SmartSession

Use the F1 button on any page of a ThinManager wizard to launch Help for that page.


SmartSession provides load balancing between member terminal servers in a Terminal Services Display Client.

SmartSession uses CPU availability, memory, and the number of sessions on the member terminal servers to determine the load on the servers. ThinManager Ready thin clients connect to the terminal server in the Display Client with the most available resources.

**SmartSession**

<table>
<thead>
<tr>
<th>Server</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;A&quot;</td>
<td>182.60</td>
</tr>
<tr>
<td>&quot;B&quot;</td>
<td>32.75</td>
</tr>
<tr>
<td>&quot;C&quot;</td>
<td>64.55</td>
</tr>
<tr>
<td>&quot;D&quot;</td>
<td>243.50</td>
</tr>
</tbody>
</table>

**Display Client with SmartSession**

ThinManager polls the terminal servers for resource availability and assigns a ranking to pass to the terminals. Terminals connect to the terminal server with the lowest ranking. Lower numbers mean a lighter load.

This example is ranked B-C-A-D.

**SmartSession**

SmartSession has settings that need configured in two places, the Terminal Server Configuration Wizard and the Display Client Configuration Wizard.
Terminal Server Configuration Wizard

The Terminal Server List Wizard can be launched by:

- Right clicking on the Display Servers Terminal Servers branch and choosing the Add Terminal Server command to create a new Terminal Server Display Server.
- Double clicking on the icon of a Terminal Services Display Servers in the tree to launch the wizard for an existing Terminal Services Display Servers

Navigate to the Terminal Server Capabilities page and select the Available for Smart Session Server checkbox to make the terminal server available for Display Clients that use SmartSession to provide load balancing.

A terminal that is used as a SmartSession server will have a SmartSession Configuration page. Select the Next button to continue the configuration.
ThinManager uses the CPU utilization, Memory utilization, and number of sessions on the terminal server to define the SmartSession terminal server’s available resources. ThinManager uses these resource values to rank the load of the SmartSession servers. ThinManager supplies this load data to the terminals to allow the terminals to connect to the terminal server with the lightest load and greatest available resources.

The SmartSession Configuration page allows the configuration of the three parameters that ThinManager uses to determine availability for SmartSession. ThinManager will scale the range between the Minimum field and Maximum field as 100%.

These values can be changed if you want to tweak your settings through trial and error. Normally the defaults are adequate.

Select Finish to save and close or Cancel to close without saving.
Display Client Configuration Wizard

Display Clients need configured to use SmartSession.

The **Display Client List Wizard** can be launched by either:

- Right clicking on the Display Client branch and choosing the **Add Display Client** command to create a new Display Client.
- Double clicking on the Display Client in the Display Client branch of the ThinManager tree to open an existing one.

![Display Client Wizard](image)

**Terminal Services Display Client Options**
Select the options for this display client

- **SmartSession**
- **Application Link**
- **Enhance Primary**
- **Instant Failover**
- **Allow Auto-Login**

Select the **SmartSession** checkbox to enable the Display Client to use SmartSession.

It is typical to also have the Display Client use AppLink (**Application Link**) to launch a program instead of a desktop in the session.

Select **Next** to continue.
Add Terminal Servers to the Display Client by moving them from the **Available Terminal Server** list to the **Selected Terminal Server** list with the arrow buttons or by double clicking.

Only terminal servers that have been configured for SmartSession by checking the **Available for Smart Session Server** checkbox on the Terminal Server Capability page of the Terminal Server Configuration Wizard will appear in the **Available Terminal Server** list.

If you need to add servers or change their configuration select the **Edit Server List** button to launch the configuration wizard that allows that.

Select **Next** to continue.
The **SmartSession Settings Page** allows tweaking of SmartSession values by adjusting the weights of the SmartSession settings.

ThinManager multiplies the CPU utilization, Memory utilization, and number of sessions on the terminal server by the **Weight** shown to define the SmartSession terminal server’s available resources. The higher the **Weight**, relative to the others, the greater the importance that parameter has in determining the load for SmartSession.

Tweaking these settings allow you to adjust the load distribution in SmartSession although the defaults are commonly used.

### Queuing

**Queuing** controls the rate that terminals connect to the terminal servers in the Display Client to allow processor intensive applications to load one at a time instead of many sessions forming at once, bringing the server to a halt. As terminals that use SmartSession Queuing boot, they request their terminal server from ThinManager. ThinManager will send the first terminal to the terminal server with the lightest load and will put the other terminals in a queue for the interval defined in the **Min Sec** field. This allows the terminal server load to stabilize and allows ThinManager to re-sample the loads and send the terminal to the terminal server with the lowest current load.

The **Min Sec** field is the amount of seconds that a terminal will wait in the queue before being sent to a terminal server that has another terminal connecting. The terminal may wait longer than this value to connect
if the CPU of the terminal server exceeds the **Maximum CPU Utilization** defined on the **SmartSession Configuration** page of the **Terminal Server Configuration** wizard.

The **Max _ Sec** field is the maximum amount of seconds that a terminal will wait in the queue before being sent to the terminal server to login, regardless of the load.

If the **Infinite** checkbox is selected, ThinManager will wait until the CPU utilization of the terminal server has regained an acceptable range before sending other terminals to it to login.

### SmartSession Graph

![SmartSession Graph](image)

**ThinManager Interface – Server Rank Tab**

The Server Rankings of the terminal servers are displayed on the Server Rank tab when a Terminal Services Display Client is highlighted in the ThinManager tree. In the example above a ThinManager Ready thin client would connect to Silver because it has the lowest load.