Adding or Editing a Port

User-defined ports can be added or edited.   System defined ports can only have the use port field changed.

To add a user-defined port, click on the Add button.   To edit a port, user-defined or system, move the highlight bar to the port to edit and click on the Edit button.

When adding a user-defined port, the Add Port window will appear with default values. When editing a port, the Configure Port window will appear with the current values for the port.   If a system port is being edited, all fields except the usage field will be dimmed. Only the usage field may be modified for a system port.

The configuration parameters are described below.

The **Use this port?** field is a radio button selection.   If Yes is selected, the Sentinel Driver will search this port for keys otherwise the port will not be searched for Rainbow keys.   The value for this field does not effect any other operation on this port.   For example, printing can always occur to the parallel port regardless of the **Use this port?** field value.

The **Bus Address** is computer dependent and for **Intel** machines is usually one of the hexadecimal values 3bc, 378 or 278.

The **Bus Number** defaults to 0 and will generally not be modified.   The list box allows selecting another **Bus Number** if necessary.

The **Bus Type** allows selecting the computer bus type from the list box.   Most **Microsoft Windows NT** capable machines are either ISA (Standard AT bus), MicroChannel (usually IBM PS/2s), or EISA.

The **Address Space** defaults to I/O and is generally not modified for parallel ports.

The **Port Type** describes the parallel port as seen by the Sentinel Driver.
Note! In most cases, you do not need to modify this setting.
> **Autodetect -** The Sentinel Driver automatically determines the port type.
> **NEC (Japan) -** This type of port is found on NEC systems built for the Japanese market.
> **FMR (Japan) -** This type of port is found on Fujitsu systems built for the Japanese market.
> **IBM AT -** This type of port is the AT-compatible port found on most systems.
> **PS2 w/ DMA -** This type of port supports DMA.   Examples are Type 2 and Type 3 ports found on IBM PS/2 systems.

The **Port Ownership Method** specifies the method used to acquire ownership of the port.

Note! In most cases, you do not need to modify this setting.

Auto - This method directs the Sentinel Driver to use the method(s) that it determines

to be best.   Use this method unless you experience problems.

System - This method uses the Windows NT port allocation feature

(available in Windows NT version 3.5).

Raise Priority - This method raises the priority of the process using the Sentinel Driver.

The **Acquisition Timeout** specifies how long the Sentinel Driver will wait for the port if it is in use by another program.

Following are valid entries for this field:

0:   Do not wait for the port if it is not available.

1 - 2,147,483,647:   Wait for the specified number of milliseconds to acquire the port.

-1: Wait as long as necessary to acquire the port.

If the configuration is changed, it will be necessary to reboot for the new configuration to take effect.

If there is an error in the configuration, it will not be detected until the system is rebooted.   If an error is detected,   Rainbow keys will not be able to be accessed on the parallel port having the configuration error.

Overview

The Sentinel Driver provides access to Rainbow keys for **Windows NT** applications.

The Sentinel Driver is self-configuring, and for most systems does not require configuration by the user.   However, if your system should require configuration, the process is outlined below.

 1.   The Sentinel Driver locates all ports which are known to **Windows NT** and configures these ports automatically.   These ports are shown as System ports.

 2. If a port does not exist in the Parallel Ports list or a system port has incorrect information, then a user-defined port can be defined.   Most systems will not require a user-defined port.

 3. Each port, system or user-defined, has a usage field which can be set.   The usage field is initialized to Yes.   The usage field   informs the Sentinel Driver whether or not to search the port for a Rainbow key.

 4.   After the configuration is completed, **Microsoft Windows NT** must be rebooted for any changes to take effect.

If the configuration requires further modification, enter the Control Panel and select Drivers to view the driver list. Select the Sentinel Driver from the driver list and then select the **Setup** button to display the Sentinel Driver Parallel Ports list window.

Removing a Port

Only user-defined ports may be removed.

To remove a port, move the highlight bar to the port to be removed and click   on the Remove button.   Since only user-defined ports can be removed, the Remove button is only active when the highlight bar is on a user-defined port otherwise the Remove button is dimmed.

Sentinel Driver

The Sentinel Driver allows 32 bit **Windows NT** applications   to access Rainbow keys connected to system parallel ports.

More Information
Overview
Adding or Editing a Port
Removing a Port