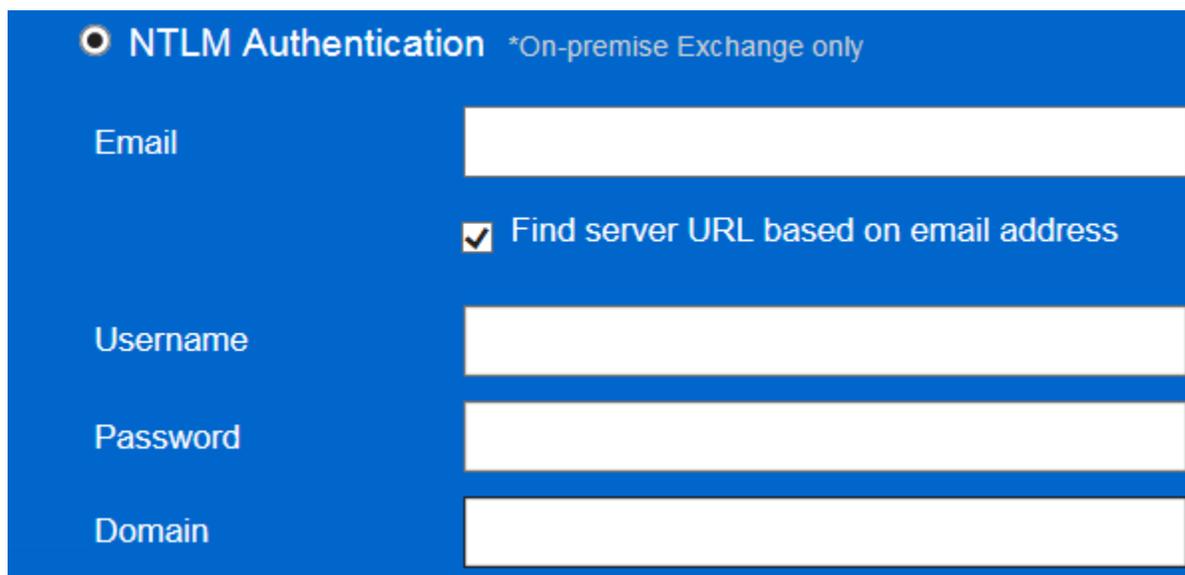
Steelcase

Overview: This Guide describes the configuration steps for NTLM authentication in an on-premise Exchange environment following the installation of Exchange Connector 6.1.0. For steps detailing the Exchange Connector installation process please review the RW Exchange Connector Installation Guide.

Background: Microsoft support for Basic Authentication is set to end in the Fall of 2020. To prepare for this upcoming change a new Exchange Connector was created that utilizes an authentication mechanism called NTLM. This authentication mechanism authenticates with hashing as opposed to passing a username and password between the Connector and on-premise Exchange environment. For additional information please access the following link: https://docs.microsoft.com/en-us/windows/desktop/secauthn/microsoft-ntlm

NTLM Parameters: Administrator access to an on-premise Microsoft Exchange domain is required to complete the configuration for NTLM. The following configurations are needed, depending on the chosen option between Autodiscover or EWS.

