

# ALOHA LOAD BALANCER

## MICROSOFT TERMINAL SERVICES LOAD-BALANCING WITH SESSION BROKER

### "APPNOTE" #0051 — TERMINAL SERVICES LOAD-BALANCING WITH SESSION BROKER

*This technical note will help you go through the implementation of Terminal Services Load-Balancing using ALOHA and MS Session Broker.*

#### REQUIREMENTS

You must have one Windows Server 2008 to act as a Session Broker.

#### PURPOSE

Use the ALOHA LoadBalancer to load-balance Microsoft Terminal Services.

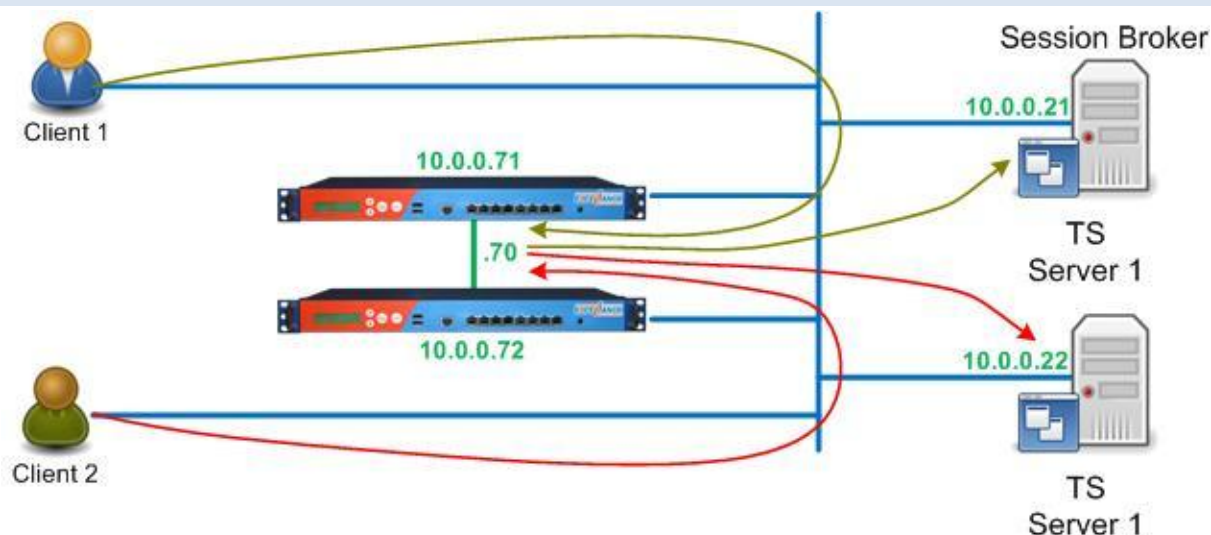
#### COMPLEXITY



#### VERSIONS CONCERNED

ALOHA v4.2 and above

#### TARGET NETWORK DIAGRAM



#### CONTEXT

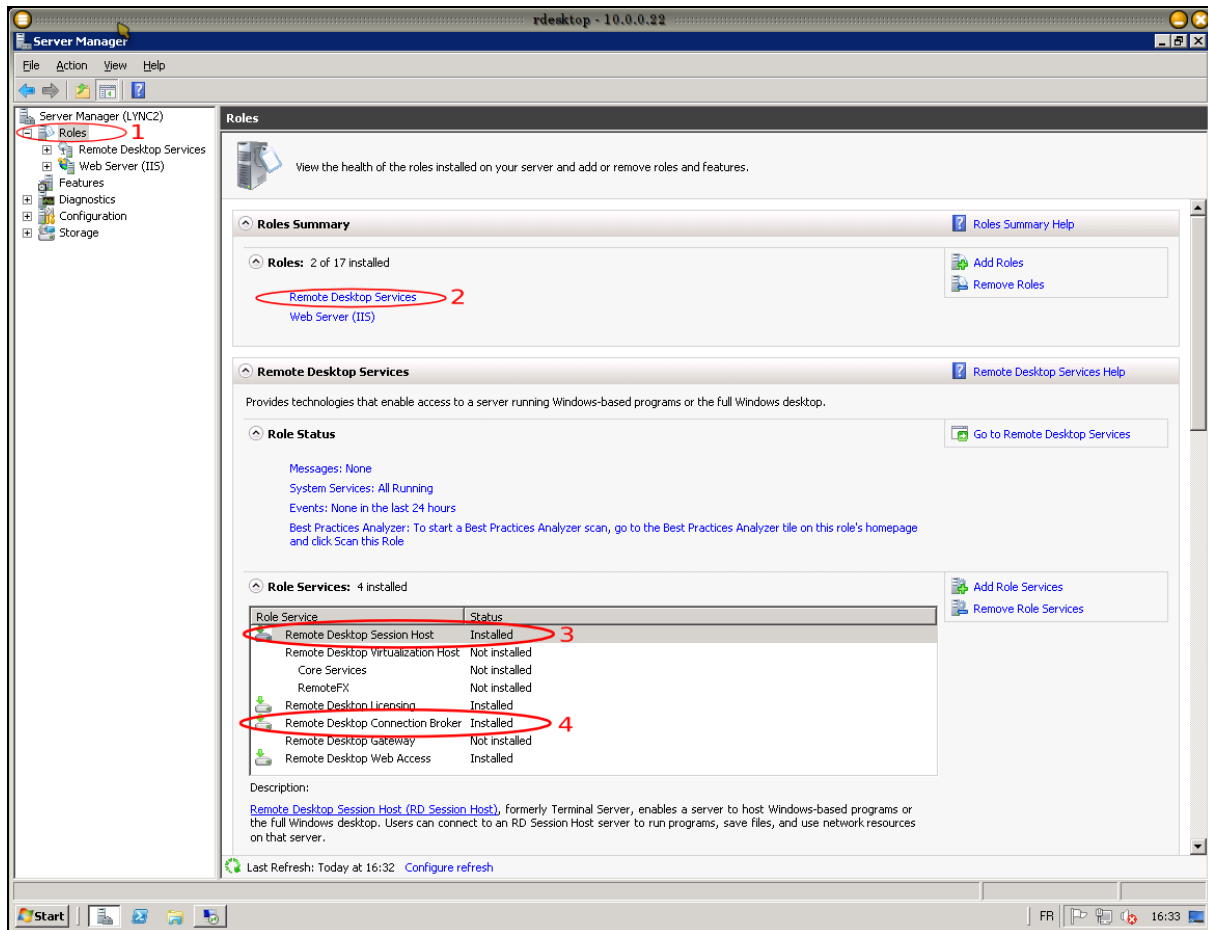
The following setup is to be used in Terminal Services environments, in order to load-balance incoming connections.

