



# HOB Remote Desktop Selector

## for Microsoft Windows Servers with Remote Desktop Services

### Overview

HOB RD Selector provides optimized and highly performant access to Microsoft Windows Servers that are using Remote Desktop Services even in very large server farms. A server farm is a conglomeration of Windows Servers which supply identical applications to the users. In such a server farm, it is important that all the servers are equally utilized. This ensures an even load distribution within the server farm and improves performance. This requires a load balancing mechanism.

HOB RD Selector contains an intelligent and parameterizable load balancing function which has been developed and optimized by HOB. The major advantage: HOB RD Selector uses weighted server parameters and does not use the “Round Robin” method. Thus the administrator can individually determine the utilization ratio of the servers in the farm, even with very large, load-sharing server farms. The administrator is free to design these server farms anyway he thinks necessary, as there is no limit on the number of servers that can be used.

Furthermore, users can work steadily, regardless of possible connection interruptions. If a session is unexpectedly disconnected, it will be reconnected to the same server. All data remain undamaged.

Another strong argument in favor of HOB RD Selector is that there is no need for additional hardware nor gateways. The existing Microsoft infrastructure can continue to be used. Even more, expenditures for new servers can be eliminated and maintenance costs reduced. The server consolidation achieved this way frees up capital that can be used effectively to protect the company’s future.

### Advantages at a Glance

- Enhanced and parameterized HOB Load Balancing also for the creation of large server farms
- Reconnection of disconnected sessions, no data loss
- Connection via server farm query or broadcast
- Application Publishing by HOB
- Supports Microsoft standard features, for example, Application Serving and Remote-App
- Easy session configuration

HOB RD Selector consists of two components:

On the client side the HOB RD Selector is installed.

On the server side, the HOB RD Selector Agent is

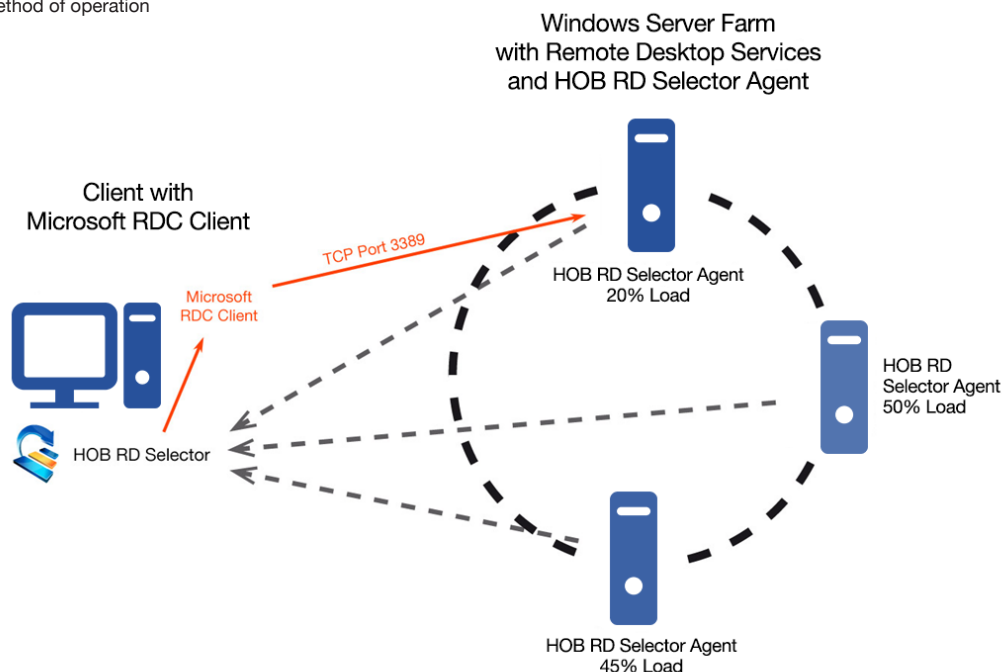
deployed. After installation is completed, the client-side HOB RD Selector communicates with the corresponding Agent on the server side.

## Mode of Operation and Functions

The HOB RD Selector Client is installed and configured as an application on Microsoft Windows operating systems. A Microsoft Remote Desktop Connection Client, i.e., a Microsoft RDP Client, is required.

The second component, the HOB RD Selector Agent, including the service “HOB Remote Desktop (RD) Balancer,” is installed on each Windows Server in the server farm.

Depiction of the HOB RD Selector's method of operation



This service ascertains the time-averaged loads of each server. If now the HOB RD Selector Client requests a connection to one of the Windows Servers, the HOB RD Balancer will return the current server load to the client. Hereby, each server sends its load information directly to the HOB RD Selector Client. The load is not managed by a master server, eliminating a single point of failure.

After the Microsoft Remote Desktop Connection Client (RDC Client) is started, the HOB RD Selector Client will now evaluate the feedback from the HOB RD Balancer to determine the server with the least load and, over HOB RD Selector, forward the configuration parameters to the Microsoft RDC Client. This will then establish a connection to the targeted remote desktop.

There are two different ways to directly address the individual Windows Servers within a server farm:

- Search server via a broadcast:  
HOB RD Selector sends a query regarding the Windows Servers' loads via a UDP broadcast.
- Search server via a server list:  
HOB RD Selector queries all Windows Servers within a pre-defined list as to their respective loads.

If an existing session is interrupted (Disconnected Session), the user will be – if so desired – reconnected to the same session.

Another advantage for the user is that the Microsoft RDC Client's standardized configuration possibilities are enhanced by important features. These are: HOB Application Publishing, HOB Load Balancing and a user-defined session window.

All configurations that can be made in a Microsoft RDC Client can be conveniently and easily preconfigured with HOB RD Selector. In addition to enhancing the functionality, this saves time and effort.

## Highlights

- Optimum distribution of users across the available servers
- Use of HOB Load Balancing with different parameters possible  
For example, the following parameters are only some of those that can be selected:
  - » CPU load
  - » Memory utilization
  - » Network load
  - » Input/Output activity
  - » Harddisk accesses
  - » Disconnected sessions
  - » Active sessions
  - » Number of processes
  - » Number of threads
  - » Page file use
  - » Paging activity
- Different weighting of the individual parameters possible
- Servers in a farm can also be weighted individually
- Faster creation of load-sharing server farms

## Configuration Options

- Display settings (standard screen size, user defined, screen ratio)
- Log-on configurations (username, password, domains, etc.)
- Server lists
- Selection criteria for the connection
- Applications (HOB Application Publishing, Application Serving)
- Saving various configurations
- Desktop shortcuts

- More effective use of server hardware
- No single point of failure thanks to HOB Load Balancing
- No intervention in network infrastructure
- Application Publishing

## Patented Solution

The HOB Load Balancing solution is patented:  
 “Controlling load-balanced access by user

computers to server computers in a computer network”  
 Patent-No. US 6950849 B1.

## System Requirements

### Server Platforms with Microsoft Remote Desktop Services:

The HOB RD Selector Agent is available for the following platforms (32/64 Bit):

- Microsoft Windows Server 2008 R2
- Microsoft Windows Server 2008
- Microsoft Windows Server 2003

### Client Platforms:

The HOB RD Selector Client can be installed on the following platforms (32/64 Bit) :

- Microsoft Windows 7
- Microsoft Windows Vista
- Microsoft Windows XP Professional
- Microsoft Windows Server 2008 R2
- Microsoft Windows Server 2008
- Microsoft Windows Server 2003

Note: To use HOB RD Selector, the installation of a Microsoft RDP Client or MS Remote Desktop Connection Client is required.