**Windows Server 2008/2012/2016 GUI Firewall Checklist**

**1. Initial diagnosis**

* Open Notification tab in top right corner
  + Read any highlighted alerts
* Find applicable section

**2. Confirm Firewall is enabled.**

* Change Firewall state to “On”
  + Find the switch labeled “Turn on Windows Firewall”
  + Move switch to “On”

**3. Specifically, what is wrong?**

* Click red highlighted alerts
* Open the “Detail View” dialog box
* Read description of error

**4. For which roles or servers is the problem occurring?**

* Click the “Go To” button (opens the role or group home page)
* Write down the names of the roles or groups listed

**5. Are there notifications about failed tasks or processes, and Task Details messages?**

* Look at the Notifications area (top right corner)
  + If there is a red exclamation mark, there is an alert
  + If there is no exclamation mark, there is no alert
    - Click any alerts to open the “Task Details” dialog box (often identifies the source of the problem)
* Look at the Manager tab(top, top right of screen)
  + If there is a red exclamation mark, there is an alert
  + If there is no exclamation mark, there is no alert

**7. Explore Manager**

* Click on the Manager tab
* Ensure “All Servers” option is selected
* Right click on error process messages
  + Read for description

**8. Respond to Errors**

* Authentication errors require Active Directory or permissions updates/checks
  + Confirm devices listed with errors are added in the right groups with the right permissions (Communicate with Active Directory Team to complete this task)
* Name resolution errors come from conflicts in naming (special characters) or location (correct domain/ domain controller)
  + Confirm no inappropriate special characters are used (“,/\{}()[])
  + Confirm device correctly managed in Active Directory (Communicate with Active Directory Team to complete this task)

**9. General Connection Issues**

* Confirm you are trying to connect to a Windows machine
  + Open device
  + Observe Operating System
* Confirm the target is on
  + Turn it on if it is off
* Confirm the target is physically connected
  + View physical ports for wired connection
    - Push cables into ports completely
* Confirm the target has proper baseline configurations (i.e. proper static IPs for servers, in correct domain for users, etc.)
  + ipconfig /all
  + Compare given information with expected information
  + As necessary, change IP addresses, domains, groups, etc.
* Confirm you are using the correct username/password to log in
  + Refer to credential source document
  + Type username/password carefully

**10. Firewall Blockage/Conneciton refused**

* Ensure Windows Management Framework 3.0 is used
  + Open Powershell
  + Run (host).Version
* Check blocked ports for conflict
  + View existing firewall rules
  + Confirm rules are in proper order
* Check logs
  + Listed on homepage under name of each server

**11. What is the update status of the server?**

* If necessary, check for updates.
  + Control Panel>System and Security>Windows Update>Check for Update
* If problem persists, repeat at step 1

**12. Dear God, what is going on?**

* <https://social.technet.microsoft.com/wiki/contents/articles/13443.windows-server-2012-server-manager-troubleshooting-guide-part-i-overview.aspx>
* <https://docs.microsoft.com/en-us/windows-server/networking/sdn/troubleshoot/troubleshoot-windows-server-software-defined-networking-stack>