## MICROSOFT WINDOWS 2008 SERVER CONFIGURATION

### FIRST SERVER CONFIGURATION (WITH BROKER):

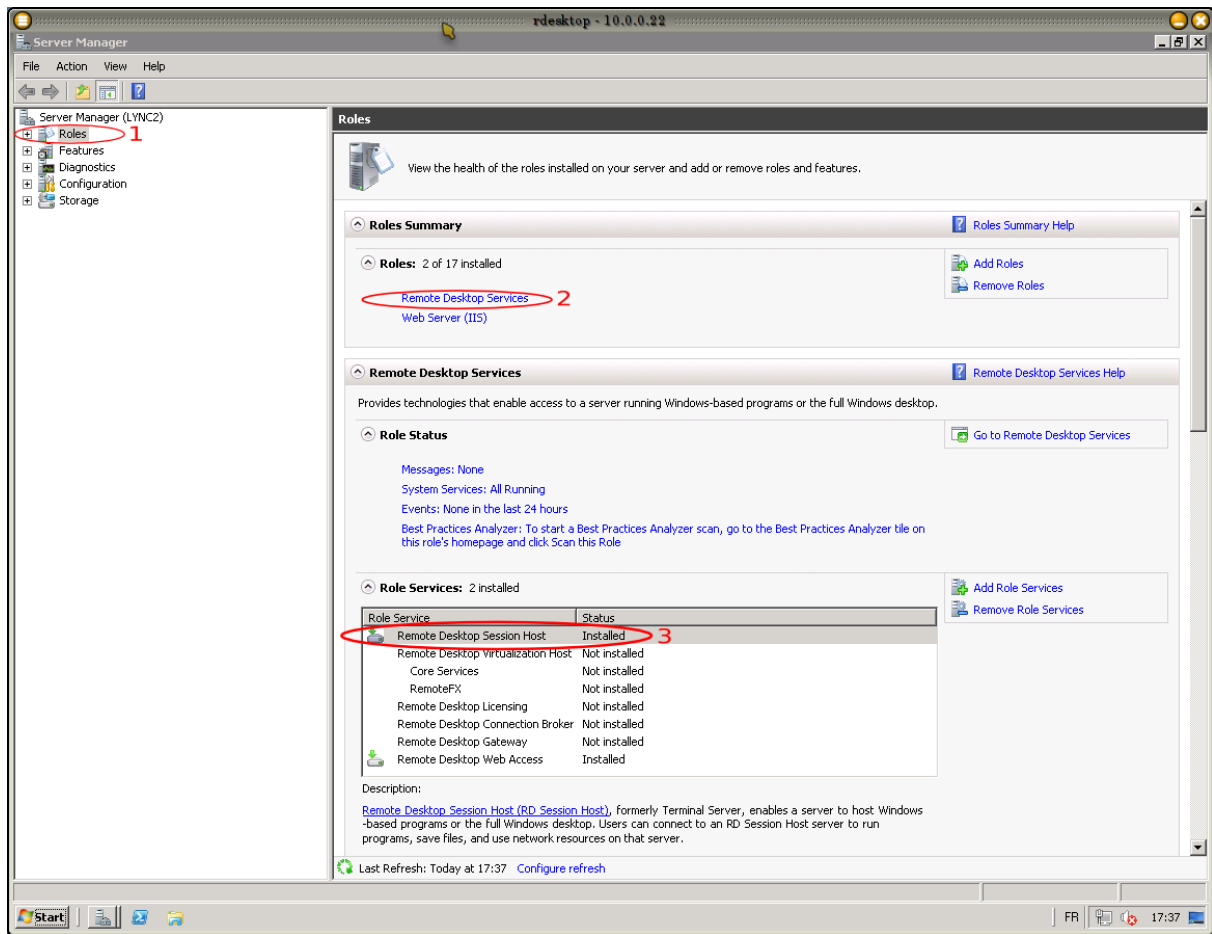
The "**Remote Desktop Services**" Role (1 & 2) must be installed on both servers. On the first server, two Role Services must be installed:

