

# CipherLab User Guide

## AG Utilities & Mobile Link

8000 / 8300 / 8500 Series  
Mobile Computers

DOC Version 1.00



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# RELEASE NOTES

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Version	Date	Notes
1.00	Sep. 12, 2008	Initial release



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# INTRODUCTION

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FORGE Application Generator for 8000/8300/8500 Series Mobile Computers, batch or WLAN version, is designed for the users to develop custom templates for the use with AG runtime preloaded on the mobile computers.

We also provide several utilities as alternatives when dealing with the following tasks:

- ▶ Download Application (Batch/WLAN)
- ▶ Download Lookup File (Batch only)
- ▶ Receive Data (Batch/WLAN)

Instead of direct link, we now provide new utility **Mobile Link** that allows the mobile computer to establish a connection with the host computer over network. Ethernet Cradles are required for such net link. Most of all, multiple connections are made possible and easier.

This manual serves to provide comprehensive understanding of these AG utilities. We recommend that you read the document thoroughly before use and keep it at hand for quick reference.

Thank you for choosing CipherLab products!



## UTILITIES FOR BATCH APPLICATION GENERATOR

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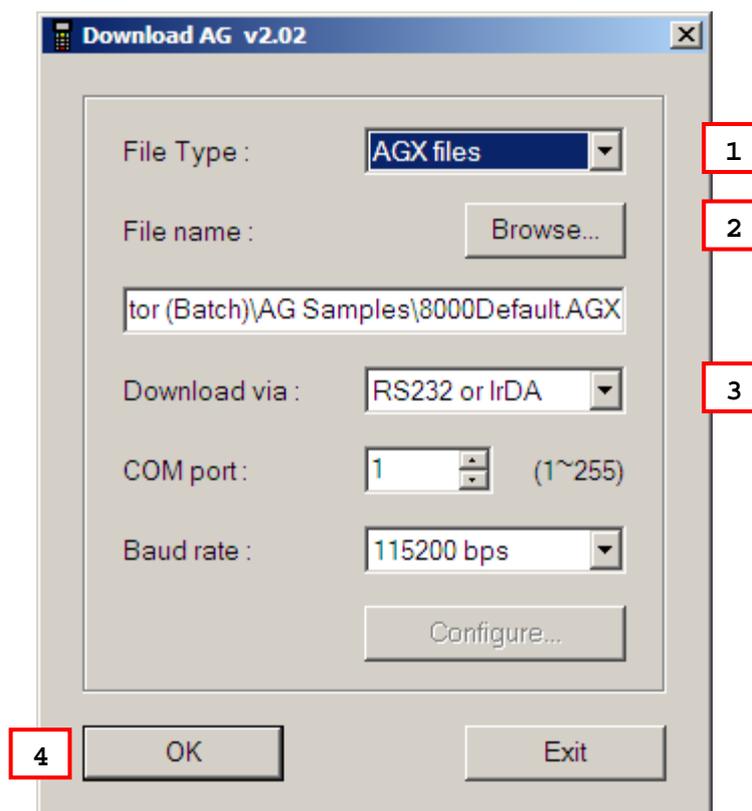
Without the need to run any Batch Application Generator programs, you can make use of the following AG utilities to handle the following tasks. Alternatively, you may use command lines in your own code.

- ▶ AG\_Load.exe : download the template file (.AGX or .ATX) to mobile computers
- ▶ DLookup.exe : download the lookup files (.TXT) to mobile computers
- ▶ Data\_Read.exe : upload the collected data (.TXT) from mobile computers to host

### 1.1 DOWNLOAD APPLICATION

#### 1.1.1 AG\_LOAD (.EXE) UTILITY

Use **AG\_Load.exe** to download the Batch AG template file (\*.AGX or \*.ATX) from the host computer to your mobile computer.



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Note: This utility AG\_Load.exe cannot be used with 8500 Series Mobile Computer. You must use the program AG8500.exe to download its template file.

