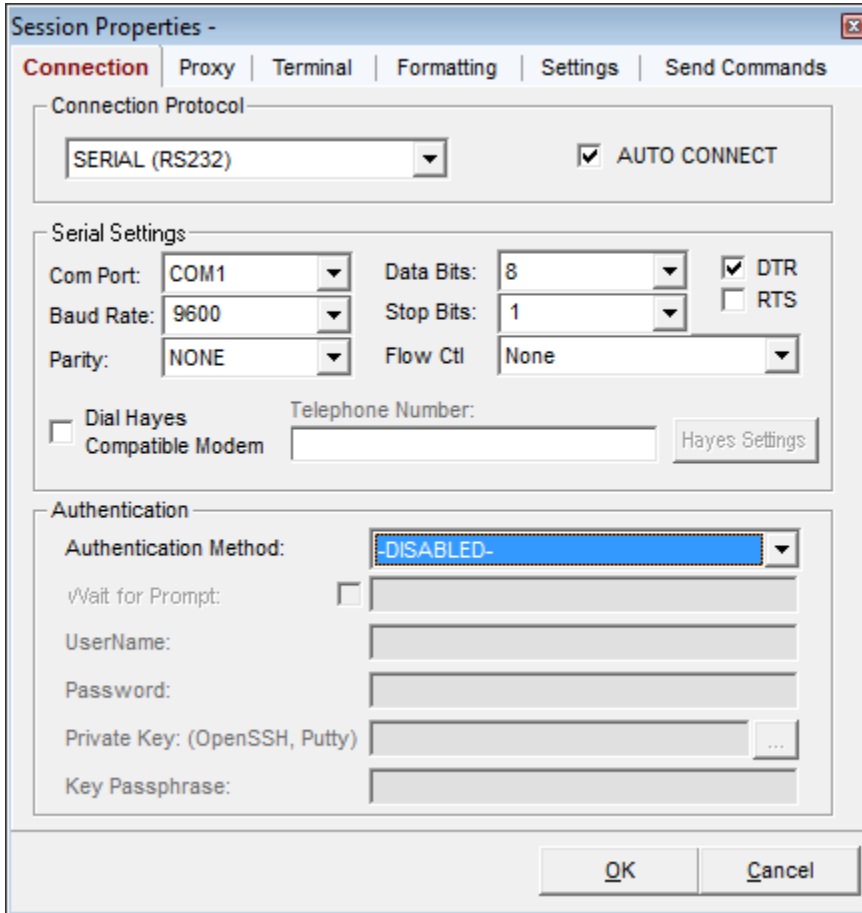


Serial Connection Settings

Serial Connection Settings

Each of the serial connection options: [RS-232](#), [RS-422](#), [RS-485](#) use the same configuration dialog and settings.



(For more information on other session property configuration tabs, please see [Session Properties](#).)

The following serial configuration settings are available to properly setup your device connection and terminal session.

Setting	Description
Auto Connect	If this option is enabled, then the terminal session will attempt to establish a connection immediately when opened in Indigo.

Com Port

Select the com port that is connected to the target device you wish to communicate with.

This field will list the available serial com ports that have been detected on this computer.

(If your com port is not listed, you can override Indigo's automatic detection, please see the Com Ports tab in [Program Preferences](#))

Indigo supports com ports addressed up to 256.

Baud Rate

Select the required [baud](#) rate for the device you are connecting to.

If you are not sure what baud rate to select, please refer to the documentation for the device you are attempting to communicate with.

(The baud rate in Indigo must match the baud rate that the connected device expects.)

Indigo supports the following baud rates:

Standard Edition	Professional Edition
<ul style="list-style-type: none">• 75• 110• 134• 150• 300• 600• 1200• 1800• 2400• 4800• 7200• 9600• 14400• 19200• 28800• 38400• 57600• 76900• 115200	<ul style="list-style-type: none">• 128000• 230400• 460800• 921600 <p>(User defined custom baud rates)</p>

(The serial port hardware and serial drivers must support the baud rate for Indigo to apply it successfully.)

Parity

Select the required [parity](#) for the device you are connecting to.

If you are not sure what parity to select, please refer to the documentation for the device you are attempting to communicate with.