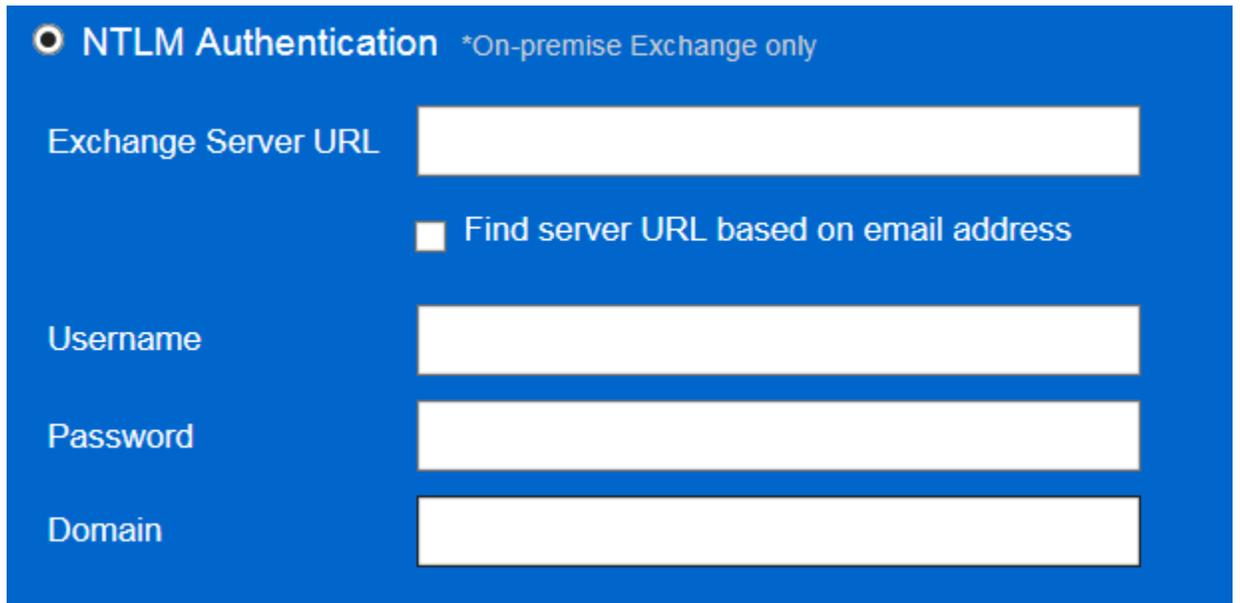**Autodiscover Variables**: The following fields are needed if Autodiscover is the chosen authentication method:

1) Email: This is an email address within the domain that is used to test Autodiscover. This can be any valid email address within the Microsoft Exchange domain used for configuring NTLM. The find server URL based on email address should be selected.
2) Username: The username of a service account with the appropriate Impersonation Permissions.
3) Password: The password of a service account with the appropriate Impersonation Permissions.
4) Domain: The domain name of the Exchange environment.

EWS Variables: The following fields are needed if EWS is the chosen authentication method:

1) Exchange Server URL: This is an EWS Exchange URL within the domain that is used to test authentication to EWS. This can be any valid URL within the on-premise Microsoft Exchange environment. The find server URL based on email address should be deselected.
2) Username: The username of a service account with the appropriate Impersonation Permissions.
3) Password: The password of a service account with the appropriate Impersonation Permissions.
4) Domain: the domain name of the Exchange environment.

Connector Installation: It is recommended to install the new Exchange Connector on an IIS Server that will not interfere with the current Exchange Connector to maintain the meetings that are currently scheduled. Upgrading the Exchange Connector could result in lost functionality for all RoomWizard devices currently using the Exchange Connector, and this should be considered when upgrading/installing the new Exchange Connector.

After the install/upgrade is complete, it is advised to find an off-hour time to change from Basic Authentication to NTLM. It should be expected that there will be possible downtime during the change to NTLM, and this should be taken into consideration, especially for RoomWizard devices that are currently utilizing the Exchange Connector.

NTLM Configuration: To begin the NTLM Configuration it needs to be decided whether Autodiscover or EWS will be used. Once a method is confirmed follow the steps for either Autodiscover or EWS shown below.

Autodiscover Option Instructions:

1) Login to the Exchange Administrative Console. Select Servers from the left and highlight Virtual Directories. Choose Autodiscover and click to access configuration page.