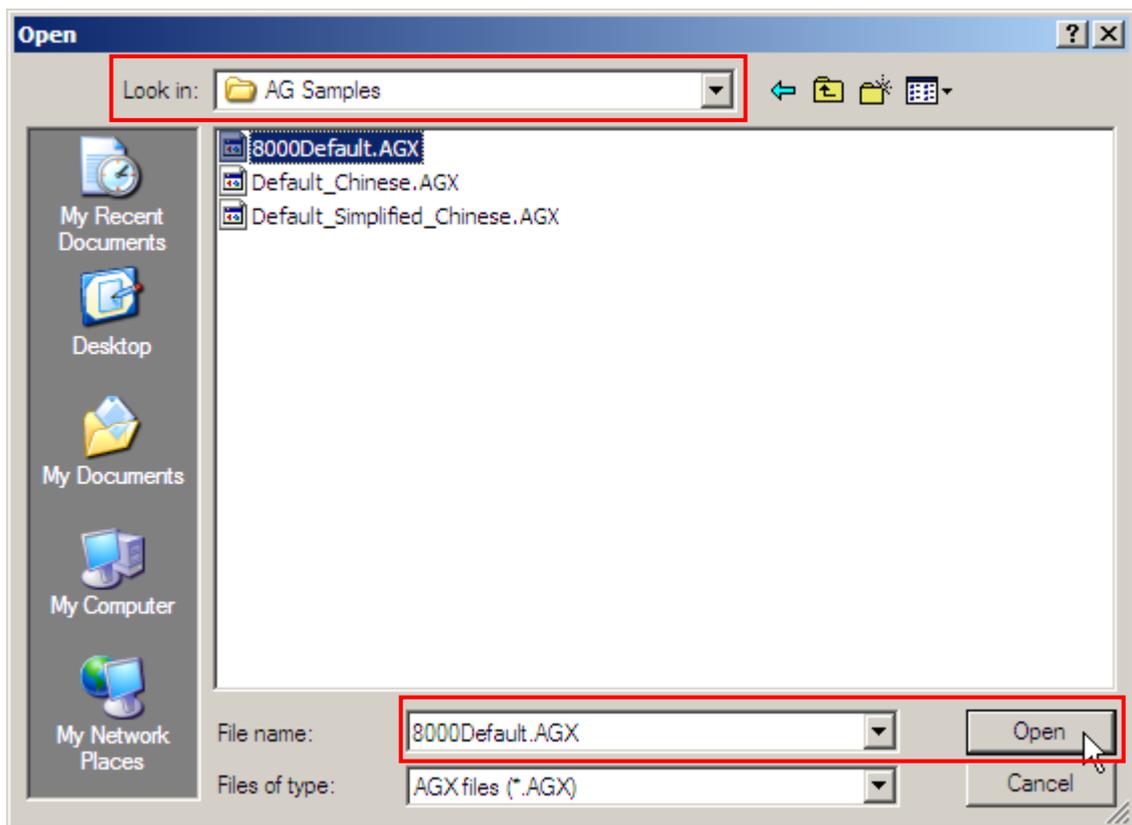
---

1) In the **File Type** box, select the file type of the target AG template file.

File Type	Description
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The AGX format is used by the template file of Batch AG programs for 8000/8300 Series Mobile Computers: <ul style="list-style-type: none"> <li>▶ AG8000*.exe</li> <li>▶ AG8300*.exe</li> </ul>
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The ATX format is used by the template file of Batch AG program for 711 Mobile Computer: <ul style="list-style-type: none"> <li>▶ AG711*.exe</li> </ul>
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The ATF format is used by the template file of WLAN AG programs for 8000/8300 Series Mobile computers.

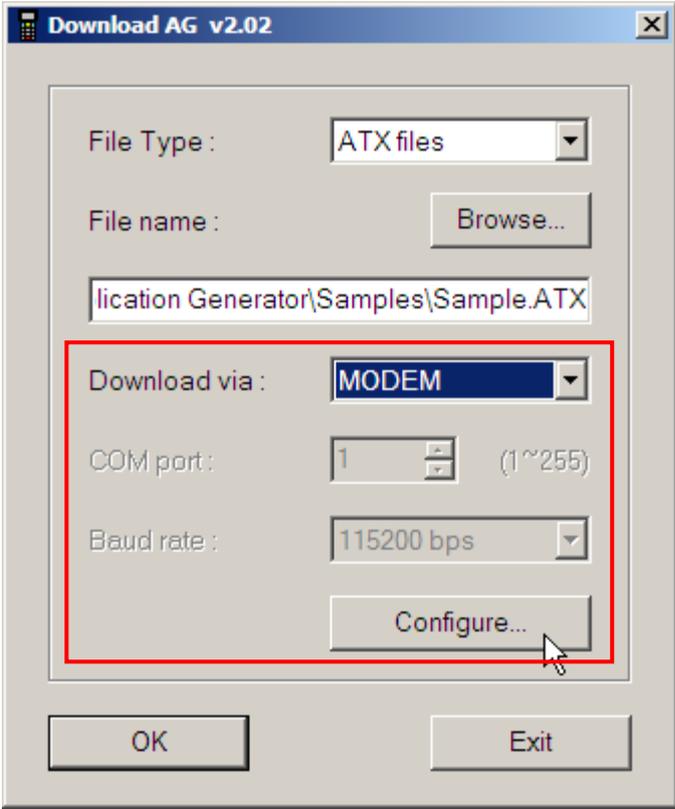
2) In the **File name** box, type the file path where the AG template file is located.

