

Application Note for TPP

NAT or Multiple IP Configuration

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Introduction

If you want to use the Thick Client to access your TPP Server through a firewall and the firewall changes the TPP Server IP address, then you'll have to reconfigure your TPP Server as described in the "NAT Configuration" section.

A TPP Server, by default, will support communication over all IP addresses associated with its network cards. If you want only one of the IP addresses used for TPP communication, then see the "Multiple IP Configuration" section.

For both configuration changes below:

- The Thick Client can be the "installed version" (from your Desktop or Start Menu TPP icon) or it can be from the "Applet launch version" (accessible from a link on the TPP Web client).
- They require changes to the TPP Server's configuration.properties file, which is often located in the folder: c:\Program Files\Acterna FDM-250\cfg

NAT Configuration – Thick Client access when a firewall with NAT changed the TPP Server IP address

TPP uses RMI technology to allow Thick Client access, but RMI technology, by default, does not support NAT, Network Address Translation. If your server has different IP address when accessing from different location on the internet or your company intranet, then you are using NAT. By default, TPP will only work if the IP addresses associated with the Network cards on your Server are used by client PCs running the Thick Client.

All changes to the configuration.properties file require a restart of the TPP Server (Window's service name: fdm250Service).

Any thick client can be made to connect to the server running behind a firewall using NAT by entering the following in the server's configuration.properties file:

Firewall_IP=y.y.y.y

Note: "y.y.y.y" is the IP address of the firewall.

Port forwarding of 1099 for the TPP Server should also be configured on the Firewall.

Multiple IP addresses for Firewall_IP can be entered as a comma separated list (for multiple sub-nets).

Note: The addresses might not show up in the "About Dialog" because of insufficient width.

Firewall_IP=10.11.13.14, 10.11.15.26

Note: The last IP should not have a comma.

Multiple IP Configuration – Restrict access to 1 IP address when multiple exist

TPP supports servers with Multiple IP addresses by default for FTP, RMI, HTTP, and HTTPS communication.

This communication is for Thick Clients, Web Clients, and meter synchronization. To make the TPP Server communicate on only 1 fixed IP when multiple exist, enter the following in the server's configuration.properties file and **(re)run the installer** or follow the directions in the alternative method below:

Bind_IP=x.x.x.x

Note: "x.x.x.x" is the IP address.

Alternate method: avoid (re)running the installer after a Bind_IP change:

NOTE: Running the installer, if available, is much simpler than the following instructions. It is recommended that default values on installer pages be maintained during such an upgrade.

This section details the changes that must be made in TPP.

- 1) update Bind_IP as previously described
- 2) Stop the FDM250Service via the Windows Services Control Panel.
- 3) Via the Start menu of Windows, click run, then type
cmd.exe
click "Enter", and type the following in the command window (substituting your install directory, if needed):
cd c:\Program Files\Acterna FDM-250\bin
NOTE: The cmd window must be open with Administrator permissions, for Microsoft VISTA, this is done by locating the cmd.exe executable (See Start Menu – Programs – Accessories), right clicking it, and clicking "run as administrator".
- 4) Type the following in the command window:
updateWebapp.bat -all
- 5) Start the FDM250Service via the Windows Services Control Panel.