RUMBA

*System
Administrator Kit*

Getting Connected Guide

RUMBA 8.0

MICRO FOCUS

Contents

1 Introduction

RUMBA software, the PC-to-host connectivity system, gives you easy, complete, and transparent access to host applications. PC users working in the Microsoft Windows environment can use the appropriate RUMBA software to communicate with HP, UNIX, AS/400 and Mainframe hosts and host applications. RUMBA software combines the convenience, ease of use, and versatility of PCs with the power of HP hosts and host applications.

While this guide provides an overview of the core RUMBA Display and Printer connection capabilities, you can find more information specific to AS/400 connection options in Appendix A: Configuring the AS/400 Communications Utility of this guide, and in the AS/400 Client Applications guide.

- Configuration procedure
- Diagnostics and Troubleshooting

Who should read this guide

This guide was written to help system administrators configure and maintain RUMBA Display and Printer connections. It contains concise general information. For in-depth host-specific information, the guide points the user to the appropriate location in the RUMBA online help.

Advanced configuration settings for AS/400 and Mainframe

hosts

The APPC Configuration utility assists you in building a configuration file for the RUMBA SNA engine. This configuration file defines the elements: connections, AS/400 modes, remote and local logical units, CPI-C side information file, transaction programs, and conversation security.

▶ **For more information**

Other Connection Tools Guide

2 Configuration procedure

RUMBA can connect to a host system using a number of different interfaces. The interface you use depends on which ones your PC is configured to use. This chapter provides an overview of how to configure an interface.

▶ **Note**

The focus of this guide is on configuring connections for use with the RUMBA Display and Printer applications. Configuring connections for features such as AS/400 File Transfer and Shared Folders use the RUMBA AS/400 Communications dialog box. For more information on this application, refer to Appendix A: Configuring the AS/400 Communications Utility

Interface descriptions

AS/400 interfaces

The following table lists the interfaces that the AS/400 display supports.

	Function
Microsoft SNA Server	Connects to AS/400 hosts by using an existing network connection as a node. For example, an APPN connection between your PC and an AS/400 host can be used to access another mainframe host that does not have a direct physical connection to your PC.
MPTN (SNA over TCP/IP)	Connects to a mainframe host using SNA$^®$ or APPC to communicate over TCP/IP networks. The full capability of the RUMBA APPC engine is used over an existing TCP/IP backbone, linking client workstations to the host and providing transparent access to functions such as mainframe printing and file transfer.
RUMBA Router	Connects to an AS/400 host over a LAN or a direct physical connection. The RUMBA Router supports Advanced Peer to Peer Networking (APPN), and the Common Programming Interface for Communications (CPI-C)
TN5250	Connects to an AS/400 host using the Telnet protocol to send and receive 5250 data strings. TN5250 allows a 5250 terminal emulator to communicate over a TCP/IP network instead of an SNA network.

Table 2-1   RUMBA AS/400 Display and AS/400 Printer applications connection types

Mainframe interfaces

The following table lists the interfaces that the mainframe display supports.

	Function
Microsoft SNA Server	Connects to mainframe hosts by using an existing network connection as a node. For example, an APPN connection between your PC and a mainframe host can be used to access another mainframe host that does not have a direct physical connection to your PC.
MPTN (SNA over TCP/IP)	Connects to a mainframe host using SNA$^®$ or APPC to communicate over TCP/IP networks. The full capability of the RUMBA APPC engine is used over an existing TCP/IP backbone, linking client workstations to the host and providing transparent access to functions such as mainframe printing and file transfer.
TN3270	Uses a TCP/IP protocol stack to connect to a mainframe host via a Telnet server.

Table 2-2   RUMBA Mainframe Display and Mainframe Printer applications connection types

HP and UNIX interfaces

The following table lists the interfaces that the HP and UNIX displays support.

	Function
ASYNC	Connects to the host asynchronously, either directly or via a modem.
NSVT (HP only)	Connects to the host using a form of Telnet that supports block mode communications and screen fields. If the host is an HP 3000 running a version of the MPE operating system older than MPE V release 30, the patch NSSANT7 should be applied before attempting an NSVT connection.
Telnet	Connects to a remote host using an interactive, 8-bit communications session.

Table 2-3   RUMBA HP and UNIX applications connection types

General configuration procedure

You can connect to the host through modems or as part of a local-area network (LAN).