Otherwise, click **Browse** to locate the AG template file you want to download. Click **Open** in the dialog box as shown below.



3) In the **Download via** box, select the download interface.

Download via	Description
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	RS-232 or IrDA interface is available on 711/8000/8300 Series Mobile Computers. ▶ Proceed to configure COM port and baud rate settings.
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	Cradle-IR interface is available on 711/8000/8300 Series Mobile Computers. Cradles or IR-Transceivers are required. ▶ Proceed to configure COM port (1~255) and baud rate settings.
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	Modem interface is available on 8000/8300 Series Mobile Computers. Modem Cradles are required. ▶ Proceed to configure modem if necessary.

The screenshot shows a dialog box titled "Download AG v2.02". It contains several fields: "File Type" set to "ATX files", "File name" with a "Browse..." button, and a text field containing "lication Generator\Samples\Sample.ATX". Below these, the "Download via" dropdown is set to "MODEM". The "COM port" is set to "1" (with a range of "1~255" indicated) and the "Baud rate" is set to "115200 bps". A "Configure..." button is located below the baud rate field. At the bottom of the dialog are "OK" and "Exit" buttons. A red rectangular box highlights the "Download via", "COM port", and "Baud rate" fields, along with the "Configure..." button.

Note: Mobile Link is provided for mobile computers to establish a connection with the host via Ethernet Cradles. However, it only allows uploading data currently.

4) Click **OK** to start the download process.

### 1.1.2 COMMAND LINE CONFIGURATION

You can use the command line to download the AG template file as well. At the command line prompt, use the following command line arguments:

```
AG_Load <File name>,<COM port>,<Baud rate>,<Download via>,<File type>
```

For example,

```
AG_Load SAMPLE.AGX,1,1,1,1 //COM 1, 115200 bps, RS-232/IrDA, AGX file
```

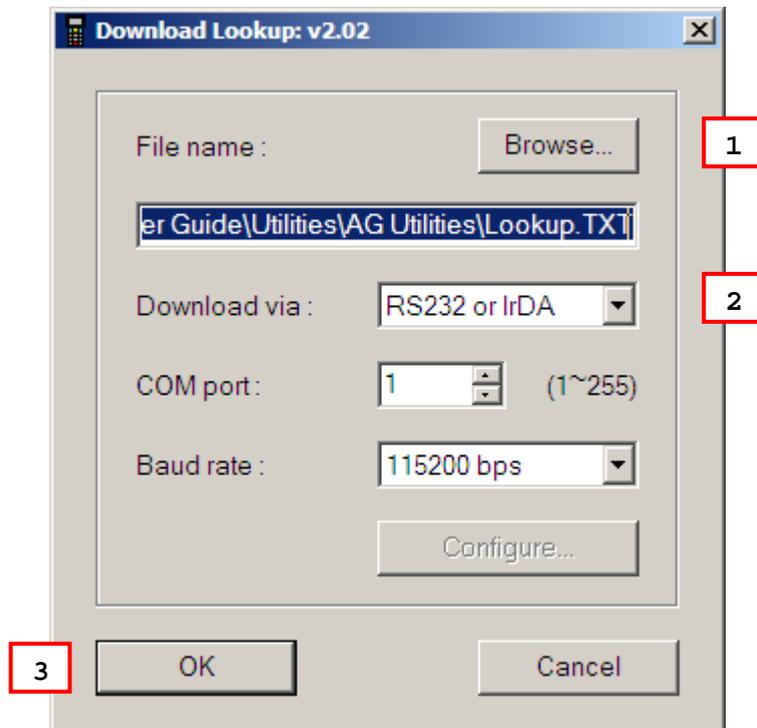
If command line arguments are not given, you may select the appropriate parameters from the dialog box that pops up. Each argument is explained in the table below.