- **Remote Desktop Session Host (3)**
- **Remote Desktop Connection Broker (4)**



## SECOND SERVER CONFIGURATION (WITHOUT BROKER):

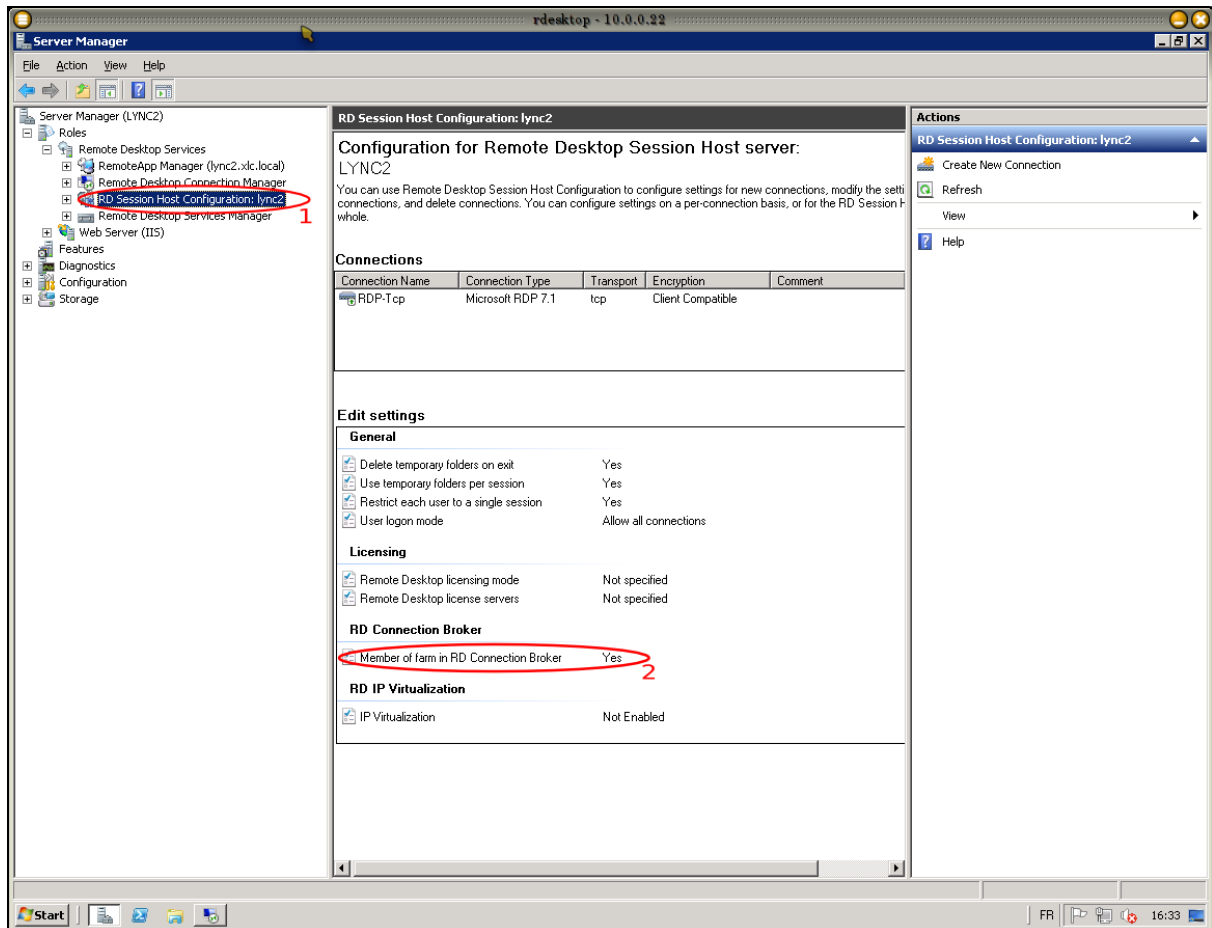
The **"Remote Desktop Services" Role (2)** must be installed on the second server as well. Only the **"Remote Desktop Session Host" Role Service (3)** is to be installed on the second server.