Exchange admin center

recipients

permissions

compliance management

organization

protection

mail flow

mobile

public folders

unified messaging

servers

servers databases database availability groups virtual directories certificates

Select server: All servers

Select type: All

NAME	▲	SERVER	TYPE	VERSION	LAST MODIFIED TIME
Autodiscover (Default Web Site)		**MAIL**	**Autodis...**	**Version 15.1 (Build 1779.2)**	**2/20/2019 8:53 AM**
ecp (Default Web Site)		MAIL	ECP	Version 15.1 (Build 1779.2)	7/12/2017 10:35 AM
EWS (Default Web Site)		MAIL	EWS	Version 15.1 (Build 1779.2)	8/15/2019 12:36 PM
mapi (Default Web Site)		MAIL	Mapi	Version 15.1 (Build 1779.2)	7/12/2017 10:36 AM
Microsoft-Server-ActiveSync (Def...		MAIL	EAS	Version 15.1 (Build 1779.2)	7/12/2017 10:35 AM
OAB (Default Web Site)		MAIL	OAB	Version 15.1 (Build 1779.2)	7/12/2017 10:36 AM
owa (Default Web Site)		MAIL	OWA	Version 15.1 (Build 1779.2)	7/12/2017 10:35 AM
PowerShell (Default Web Site)		MAIL	PowerS...	Version 15.1 (Build 1779.2)	7/12/2017 10:36 AM

2) Check Integrated Windows Authentication and disable all other options. Click Save.

Autodiscover (Default Web Site)

general

▸ authentication
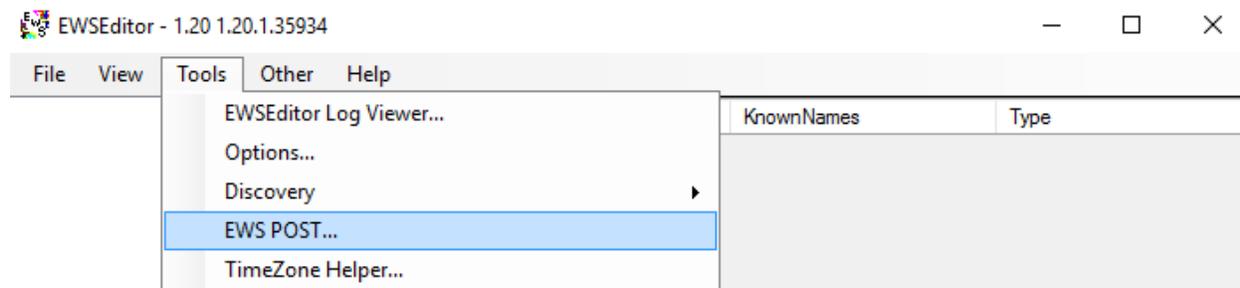
☑ Integrated Windows authentication
☐ Digest authentication for Windows domain servers
☐ Basic authentication
(Requires the use of SSL certificates to encrypt the passwords
that are normally sent in clear text)

3) Once complete repeat the process on all Exchange Servers if necessary.

Note: Before configuring the Exchange Connector with NTLM it is best to test against EWSEditor. This is a Microsoft tool and is useful in verifying NTLM functionality as well as verifying that Basic Authentication is disabled. To start load EWSEditor and under Tools select EWS POST as shown below.

EWSEditor - 1.20 1.20.1.35934

File View Tools Other Help

EWSEditor Log Viewer...
Options...
Discovery   ▸
EWS POST...
TimeZone Helper...

KnownNames   Type

a) **Enter the necessary credentials, including the proper Autodiscover URL. Click Run in the top right corner.**

b) **Verify that the response returned is OK. This confirms that NTLM is configured.**

EWS Call Info:

Start: 5/28/2019 10:30:49 AM End: 5/28/2019 10:30:49 AM Timespan: 00:00:00.06:

