

## **RUMBA® 95/NT - NetWare® for SAA® NDS Support**

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<b>Product:</b>	RUMBA 95/NT for the Mainframe	<b>NIC:</b>	N.A.
	RUMBA OFFICE 95/NT	<b>Interface:</b>	N.A.
<b>Version:</b>	5.2 with PTF SAA52003 or later	<b>Oper Sys:</b>	Microsoft® Windows® 95 Microsoft Windows NT®
<b>Host:</b>	Mainframe		

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## Summary

The RUMBA 95/NT Mainframe NetWare for SAA interface allows users to connect to IBM® mainframe hosts via NetWare SAA gateways. PTF SAA52003 introduces a new feature to this interface that enables RUMBA 95/NT software to retrieve the required connectivity parameters from Novell® Directory Services (NDS), thereby relieving NDS users from having to manually configure the interface. The “Administrative Requirements” section of this technical bulletin explains how to modify the NDS schema to support this feature.

## User Interface

A graphical, “point-and-click” user interface (UI) using Windows *tree* and *list* controls has been added to the interface configuration dialog box to display SAA 3270 configuration information found in NDS. You navigate by expanding and collapsing items in the tree control. When you select an item in the tree control, configuration properties related to that item are displayed in the list control appearing immediately to the right. This behaves much like the REGEDIT program used for viewing and editing registry entries. Unlike REGEDIT, however, the SAA configuration properties cannot be modified using this interface.

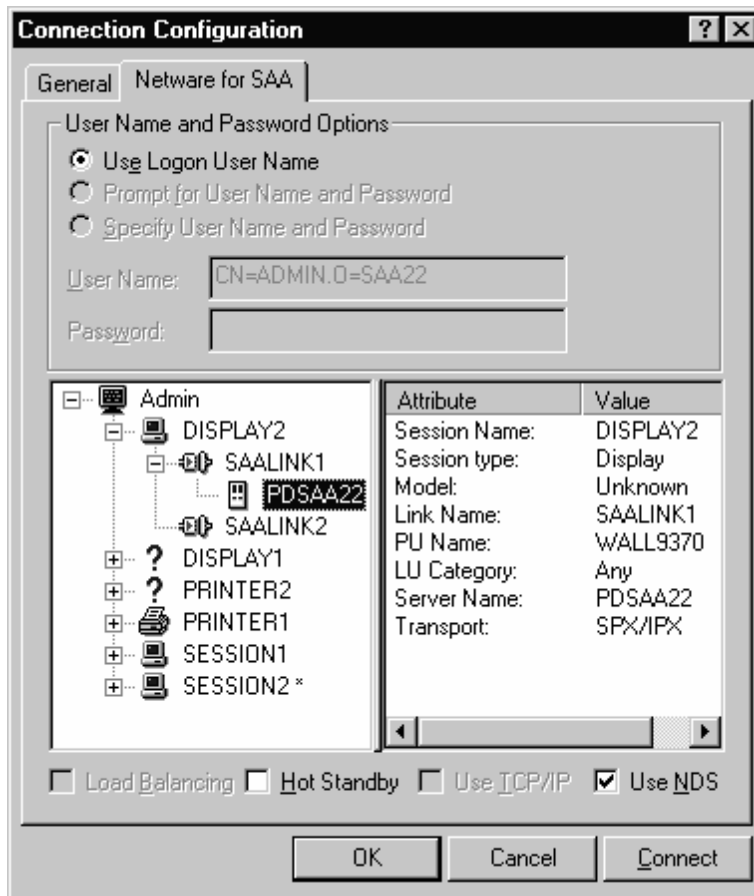


Figure 1. Dialog layout when using the NDS feature.

Note that when you apply PTF SAA52003 or later, the “Use NDS” checkbox is added to the dialog box. When this is checked, the tree and list controls become visible in the configuration dialog box as shown above.

When NDS is not being used, the dialog box layout appears as in the following screen shot.

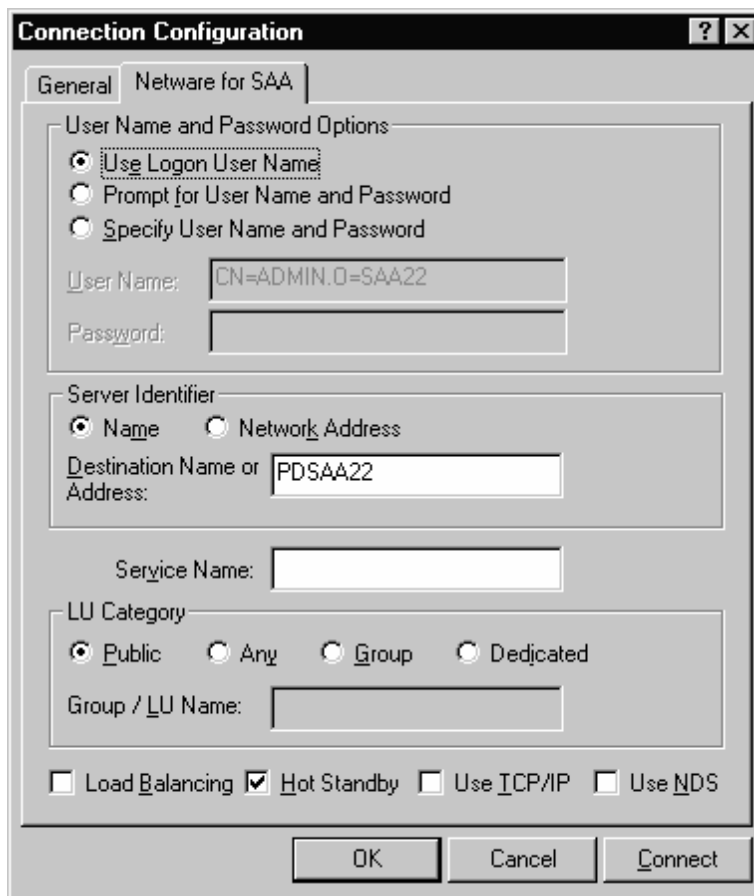


Figure 2. Dialog layout when NDS is not used for configuration.