## BOTH SERVERS:

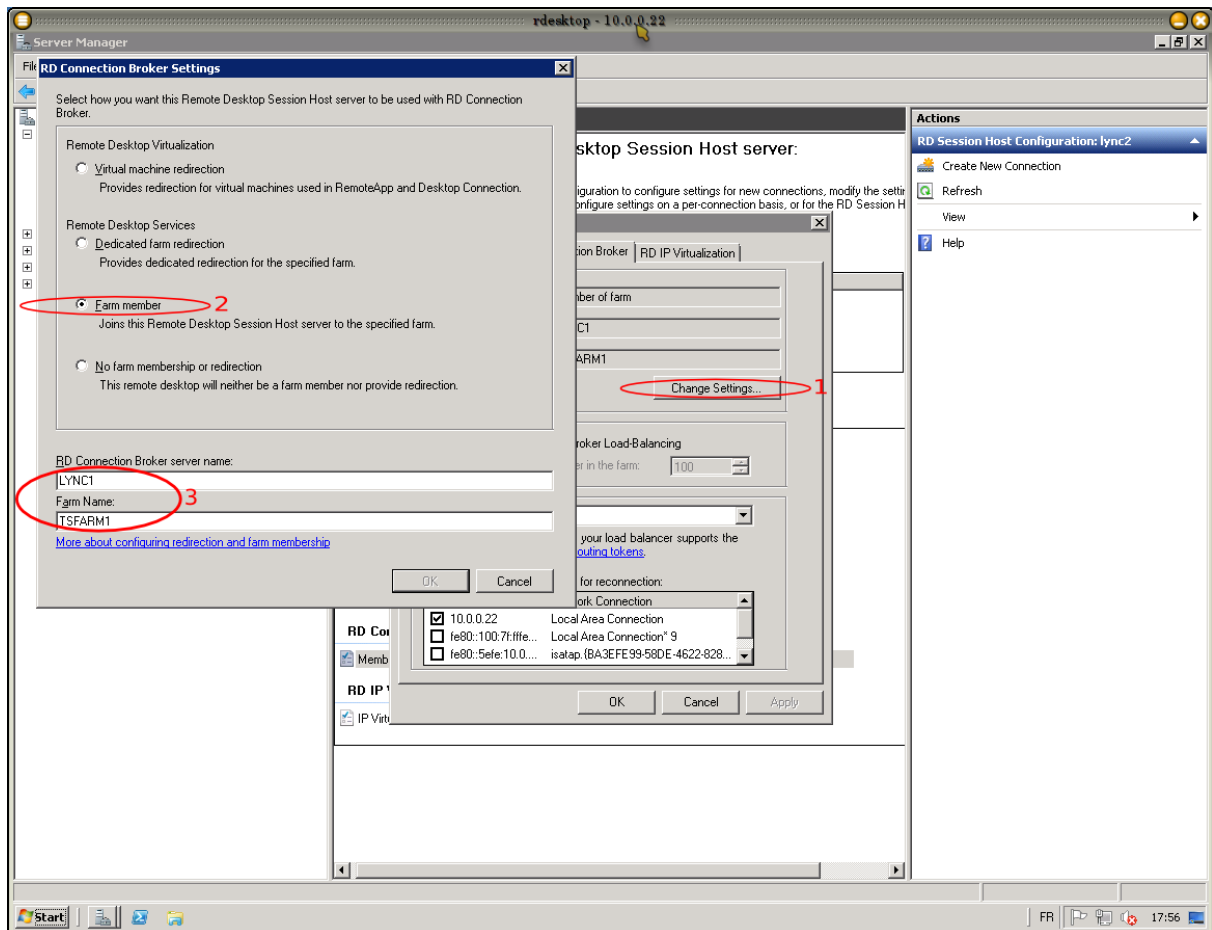
We now need to put each server in the appropriate "Farm", and specify which "Broker" is to be used.

In the "RD Session Host Configuration" menu item (1), double-click on "Member of farm in RD Connection Broker" (2).



