Configuring WinRM over HTTPS on Port 5986

To configure WinRM to use port 5986 for secure communication (HTTPS), follow these steps:

1. Configure WinRM to Use HTTPS on Port 5986

  a. Run PowerShell as Administrator and execute:

```
winrm quickconfig
```

  b. Set WinRM to listen on port 5986 (HTTPS) by running the following command:

```
winrm create winrm/config/Listener?Address=*+Transport=HTTPS @{Hostname="YourServerName";Port="5986";CertificateThumbprint="YourCertificateThumbprint"}
```

   Replace "YourServerName" with the name of your server and "YourCertificateThumbprint" with the thumbprint of the SSL certificate.

  c. To find the thumbprint of the certificate, use:

```
Get-ChildItem -Path Cert:\LocalMachine\My
```

  d. Verify the listener has been created successfully with:

```
winrm e winrm/config/listener
```

2. Configure the Firewall

  Open the firewall for WinRM over HTTPS with:

```
New-NetFirewallRule -Name "WinRM 5986" -DisplayName "WinRM 5986" -Enabled True -Direction Inbound -Protocol TCP -LocalPort 5986 -Action Allow
```

3. Configure Ansible to Use WinRM over Port 5986

a. Modify your Ansible inventory file with the following configuration:

```
[windows]
winserver01 ansible_host=192.168.1.100
[windows:vars]
ansible_user=Administrator
ansible_password=YourSecurePassword
ansible_connection=winrm
ansible_winrm_transport=ntlm
ansible_port=5986
ansible_winrm_server_cert_validation=ignore
ansible_winrm_scheme=https
```

4. Test the Connection with Ansible

Run the following command to verify the connection:

```
ansible -i hosts winserver01 -m win_ping
```

5. Troubleshooting

- If you're encountering issues with certificates, ensure to set ansible_winrm_server_cert_validation=ignore in the inventory file for self-signed certificates.

- Ensure the firewall rule for port 5986 is active.

- Use winrm e winrm/config/listener to verify the WinRM listener is set up on port 5986.