(The parity in Indigo must match the parity that the connected device expects.)

Indigo supports the following parity options:

Parity
NONE
EVEN
ODD
MARK
SPACE

Data Bits

Select the required data bits for the device you are connecting to.

If you are not sure what data bits to select, please refer to the documentation for the device you are attempting to communicate with.

(The data bits in Indigo must match the data bits that the connected device expects.)

Indigo support the following Data Bit options:

Data Bits
4
5
6
7
8

Stop Bits

Select the required stop bits for the device you are connecting to.

If you are not sure what stop bits to select, please refer to the documentation for the device you are attempting to communicate with.

(The stop bits in Indigo must match the stop bits that the connected device expects.)

Indigo support the following Stop Bit options:

Stop Bits
1
2

Flow Control

Select the required flow control for the device you are connecting to.

If you are not sure what flow control to select, please refer to the documentation for the device you are attempting to communicate with.

(The flow control in Indigo must match the flow control that the connected device expects.)

Indigo supports the following Flow Control options:

Flow Control	Hardware	Software
None		
XON/XOFF (Software) ¹		✓
RTS/CTS (Hardware) ²	✓	
RTS/CTS and XON/XOFF	✓	✓
DTR/DSR	✓	
DTR/DSR and XON/XOFF	✓	✓
CTS/DSR	✓	
CTS/DSR and XON/XOFF	✓	✓

Most modern devices do not use flow control; however, if you are using a device that required *Hardware Flow Control* please make sure that you have the correct cable connected between the computer's serial port and the device.

Hardware flow control requires additional connected pins and may not work with if the proper cable is not connected. Please consult your device documentation for details on the cabling required.

¹ The most common form of software flow control is the [XON/XOFF](#) option. If your device documentation just says Software Flow Control, then most likely it is referring to [XON/XOFF](#).

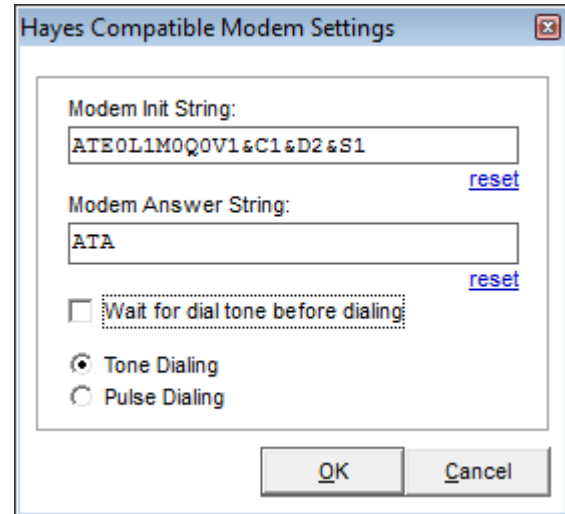
² The most common form of hardware flow control is the [RTS/CTS](#) option. If your device documentation just says Hardware Flow Control, then most likely it is referring to [RTS/CTS](#).

DTR	<p>If you wish to force the Data Terminal Ready pin to the ON/OFF state, then you can enable/disable this configuration setting.</p> <p><i>If using hardware flow control option with DTR, then this override setting may not be applied since DTS is part of the hardware flow control logic.</i></p>
RTS	<p>If you wish to force the Request To Send pin to the ON/OFF state, then you can enable/disable this configuration setting.</p> <p><i>If using hardware flow control option with RTS, then this override setting may not be applied since RTS is part of the hardware flow control logic.</i></p>
Dial Hayes Compatible Modem	<p><i>This feature is only available in the Professional Edition.</i></p> <p>If this option is enabled, then the Indigo Terminal Session will attempt to communicate to a Hayes Compatible modem via the serial port to dial a remote connection using a telephone line.</p> <p>If enable, then a telephone number must be provided.</p> <p><i>If your modem is recognized by Windows as a TAPI-compliant modem, then using the Indigo Dial-Up connection may be a simpler method for creating a dial-up connection terminal session.</i></p>
Telephone Number	<p><i>This feature is only available in the Professional Edition.</i></p> <p>If the <i>Dial Hayes Compatible Modem</i> option is enabled then a telephone number must be provided to establish a modem connection to a remote host.</p>

Hayes Settings

This feature is only available in the Professional Edition.