ResponseStatusCode: OK

c) **Next verify that Basic Authentication is disabled.**

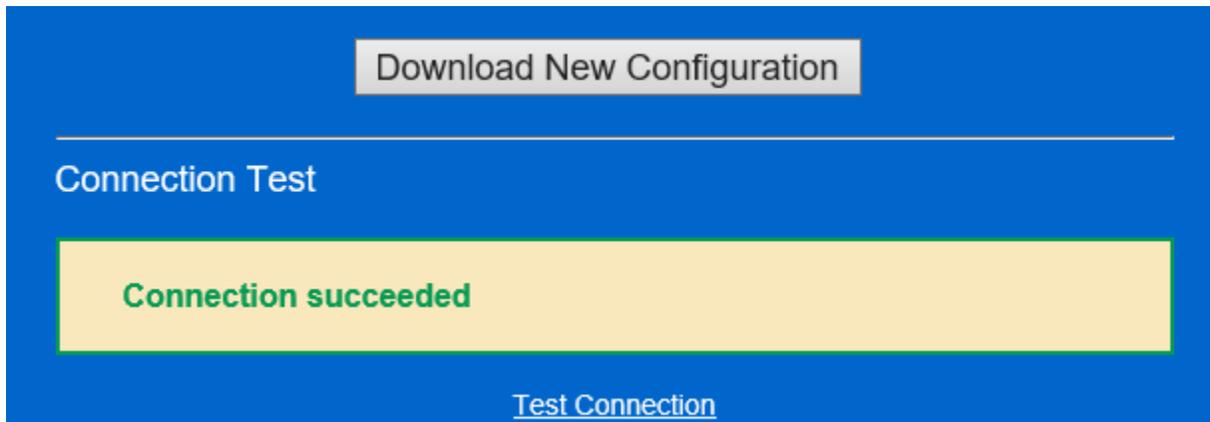d) **Basic Authentication returns a 401 error and is disabled.**

EWS Call Info:

Start: 5/28/2019 10:36:24 AM End: 5/28/2019 10:36:24 AM Timespan: 00:00:00.10:

Failed:
    Error: The remote server returned an error: (401) Unauthorized.

4) Login to the new Exchange Connector. For Autodiscover the checkbox needs to be selected. Complete the appropriate fields and click Test Connection:

5) After the Test Connection completes click on Download New Configuration and Save to the Site.Config file (found in the bin directly below the root installation folder of the Exchange Connector). The Exchange Connector is now configured for NTLM using Autodiscover.

EWS Option Instructions:

1) Login to the Exchange Administrative Console. Select Servers from the left and highlight Virtual Directories. Choose EWS and click to access configuration page.

2) Check Integrated Windows Authentication and disable all other options. Click Save.
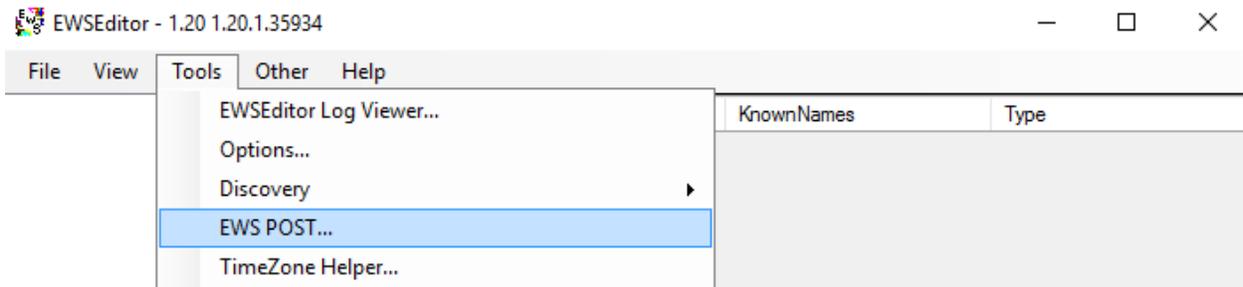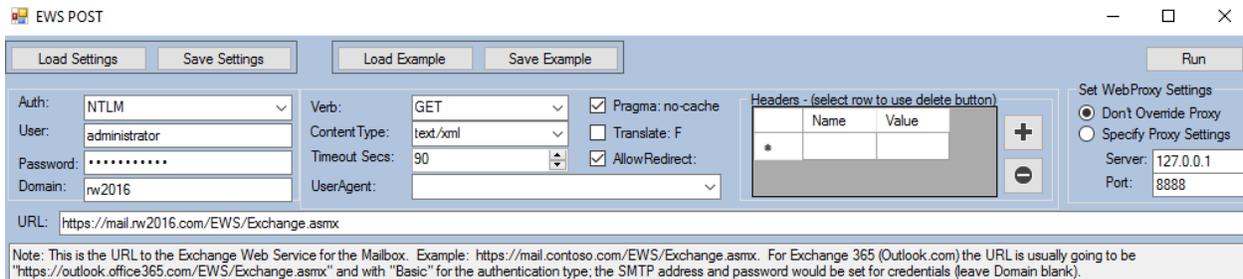
EWS (Default Web Site)

general
▸ authentication

☑ Integrated Windows authentication
☐ Digest authentication for Windows domain servers
☐ Basic authentication
(Requires the use of SSL certificates to encrypt the passwords
that are normally sent in clear text)