In order to use the new NDS feature, you must be logged into an NDS tree whose schema has been modified to store SAA 3270 configuration data and the “Use Logon User Name” option at the top must be chosen. Otherwise, the “Use NDS” checkbox is disabled.

The “Load Balancing”, “Use TCP/IP”, and “Use NDS” features are all mutually exclusive. When one of these check boxes is checked, the others are disabled.

### Configuration Parameters (Tree/List Control Items)

SAA session configurations are presented in a hierarchy as items in the tree control. These items appear as icons along with the name of the item as configured in NDS by the administrator.

**Icon Name and Definition**

-  **NDS user.** A logon screen icon and a network login name identify the NDS user. No properties are displayed in the list control window when this item is selected.
-  **Display Session.** Specifies that configuration parameters apply to a RUMBA display session (as opposed to a session printer). Properties appearing in the list control on the right include Session Name, Session Type, and Model Number.
-  **Printer Session.** Specifies that configuration parameters apply to a RUMBA printer session. Properties appearing in the list control on the right include Session Name and Session Type.
-  **Data Link.** Link items represent the host service profile and LU configuration that is used when connecting to a mainframe host through an SAA gateway. The properties that appear in the list control when this item is selected are the same properties that would be used to manually configure the SAA interface when not using NDS. They include PU Name (Service Profile), LU Name, and LU category and appear along with the session properties.
-  **Server.** Represents an SAA server (gateway) that is part of the NDS tree that the user is logged into. The server name and the supported network protocol appear as properties in the list control when this item is selected along with the corresponding link and session properties.
-  **Undefined session type.** A question mark icon is displayed if the session type was not defined when the session was configured. These sessions are displayed merely for informational purposes. RUMBA software will ignore them when attempting to connect.

The *user*, *session*, *link*, and *server* items in the tree control represent a hierarchy, with *user* being the top or the root of the hierarchy. A user may have many 3270 sessions (display or printer) configured in NDS. Each session may contain a list of links. Each link may contain a list of servers. In terms of the information that RUMBA software uses when connecting to a host, selections made lower in the tree are more restrictive than selections made at a higher level.

## Choosing and Saving Configuration Parameters

When using the NDS feature, you choose SAA interface configuration parameters by clicking items that appear in the tree control. The properties that appear in the list control on the right represent the actual configuration parameters that are used to establish a host session when a connection attempt is made.

You can expand session and link items in the tree control to allow further qualification. When you click “OK” or “Connect,” the dialog box closes and information for the selected item is saved in the WDNOVSAA.CFG file. For selections made at the *session* level, RUMBA software stores only the session name. Selections made at the *link* level store the link name and the name of the session to which it belongs. Selections made at the *server* level store the server,

link, and session names. RUMBA software reads this information and matches it against the current NDS settings when attempting a host connection.

## Rules for Connecting Using NDS Information

When attempting to connect to a host, RUMBA software extracts your *current* SAA 3270 settings from NDS and compares them with the contents of the WDNOVSAA.CFG file to determine which configuration parameters (Server Name, Service Profile, LU, etc.) to use.

The following rules are obeyed when attempting a host connection.

1. If the *user* item at the top was chosen, RUMBA software will traverse the links in each session (and the servers within the links) until it succeeds at connecting or until it has tried all session/link/server combinations.
2. If a *session* item was chosen, the connection attempt is restricted to just those links (and any servers within the link) for that session.
3. If a *link* within a session was chosen, only that link is used in the connection attempt. If the link has a server list, only the servers in that list will be tried.

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**NOTE:** It is not necessary for a link to have a server list associated with it. In this case, any SAA server that RUMBA discovers will be available. It is equivalent to manually configuring the interface with an asterisk in the Server Name field.

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4. If a *server* item was chosen, RUMBA will attempt to connect using only the information for that session/link/server combination.

## New DLLs

PTF SAA52003 introduces the WDSAANDS.DLL file, which gets installed in the MFRAME sub-directory of the RUMBA OFFICE 95/NT installation directory (that is, Program Files\Wall Data\mframe). In addition, IBM supplies two DLLs that are required to enable this feature: SAANDSX.DLL for Windows 95 users and SAANDSN.DLL for Windows NT users. These DLLs are part of the NetWare 3270 Client Administration toolkit and should be installed in the Windows SYSTEM directory. Currently, NetManage is not licensed to bundle these modules with its products, so customers must procure them through IBM. (IBM has an agreement with Novell to do all sustaining and future development associated with SAA gateways.)

## Administrative Requirements

For this feature to work, customers must apply PTF SAA52003 to the RUMBA installation on the PC and modify the NDS schema on their Novell servers to store SAA 3270 configuration data. Once the NDS schema is modified, the NetWare system administrator must enter 3270 session data for users who want to use this feature.

In order to modify the NDS schema so it can store SAA 3270 configuration data, the administrator needs to install the 3270/LUX “snap-in” (an add-on feature) to the NetWare Administration client. The snap-in updates the NDS database structure to enable SAA 3270 data storage. It also adds new dialog boxes to the administration client that enable the administrator to add, delete, and edit 3270 configuration data. This process involves only Novell and IBM SAA software and does not involve NetManage software.

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