On the Settings tab, click Connection Configuration (Connection > Configure in the Classic interface) to configure the interface yourself. The online help provides step-by-step instructions for configuring each interface.

You should not need to change the system configuration of the workstations on which you run RUMBA HP.

▶ **For more information**

Installation Guide

Additional configuration for Kerberos single sign-on

If you intend to use Micro Focus RSS Secure Redirector Client to provide Kerberos single sign-on, some additional configuration may be required.

On Windows 7, the encryption type used by Kerberos authentication is disabled by default. To enable Kerberos authentication on Windows 7:

1. Log onto the computer as an administrator.

2. From the Control Panel, select Administrative Tools.

3. Open the Local Security Policy.

4. Navigate to Local Policies > Security Options and open the following policy:

    Network security: Configure encryption types allowed for Kerberos

5. Enable the DES-CBC-MD5 encryption type and click OK.

How to configure an interface

The following steps provide an overview of the process of configuring an interface in Rumba's Ribbon interface.

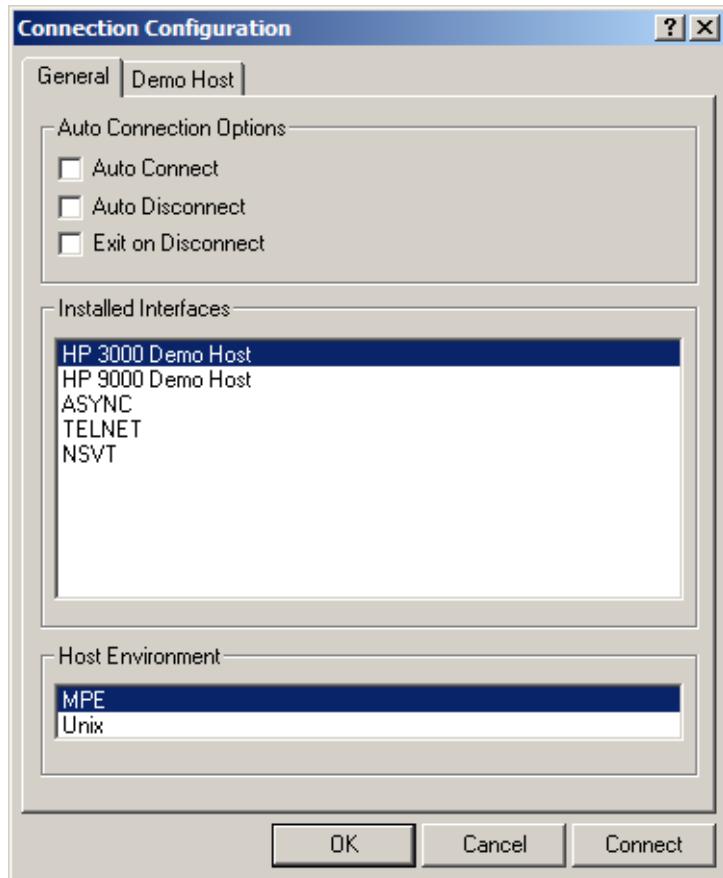1. From the Settings tab, click Connection Configuration. The Connection Configuration dialog box is displayed.

Figure 2-1   Connection Configuration dialog box

2. From the Installed Interfaces list, select the interface you will use. The tabs in the dialog box change to reflect your selection.

3. Enter the required information in the fields on each of the tabs.

4. When you are finished entering information, click OK.

To connect to the host, click Connect.

The Demo Host

The Demo host lets you communicate with a simulated host through a series of PC-to-host conversations previously recorded with the Data Stream Analyzer (DSA) Trace system.

The Demo host is especially useful for training purposes. You do not have to configure the host or the session parameters to use the demo host.

▶ **Warning**

These fields are initialized with defaults based on data from your current profile if available, or from system defaults. They are the recommended settings and should not be changed except for special circumstances. Selecting an inappropriate starting state could result in undesirable Demo Host behavior.

3 Diagnostics and Troubleshooting

This chapter introduces three tools you can use in diagnosing connection problems that your users may encounter when trying to establish a host connection.

Trace utility

Use the RUMBA Trace Console to trace and record RUMBA Display data streams. Because these trace options can have an impact on your system performance, it is best to use these options as a filter to sift through your communication sessions when you need to isolate a problem.