3) Once complete repeat the process on all Exchange Servers if necessary.

Note: Before configuring the Exchange Connector with NTLM it is best to test against EWSEditor. This is a Microsoft tool and is useful in verifying NTLM functionality as well as verifying that Basic Authentication is disabled. To start load EWSEditor and under Tools select EWS POST as shown below.
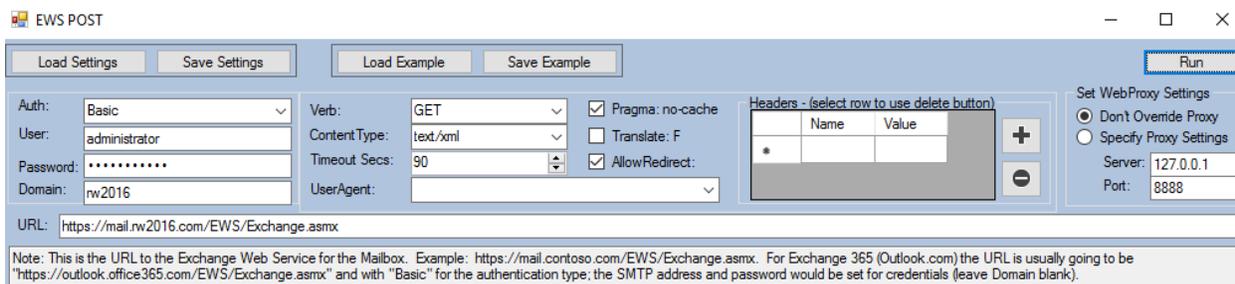
EWSEditor - 1.20 1.20.1.35934   —   □   ✕

File   View   Tools   Other   Help

EWSEditor Log Viewer...   KnownNames   Type
Options...
Discovery   ▸
EWS POST...
TimeZone Helper...

a) **Enter the necessary credentials, including the EWS URL. Click Run in the top right-hand corner.**

EWS POST   —   □   ✕

Load Settings   Save Settings   Load Example   Save Example   Run

Auth: NTLM   Verb: GET   ☑ Pragma: no-cache   Headers - (select row to use delete button)   Set WebProxy Settings
                                                                                    Name   Value   ◉ Don't Override Proxy
User: administrator   ContentType: text/xml   ☐ Translate: F   ○ Specify Proxy Settings
                                                                                         ✚
Password: ••••••••••   Timeout Secs: 90   ☑ AllowRedirect: *   Server: 127.0.0.1
Domain: rw2016   UserAgent: ➖   Port: 8888

URL: https://mail.rw2016.com/EWS/Exchange.asmx

Note: This is the URL to the Exchange Web Service for the Mailbox. Example: https://mail.contoso.com/EWS/Exchange.asmx. For Exchange 365 (Outlook.com) the URL is usually going to be
"https://outlook.office365.com/EWS/Exchange.asmx" and with "Basic" for the authentication type; the SMTP address and password would be set for credentials (leave Domain blank).

b) **Verify that the response returned is OK. This confirms that NTLM is configured.**

