GO-Global Technology and RDS

GraphOn dedicates considerable engineering resources in order to provide GO-Global customers with reliable, secure, multi-user access to mission-critical applications from anywhere. GO-Global's unique technology architecture does not access any remote desktop services (RDS) Windows Server functionality, and is therefore free of the burdens of redundant technology requirements and associated RDS license fees.

Windows Server operating systems contain RDS functionality developed by Microsoft, and GUI-hosting functionality originally developed by Citrix, and later licensed by Microsoft. Unlike any other product, GO-Global provides full replacements for both Windows Server's RDS functionality and its GUI-hosting functionality. As a result, users who access a Windows Server using GO-Global do not directly or indirectly access Windows Server's RDS functionality or its GUIhosting functionality. They also do not access Windows Server's Multipoint Services functionality. In other words, users who access a Windows Server using GO-Global do not access any of the server software functionality that Microsoft claims requires a client access license (CAL).

GraphOn respects Microsoft's Windows Server licensing which requires end users to purchase an RDS CAL when Window Server RDS functionality is accessed. GO-Global does not interact with, access, override, circumvent, or disable Microsoft RDS license controls. GO-Global has no dependence on RDS technology.

To GraphOn's knowledge, GO-Global is the only multiuser remote access product for Windows that can make this claim.

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GO-GLOBAL

1. **Verify GO-Global independence of RDS technology**

   Disable the Remote Desktop Services service on a GO-Global Host and observe that GO-Global works even when the Remote Desktop Services service is not running:

   1. Sign in to the console of a computer that has the GO-Global Host installed.
   2. Stop the **Remote Desktop Services** service:
      a. Run **services.msc.**
      b. Right-click **Remote Desktop Services**.
      c. Click **Stop**.
   3. On another computer, start a GO-Global client and connect to the GO-Global host:
      a. On another computer run the GO-Global client. (Install it first, if necessary.)
      b. Enter the address of the GO-Global Host in the **Host Address** field.
      c. Click **Connect**.
   4. Sign in and start an application.
      a. In the **Sign In** dialog's **User name** field, enter the user name for an account that is not signed into the computer. (E.g., use an account other than the account used to sign into the console in Step 1.)
      b. Enter the password for the account.
      c. Click **Sign In.**
      d. When the Program Window appears, start one or more applications.

   Result: The GO-Global session starts and applications run within the session even though the Remote Desktop Services service is not running.

2. **Verify that GO-Global does not use or rely on the GUI-hosting functionality in Windows, and observe that all processes running in GO-Global sessions run in Windows session 0**

   Background:

   In 1997, Microsoft licensed technology from Citrix that enables multiple instances of the Windows GUI to be hosted from a Windows server. Microsoft later incorporated this GUI-hosting technology into all editions of Windows. This technology creates a GUI session for each user that accesses a Windows computer from the computer's console, RDS clients, Citrix XenApp clients, etc. Each GUI session created by Windows has a unique Session ID that can be viewed in Task Manager.

   Unlike these other products, however, GO-Global provides a complete replacement for the GUI-hosting functionality that is included in Windows. The extent to which GO-Global does this can be most clearly seen using a kernel debugger, but the fact that GO-Global does not use the GUI-hosting functionality in Windows can also be verified by observing that all processes running in GO-Global sessions run in Windows session 0, the same session in which Windows services run.

   1. After performing steps 1–4 in Scenario 1 above, go to the console of the GO-Global host used in Step 1.
   2. Run **Task Manager.**
   3. Click More details | Details.
   4. Right-click on the list view's headings.
   5. Click **Select columns.**
   6. Check Session ID.
   7. View the Session IDs of all processes running in the user account used in Step 4 of Scenario 1.

   Result: The Session ID of each process running under the user account is 0 (zero).

   8. Go to the computer that is running the GO-Global client and start additional applications in the GO-Global session
   9. Go back to the console of the GO-Global host and check the Session ID of the new processes that were started under the user account.

   Result: The Session IDs of the new processes started in Step 8 are also 0.

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