▶ **For more information**

Help topic: RUMBA Utilities > RUMBA Trace Console

Event Logger

Use the RUMBA Event Logger to record session events. An event is any significant occurrence, whether a fatal or non-fatal session error. RUMBA Event Logger works in the background collecting information, and RUMBA Event Viewer collects this information at timed intervals, which you can set. The RUMBA Event Viewer then keeps an event log organized by Data, Time, Source, Event ID, Type, and Computer. The RUMBA Event Logger is very similar in appearance and functionality to the Windows Event Logger.

RUMBA Communication Monitor

You can use the RUMBA Communication Monitor as a tool to understand more about your Control Point, links, and sessions. It serves as a means of viewing a dynamic "snapshot" of the configuration elements currently active on your workstation. In other words, what facets of your configuration are active, and what are they doing right now?

The RUMBA Communication Monitor gives you a snapshot of network activity in a two part screen. The left half shows the Control Point and active and inactive links and sessions, while the right half of the screen provides you with more detailed information about your Control Point, links, and sessions.

The RUMBA Communication Monitor is a valuable utility that helps you monitor, troubleshoot, and optimize your network. You can even view system links you have not configured with the RUMBA Communication Monitor.

▶ **For more information**

Other Connection Tools Guide

Error messages and troubleshooting

Most error messages for RUMBA software are well documented in the online help. The easiest way to find a specific error message is by opening the online help and searching for the error message. The corresponding help topic contains information about possible causes of this problem and its resolution.

4 AS/400 Connections: Configuring a Microsoft SNA Server Connection

This chapter discusses aspects of configuring a host connection using the Microsoft SNA Server protocol.

About Microsoft SNA Server

In this guide, the Microsoft SNA Server interface is described as a LAN gateway connection type.

Before running RUMBA software with the Microsoft SNA Server interface, you must run the Microsoft-supplied configuration utility and configure the workstation as an APPC client. Also, you must run the supplied **snabase.exe** utility to start communication between the workstation and the Microsoft SNA Server.

5 AS/400 Connections: Using the RUMBA Router to Configure an APPC Link

The RUMBA Router supports Advanced Peer to Peer Networking (APPN), and the Common Programming Interface for Communications
(CPI-C). Workstations using the RUMBA Router can connect to AS/400s over a LAN or direct physical connection.

This chapter provides an overview of the procedures used to specify the settings for a host connection using the RUMBA Router.

Overview of RUMBA Router

Using the RUMBA Router provides you with support for a wider range of client-based applications and connectivity types. By processing API commands on the client workstation, RUMBA Router takes advantage of the benefits of distributed computing to enhance both the performance and flexibility of the applications you use to interact with your AS/400 host.

When you select the RUMBA Router, the Connection Configuration dialog box displays the RUMBA Router tab and the Security tab, in the second and third tab positions.

When you click the RUMBA Router tab and add a new connection, you see the Link Configuration dialog box. The Link Configuration dialog box has three tabs:

- the first is always AS/400 Link

- the second one changes to name the link type that you select

- the third is always Advanced

Connection Configuration dialog box

Workstation users normally use this method rather than the RUMBA APPC Configuration utility or the RUMBA AS/400 Communications utility to configure the connection from an AS/400 display or printer session. The RUMBA APPC Configuration utility is more suited for creating configuration files for SNA interfaces, and the RUMBA AS/400 Communications utility is used to configure host connections for RUMBA Client Applications.

The installed interfaces that display on the Connection Configuration dialog box include the Demo host, RUMBA Router, TN5250, and Microsoft SNA Server (if the SNA client is installed).

▶ **For more information**

Help topic: Connecting to a host > Connecting to an AS/400 host

Setting up connections with the RUMBA Router generally involves these three steps:

1. Configure the RUMBA Router interface.

2. Choose a link or connection type.

3. Configure the link type.

The settings you can specify vary widely depending on which link type you choose. Refer to the online help for more details.

RUMBA Router link types

To configure an AS/400 RUMBA Router link, you access the Link Configuration dialog box via the RUMBA Router tab of the Connection Configuration dialog box.

Link Configuration dialog box

The Link Configuration dialog box has three tabs:

• the first is always AS/400 Link

• the second one changes to name the link type that you select

• the third is always Advanced

The Link Configuration dialog box tabs are the same regardless of which link type you use for your host connection. These tabs are:

• AS/400 Link tab

• Advanced tab

Link type descriptions

The following table lists the link types that the RUMBA Router supports.

