



NCD ThinPATH Load Balancing
Version 2.11.7
Release Notes

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Revision History

April 28, 2003 NCD ThinPATH Load Balancing Release Notes V.2.11.7
March, 2003. NCD ThinPATH Load Balancing Release Notes V.2.8.1
January, 2000 NCD ThinPATH Load Balancing Release Notes V 2.07, Rev. C.
October, 1999 NCD ThinPATH Load Balancing Release Notes V 2.06, Rev. A.
May, 1999 NCD ThinPATH Load Balancing Release Notes V 2.01
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Introduction

This document provides information about issues and problems that may occur when using NCD ThinPATH™ Load Balancing.

Version Updates

Version 2.11.7 updates Load Balancing as follows:

- Only one file is now required to install ThinPATH Load Balancing where multiple files were provided earlier.
- This version supports the ThinPATH Executive license keys that also enable the other components of Executive.

Version 2.8.1 updates Load Balancing as follows:

- Only the component for NCD ThinSTAR devices has been updated. This component installs on a ThinPATH Portal server. The Portal then deploys the Load Balancing client software to ThinSTAR 500.NET and ThinSTAR legacy terminals. Details on installing this component on the Portal are included in the NCD Load Balancing Startup Guide.

Version 2.07 updates Load Balancing as follows:

- Supports the NCD ThinPATH Manager Configuration Tool to centrally define NCD ThinSTAR load balanced connections to servers and to configure load balancing.
- These features require NCD ThinSTAR Operating Software version 2.01 and NCD ThinPATH Manager version 1.01. You may refer to the NCD ThinPATH Manager documentation for more information about that product.
- Added support for NCD ThinSTAR 300TR. Requires NCD ThinSTAR Operating Software 2.0 or greater.
- Added auto login dialog to the NCD ThinSTAR Load Balance connection wizard.

Known Issues

1. NCD Client Services

Version 2.x Load Balance features are not supported consistently on Load Balance clients if you install Client Services 2.x in a domain with version 1.0 Load Balance servers.

In particular, the version 1.0 servers and the version 1.0 protocol do not support published applications. As a result, the Load Balance client cannot consistently display the list of published applications. To see the list of published applications, upgrade all Load Balance servers in the domain to version 2.x.

2. List of published applications

If version 1.0 Load Balance servers on the same subnet respond to a Load Balance request, they do not display the list of published applications. To see the list, direct the request to a version 2.x server.

3. NCD ThinSTAR Operating Software supported

NCD ThinSTAR Load Balancing is supported on ThinSTAR Operating Software version 1.11 and newer.

You can send Load Balance connections to NCD ThinSTAR terminals via the NCD ThinPATH Manager Configuration Tool only if NCD ThinSTAR Operating Software 2.01 is installed on the terminals.

4. Changing the server load factor calculation

The default server load factor calculation is based on the system load, the number of users, and the number of incoming session startup requests. The load factor can be modified to use different weight factors by setting the following registry entries.

Locate the following key:

```
[HKEY_LOCAL_MACHINE\Software\NCD\ClientServices\LoadBalance]
```

add the following values:

UserPercentage	DWORD	0-100	(default 33)
LoadPercentage	DWORD	0-100	(default 33)
IncomingPercentage	DWORD	0-100	(default 33)

These values set how much weight is applied to the number of users, the system load, and the number of incoming session requests, respectively. This change should be made to all servers with load balancing installed, not just one server.

The total should be 100.

When `UserPercentage` is set to 100, the server's load factor is based on the current number of active sessions (users logged in).

5. How Load Balance service uses maximum connection count values for a server

The Load Balance service diverts sessions from a server that has reached the maximum connection count.

You can review connection count values by selecting **Administrative Tools (Common) > Terminal Server Connection Configuration**, then double clicking a supported protocol.

The Load Balance service interprets counts for protocols as follows:

- If **Unlimited** is checked, the protocol is not included in the maximum connection count.
- If there is a connection count (and **Unlimited** is not checked), the protocol is included in the count.

The Load Balance service adds the connection counts for all of the supported protocols. This equals the maximum connection count for the server.

If all supported protocols allow unlimited connections, no maximum connection count applies.

If one protocol has a maximum connection count and another allows unlimited connections, the Load Balance service diverts sessions from the server after the maximum connection count for the restricted server.

As an example, suppose a server has two protocols, A and B. A allows a maximum connection count of 10 and 3 users are logged on. B allows unlimited connections and 2 users are logged on. The maximum connection count for the server is 10; the total number of users logged on is 5. After 5 more users log on, using either protocol, the Load Balance service diverts sessions from the server.

6. Ignoring disconnected sessions

If **all** of your load balance servers refuse disconnected sessions or remove them after a specified timeout (reset them), you can manually configure the Load Balance service to ignore disconnected sessions when starting a new connection. Ignoring disconnected sessions reduces processing on the servers in the target group and improves connection startup performance.

To ignore disconnected sessions, locate the following registry key:

```
[HKEY_LOCAL_MACHINE\Software\NCD\ClientServices\LoadBalance]
```

Add the following value:

```
NoReconnect      DWORD      1      (default 0)
```

Additional Documentation

Documentation is available on the NCD Web site at http://www.ncd.com/support/docs_thinpath.html, including:

ThinPATH Portal Administration Guide

ThinPATH PC Users Guide

ThinPATH Desktop Mirror Startup Guide