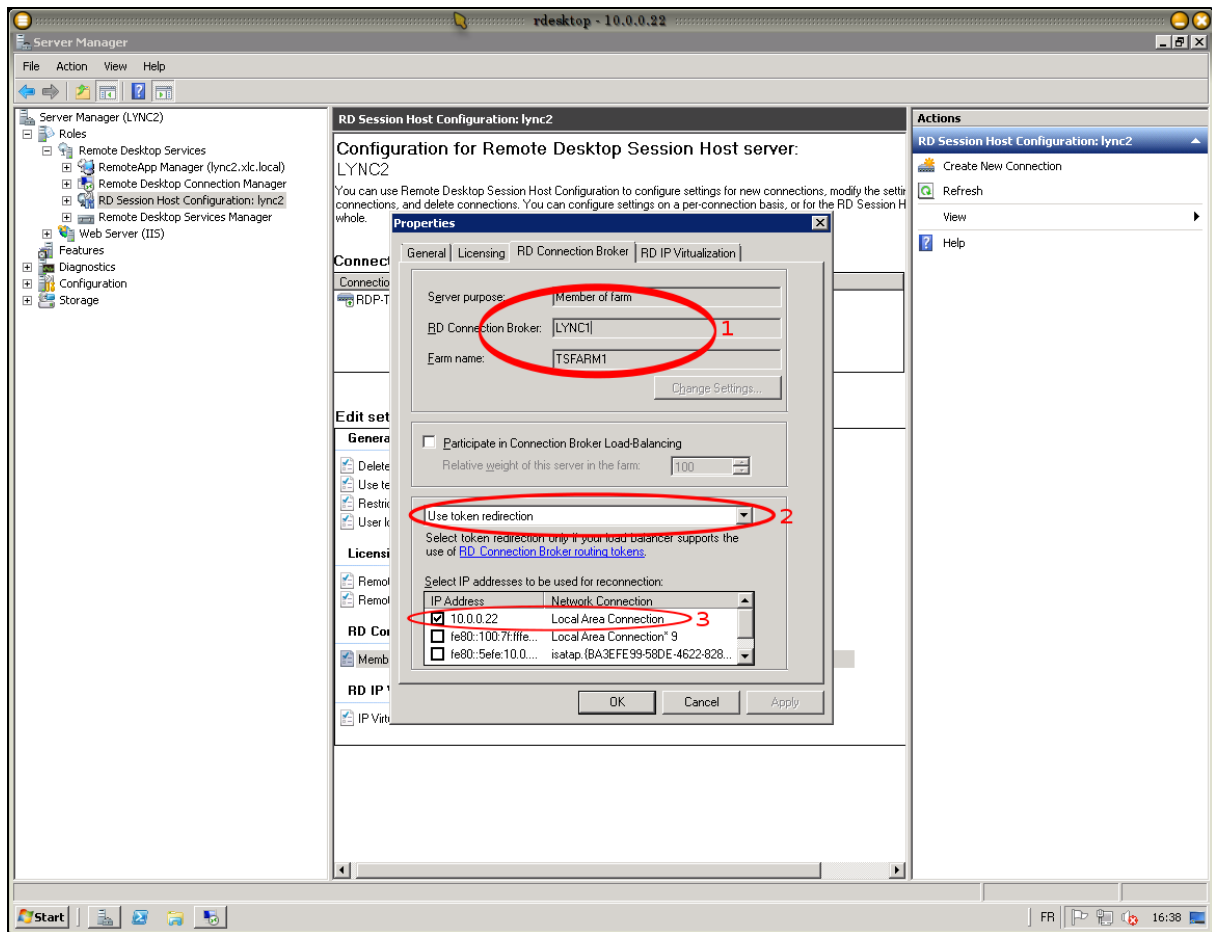
On the popup window, click on "**Change Settings...**" (1), a new window opens:

- Select "**Farm member**" (2)
- In the "**RD Connection Broker server name**" input field (3), write the name of the first server. You need to make sure that name resolution is operational.
- In the "**Farm name**" input field (3), write the name chosen for the server farm (any name would do, just make sure to use the same name on both server).
- Click on [OK].



The information you entered on the previous window should now be displayed in the **(1)** zone.

- Select **"Use token redirection"** in the dropdown menu **(2)**.
- Tick the checkbox corresponding to the main IP address in **(3)**.
- Click on **[OK]**.



## LAYER 7 CONFIGURATION

### ALOHA CONFIGURATION:

Add the following lines to the **LB Layer 7** configuration. The lines specific to Terminal Services load-balancing are the bold ones.

- Make sure to replace server names and IP addresses to match your setup.
- In the **Frontend** Section, choose the IP binding according to your needs

```
backend bk_ts
  balance leastconn
  mode tcp
  log global
  option tcplog
  default-server inter 3s rise 2 fall 3
  timeout server 300s
  persist rdp-cookie
  server LYNC1 10.0.0.21:3389 maxconn 1000 weight 10 check
  server LYNC2 10.0.0.22:3389 maxconn 1000 weight 10 check

frontend ft_ts
  bind /ssl:ft_ts accept-proxy
  bind 0.0.0.0:3389 name rdp
  mode tcp
  log global
  tcp-request inspect-delay 5s
  tcp-request content accept if RDP_COOKIE
  option tcplog
  timeout client 300s
  maxconn 1000
  default_backend bk_ts
```

Click on **[OK]**, then **[Apply]**.