	Function
APPN	Connects to an AS/400 host by using an existing network connection as a node. For example, an APPN connection between your PC and an AS/400 host can be used to access another AS/400 host that does not have a direct physical connection to your PC.
MPTN (SNA over TCP/IP)	Connects to an AS/400 host using SNA® or APPC to communicate over TCP/IP networks. The full capability of the RUMBA APPC engine is used over an existing TCP/IP backbone, linking client workstations to the host and providing transparent access to functions such as AS/400 printing and file transfer.

Table 5-1   RUMBA Router Connection types

6 AS/400 Connections: Configuring an MPTN Connection

The options you can specify with the third Link Configuration dialog box tab vary a great deal depending on which link type you use. This chapter discusses some aspects of configuring a host connection using the RUMBA Router and an MPTN link type.

▶ **For more information**

Online help section: Connecting to a host > Connecting to an AS/400 host > SNA Server > Configuring SNA over TCP/IP (MPTN).

About MPTN

In this guide, the MPTN interface is described as a LAN direct connection type.

Multi Protocol Transport Networking (MPTN) is an open architecture that allows integration of multiple-vendor and multiple-protocol environments.

The primary advantage MPTN has for users of existing RUMBA software products is that this new interface allows you to use either SNA or APPC to communicate over TCP/IP networks. This means that you can use the **full capability** of the RUMBA APPC engine over your existing TCP/IP backbone. Effectively, this links your client workstation directly to the AS/400, providing transparent access to functionality, such as AS/400 printer and file transfer.

RUMBA MPTN supports various APIs:

- EHNAPPC

- CPIC

- APPC

Various applications work with RUMBA MPTN:

- Database Applications

- Printer Configurations

- AS/400 Display

- AS/400 File Transfer

AS/400 considerations

Before you can connect to an AS/400 using the MPTN interface, the AS/400 must be set up to use the TCP/IP protocol. In order for your AS/400 to communicate using TCP/IP, it must be running OS/400, Version 3.0, Release 1 (or later). **This is an absolute requirement.**

Earlier versions of the operating system do not allow you to properly configure TCP/IP addresses for either your AS/400 or your client workstations.

7 AS/400 Connections: Native TCP Support

RUMBA AS/400 software supports access via native TCP for a number of client applications. With the implementation of this feature, RUMBA software provides support for the complete range of client applications. Companies moving to TCP/IP networking can still give their users access to key AS/400 applications which are important for user productivity.

The following topics are discussed in this chapter:

- RUMBA TCP architecture
- Supported RUMBA components
- Configuring a TCP connection
- Trace support for TCP applications

RUMBA TCP architecture

The following figure depicts the data flow from your workstation to your AS/400.
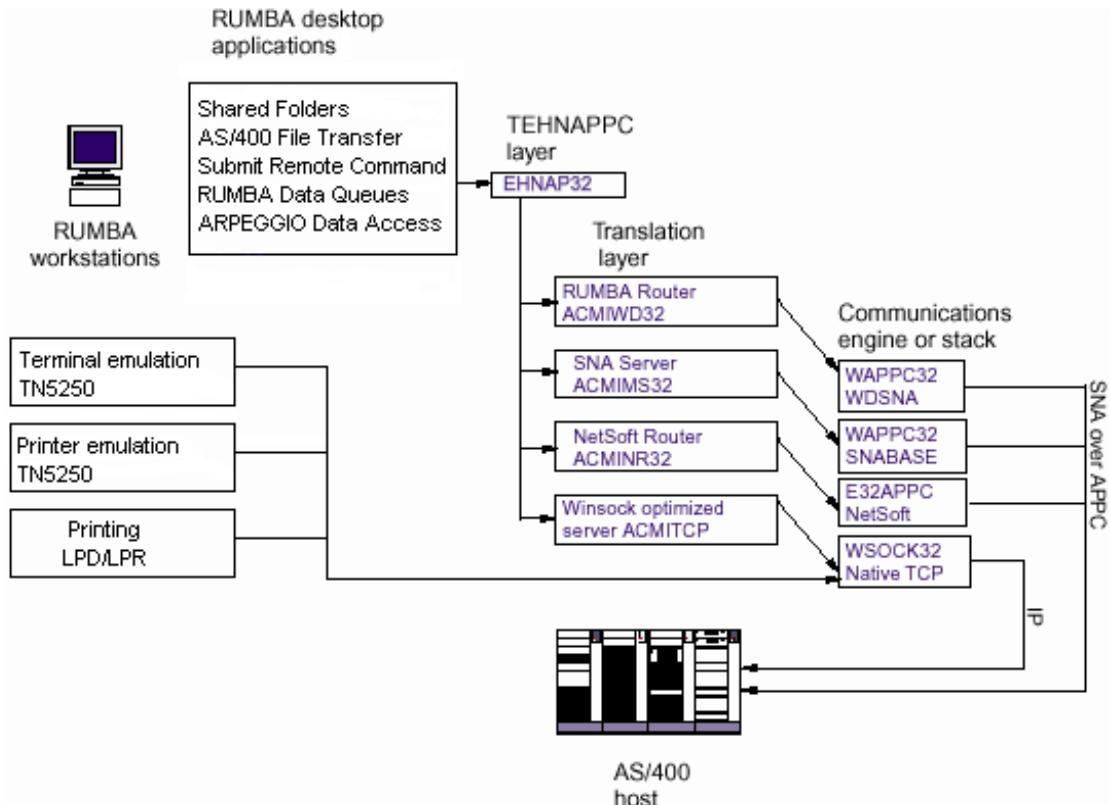
Figure 7-1   Client to host data flow