Argument	Description
File name	Max length: 256 bytes
COM port	Range: 1 ~ 255 (It is set to 1 by default in the utility program.)
Baud rate	Range: 1 ~ 5 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: 115200 bps</li> <li>▶ 2: 57600 bps</li> <li>▶ 3: 38400 bps</li> <li>▶ 4: 19200 bps</li> <li>▶ 5: 9600 bps</li> </ul>
Download via	Range: 1 ~ 3 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: RS-232 or IrDA</li> <li>▶ 2: Cradle-IR</li> <li>▶ 3: Modem</li> </ul>
File type	Range: 1 ~ 3 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: AGX file</li> <li>▶ 2: ATX file</li> <li>▶ 3: ATF file</li> </ul>

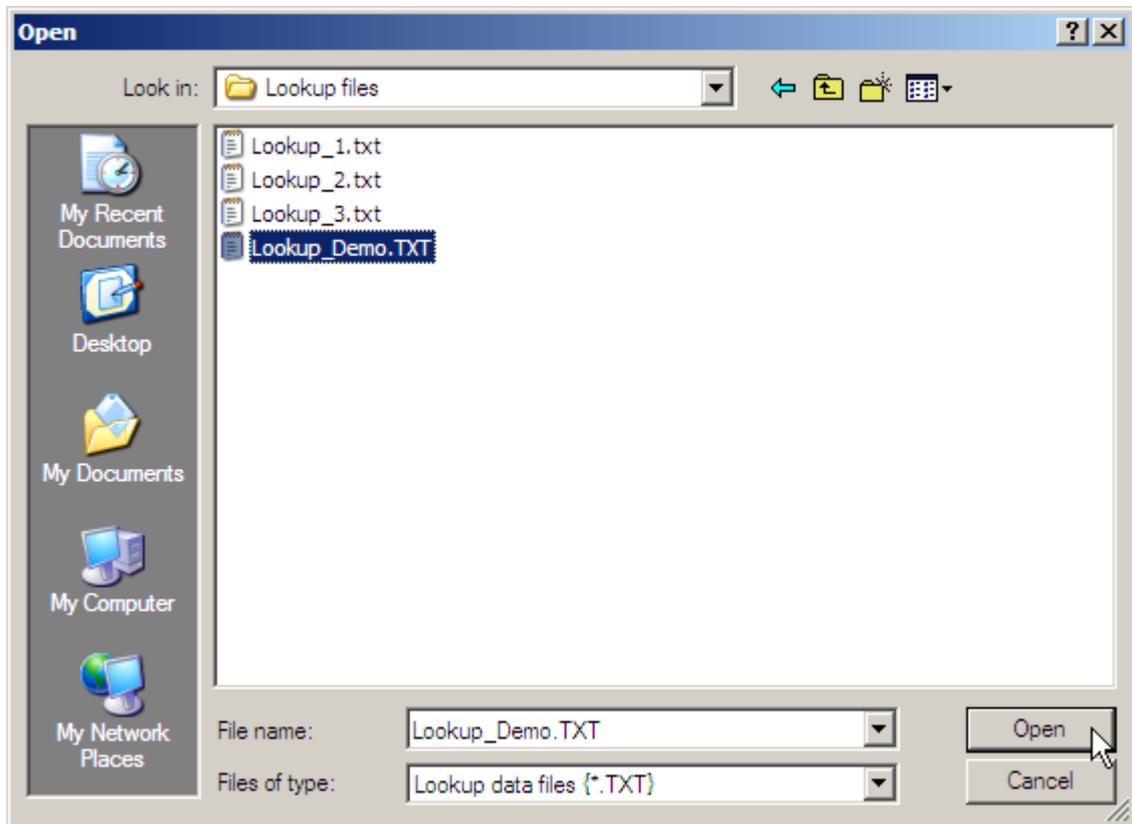
## 1.2. DOWNLOAD LOOKUP FILE

### 1.2.1 DLOOKUP (.EXE) UTILITY

Use **DLookup.exe** to download a lookup file (\*.TXT) from the host computer to your mobile computer.

