Practical No - 06

Configure Internet Protocol Security (IPSEC)

Aim: To Configure IPSec on network devices to provide secure communication and protect against unauthorized access and attacks.

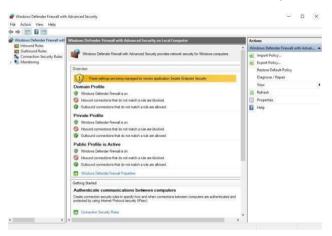
About this task:

Historian supports encryption based on Internet Protocol Security to secure traffic between various Historian components and collectors without the need to use VPN or other security protocols.

Procedure:

1. Run wf.msc.

The Windows Defender Firewall with Advanced Security window appears.



- 2. Create a security method:
 - a. Select Actions > Properties.

The Windows Defender Firewall with Advanced Security on Local Computer window appears.



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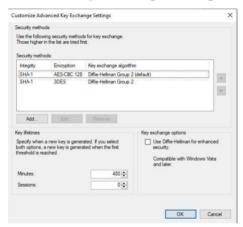
b. Select IPsec Settings > Customize.

The IPsec Defaults window appears.



c. Under Key exchange (Main Mode), select Advanced > Customize.

The Customize Advanced Key Exchange Settings window appears.

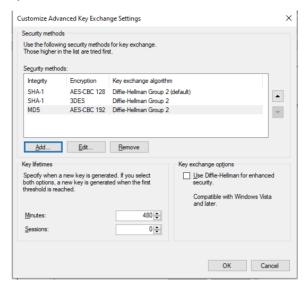


d. Select AddThe Add Security Method window appears.

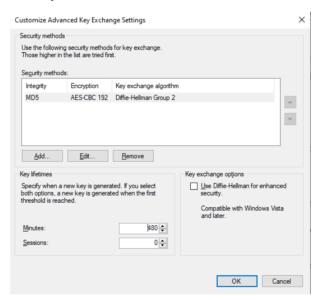


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e. Select the algorithms that you want to use for each purpose. The following image shows an example.



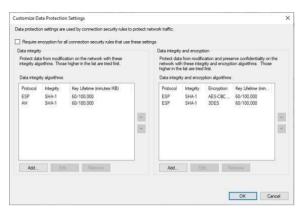
f. Move the security method that you have added to the top of the list. We recommend that you remove the other methods.



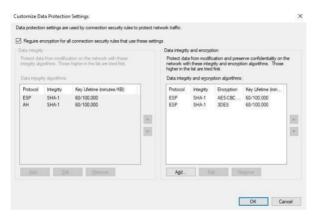
- g. Select OK.
- 3. Add integrity and encryption algorithms:
 - a. In the Customize IPsec Defaults window, under Data protection (Quick Mode), select Advanced > Customize.

The **Customize Data Protection Settings** window appears.

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b. Select the Require encryption for all connection and security rules that use these settings check box.



c. Under **Data integrity and encryption**, select **Add**. The **Add Integrity and Encryption Algorithms** window appears.



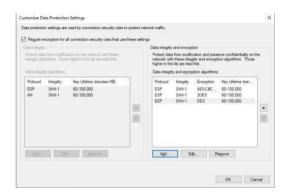
d. Under Protocol, ensure that ESP is selected.

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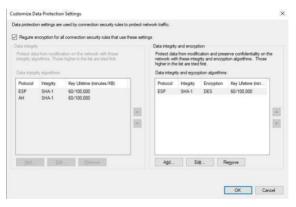


e. Select the algorithms that you want to use for each purpose, and then select \mathbf{OK} .

The algorithms that you have selected appear in the list.



f. Move the algorithms to the top of the list. We recommend that you remove the remaining items in the list.



g. Select OK.

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