RUMBA AS/400 software's Winsock support makes it possible for you to use your existing TCP/IP connection as the link between AS/400 File Transfer or Submit Remote Command and your host.

RUMBA AS/400 Display and AS/400 Printer provide display and printer support directly over TCP/IP as well.

Supported RUMBA components

The following table details the functions performed by RUMBA software components that use native TCP.

Function
Display
RUMBA AS/400 Edition Display & TN5250 interface — Presents the traditional AS/400 display terminal in a Microsoft Windows application: the RUMBA window. Users can run multiple host sessions, displaying and working with host applications simultaneously.
Printing
RUMBA AS/400 Printer — Includes standard features such as: AS/400 printer queues, PC printer queues, and print log. *Note: Printing with TCP/IP is now available using TN5250.*
File Transfer
AS/400 File Transfer — Transfers files or selected data between the AS/400 host and your PC.

Table 7-1   Supported RUMBA Components

Configuring a TCP connection

The procedure for configuring your host connection depends on which desktop application you use. Refer to the following list for the procedures you need to configure your connection.

If you plan to use:	Refer to this Administrator Guide
Data Access	Use the 32 bit ODBC program, which resides in the Control Panel, to define and manage a data source for the RUMBA AS/400 Optimized Server ODBC driver. Click the Configure RUMBA APPC button if you need to configure a RUMBA APPC connection.

▶ **For more information**

Other Connection Tools Guide
Chapter 5: RUMBA AS/400 Communications Utility

If you plan to use:	Refer to this Administrator Guide
TN5250	Use the Connection Configure dialog box to configure a RUMBA Router TN5250 host link

▶ **For more information**

Chapter 7: Configuring a TN5250 Connection

Trace support for TCP applications

To obtain trace data from your host connection use the RUMBA Trace Utility.

▶ **For more information**

RUMBA Tools Guide

Appendix A Configuring the AS/400 Communications Utility

Overview of RUMBA AS/400 Communications Utility

You use the RUMBA AS/400 Communications Utility to configure host connections for:

- AS/400 File Transfer

- Data Queues API

- Submit Remote Command API

Configurations are saved as a file with an **.ehn** extension. You can create multiple configuration files for each interface that you use.

Connecting to the host

The connection procedures in this appendix provide an overview of the process of the tasks you must complete in order to configure an AS/400 interface for the first time.

To access the AS/400 Communications Utility for file transfers:

• Click Start> All Programs > Micro Focus Rumba, and choose the
AS400 File Transfer option.

To access the AS/400 Communications Utility for client
applications:

• Click Start> All Programs > Micro Focus Rumba > Rumba Tools, and
click RUMBA AS400 Communications.

Connecting the Connection Utility to the host involves the following tasks
once you are at the RUMBA AS/400 Communications dialog box.

1. Click the Interface tab.

2. In the Installed Interface box, select an interface.

3. Click Configure, and then configure the interface.

Use the four tabs of the RUMBA AS/400 Communications dialog box to
configure your connection for different types of interfaces, set security
options, support an array of character sets, and display error messages for
diagnostic purposes.

▶ **For more information**

Online help section: RUMBA Utilities > RUMBA AS/400 Communications

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