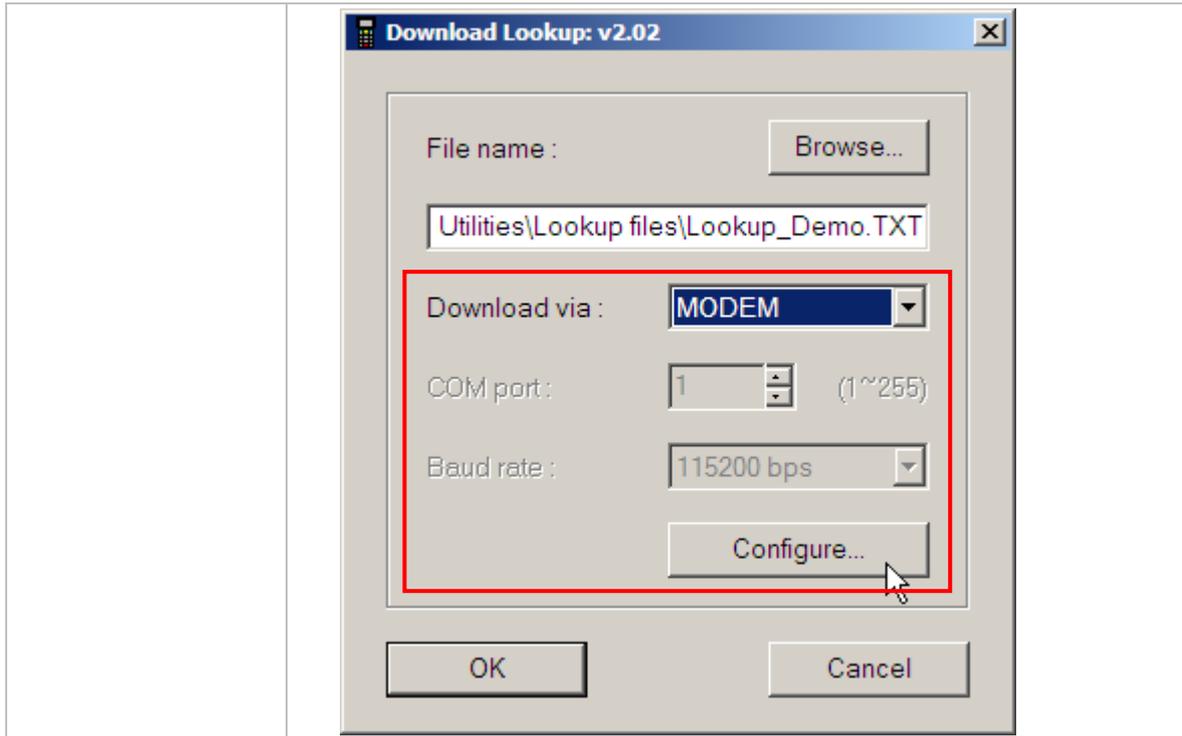


- 1) In the **File name** box, type the file path where the lookup file is located. Otherwise, click **Browse** to locate the lookup file you want to download. Click **Open** in the dialog box as shown below.



- 2) In the **Download via** box, select the download interface.

Download via	Description
RS232 or IrDA Cradle-IR MODEM	RS-232 or IrDA interface is available on 711/8000/8300/8500 Series Mobile Computers. <ul style="list-style-type: none"> <li>▶ Proceed to configure COM port and baud rate settings.</li> </ul>
RS232 or IrDA Cradle-IR MODEM	Cradle-IR interface is available on 711/8000/8300/8500 Series Mobile Computers. Cradles or IR-Transceivers are required. <ul style="list-style-type: none"> <li>▶ Proceed to configure COM port (1~255) and baud rate settings.</li> </ul>
RS232 or IrDA Cradle-IR MODEM	Modem interface is available on 8000/8300/8500 Series Mobile Computers. Modem Cradles are required. <ul style="list-style-type: none"> <li>▶ Proceed to configure modem if necessary.</li> </ul>



---

Note: Mobile Link is provided for mobile computers to establish a connection with the host via Ethernet Cradles. However, it only allows uploading data currently.