EWS Call Info:
Start: 5/28/2019 10:38:14 AM End: 5/28/2019 10:38:14 AM Timespan: 00:00:00.02:
ResponseStatusCode: OK
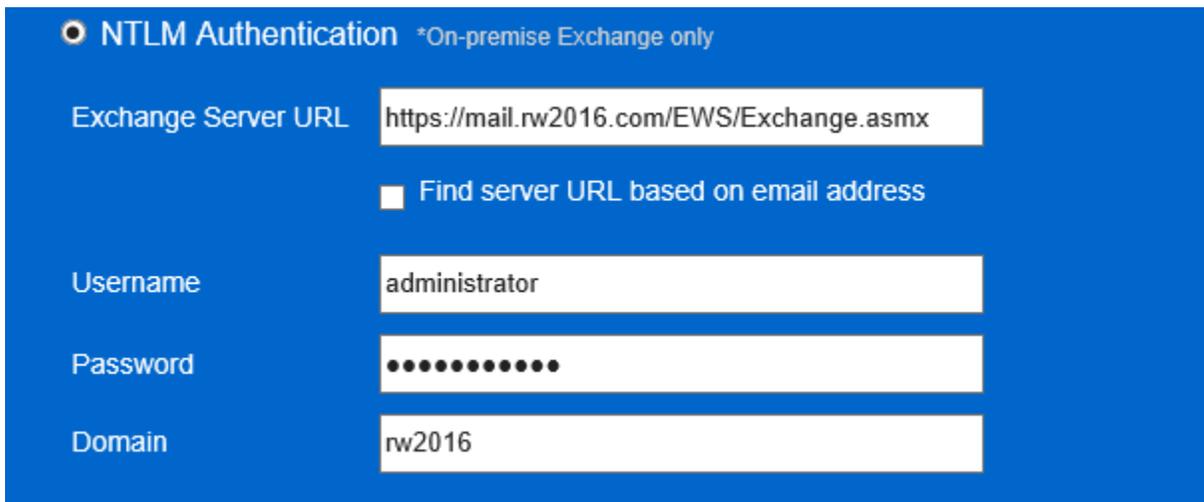
c) **Next verify that Basic Authentication is disabled.**

d) Basic Authentication returns a 401 error and is disabled.

EWS Call Info:
Start: 5/28/2019 10:42:30 AM End: 5/28/2019 10:42:30 AM Timespan: 00:00:00.02:

Failed:
    Error: The remote server returned an error: (401) Unauthorized.

4) Login to the Exchange Connector. Complete the appropriate fields and click Test Connection:

5) After the Test Connection completes click on Download New Configuration and Save to the Site.Config file (found in the bin directly below the root directory of the Exchange Connector).
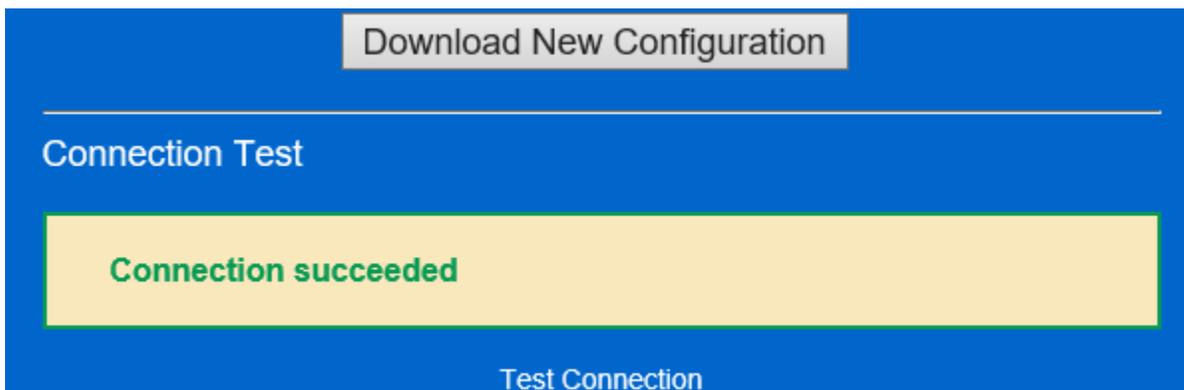
Once the new settings are saved the Website will display NTLM as the configuration. Be sure that the license key is obtained and configured along with the NTLM settings.

Version:	6.1.0
License Key:	Licensed
Auth Method:	NTLM