If the *Dial Hayes Compatible Modem* option is enabled then this configuration button will be available to configure custom modem initialization and answer strings as well as tone versus pulse dialing options.



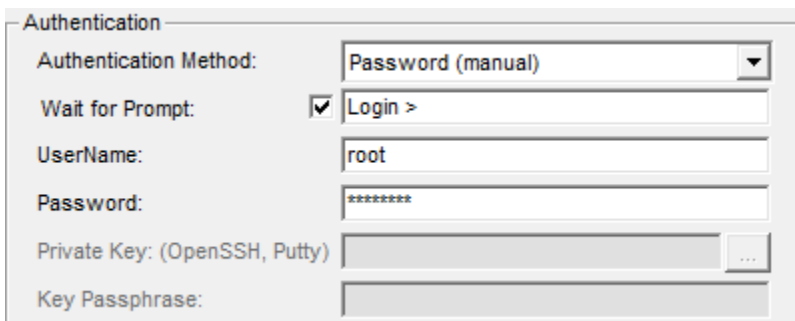
The screenshot shows a dialog box titled "Hayes Compatible Modem Settings". It contains the following fields and options:

- Modem Init String:** A text box containing "ATE0L1M0Q0V1&C1&D2&S1" with a "reset" link to its right.
- Modem Answer String:** A text box containing "ATA" with a "reset" link to its right.
- Wait for dial tone before dialing:** A checkbox that is currently unchecked.
- Tone Dialing**
- Pulse Dialing**

At the bottom of the dialog are "OK" and "Cancel" buttons.

Serial Connection Authentication Options

When using a serial connection, Indigo can provide an option for automated password authentication. Serial communication does not have an intrinsic support for authentication so this is a complete software implementation feature.



The screenshot shows an "Authentication" dialog box with the following fields:

- Authentication Method:** A dropdown menu set to "Password (manual)".
- Wait for Prompt:** A checked checkbox followed by a text box containing "Login >".
- UserName:** A text box containing "root".
- Password:** A text box containing "*****".
- Private Key: (OpenSSH, Putty):** A text box with a browse button ("...").
- Key Passphrase:** A text box.

Setting

Description

<p>Authentication Method</p>	<p>This option allows you to set the session authentication method. For serial connections, Indigo supports the following options:</p> <table border="1" data-bbox="824 260 1479 982"> <thead> <tr> <th data-bbox="824 260 1154 317">Authentication Method</th> <th data-bbox="1154 260 1479 317">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="824 317 1154 407">None</td> <td data-bbox="1154 317 1479 407">No authentication method is applied.</td> </tr> <tr> <td data-bbox="824 407 1154 982">Password (manual)</td> <td data-bbox="1154 407 1479 982"> Indigo will attempt to manually send user credentials based on the remaining authentication settings. <i>(This is a simple software only implementation, not a communication protocol level authentication negotiation. Indigo will send user credentials at the time of connection based on the Wait for Prompt property.)</i> </td> </tr> </tbody> </table>	Authentication Method	Description	None	No authentication method is applied.	Password (manual)	Indigo will attempt to manually send user credentials based on the remaining authentication settings. <i>(This is a simple software only implementation, not a communication protocol level authentication negotiation. Indigo will send user credentials at the time of connection based on the Wait for Prompt property.)</i>
Authentication Method	Description						
None	No authentication method is applied.						
Password (manual)	Indigo will attempt to manually send user credentials based on the remaining authentication settings. <i>(This is a simple software only implementation, not a communication protocol level authentication negotiation. Indigo will send user credentials at the time of connection based on the Wait for Prompt property.)</i>						
<p>Wait for Prompt</p>	<p>If this wait for prompt option is enabled, Indigo will wait until the prompt text is received before sending user credentials to the connected session. If this option is not enabled, then Indigo will automatically attempt to send user credentials when the connection is established.</p>						
<p>Username</p>	<p>This is the user name text that Indigo will submit when attempting to authenticate.</p>						
<p>Password</p>	<p>This is the password text that Indigo will submit when attempting to authenticate.</p>						