---

3) Click **OK** to start the download process.

## 1.2.2 COMMAND LINE CONFIGURATION

You can use the command line to download the lookup file as well. At the command line prompt, use the following command line arguments:

```
DLookup <File name>,<Download via>,<COM port>,<Baud rate>,<Show message box>
```

For example,

```
DLookup DEMO_LOOKUP.TXT,1,1,1,0
```

```
// RS-232/IrDA, COM 1, 115200 bps, No message box
```

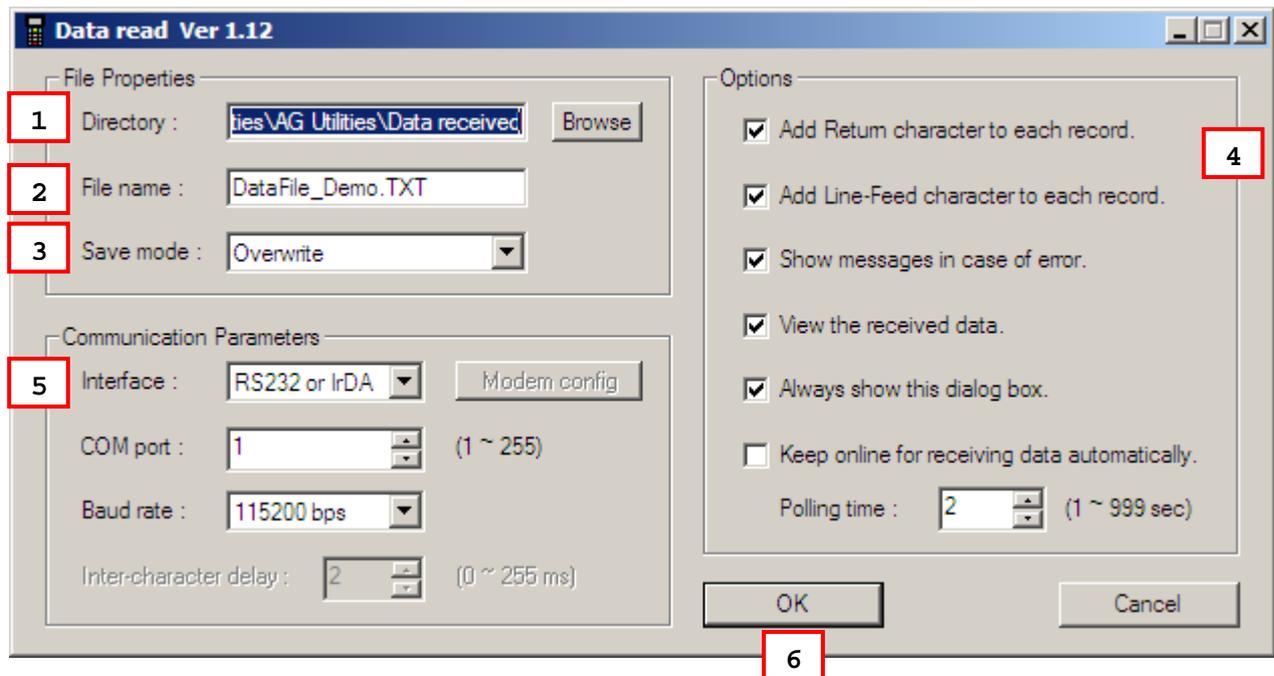
If command line arguments are not given, you may select the appropriate parameters from the dialog box that pops up. Each argument is explained in the table below.

Argument	Description
File name	Max length: 256 bytes
Download via	Range: 1 ~ 3 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: RS-232 or IrDA</li> <li>▶ 2: Cradle-IR</li> <li>▶ 3: Modem</li> </ul>
COM port	Range: 1 ~ 255 (It is set to 1 by default in the utility program.)
Baud rate	Range: 1 ~ 5 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: 115200 bps</li> <li>▶ 2: 57600 bps</li> <li>▶ 3: 38400 bps</li> <li>▶ 4: 19200 bps</li> <li>▶ 5: 9600 bps</li> </ul>
Show message box	Range: 0 ~ 1 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 0: Disable</li> <li>▶ 1: Enable</li> </ul>

## 1.3. RECEIVE DATA

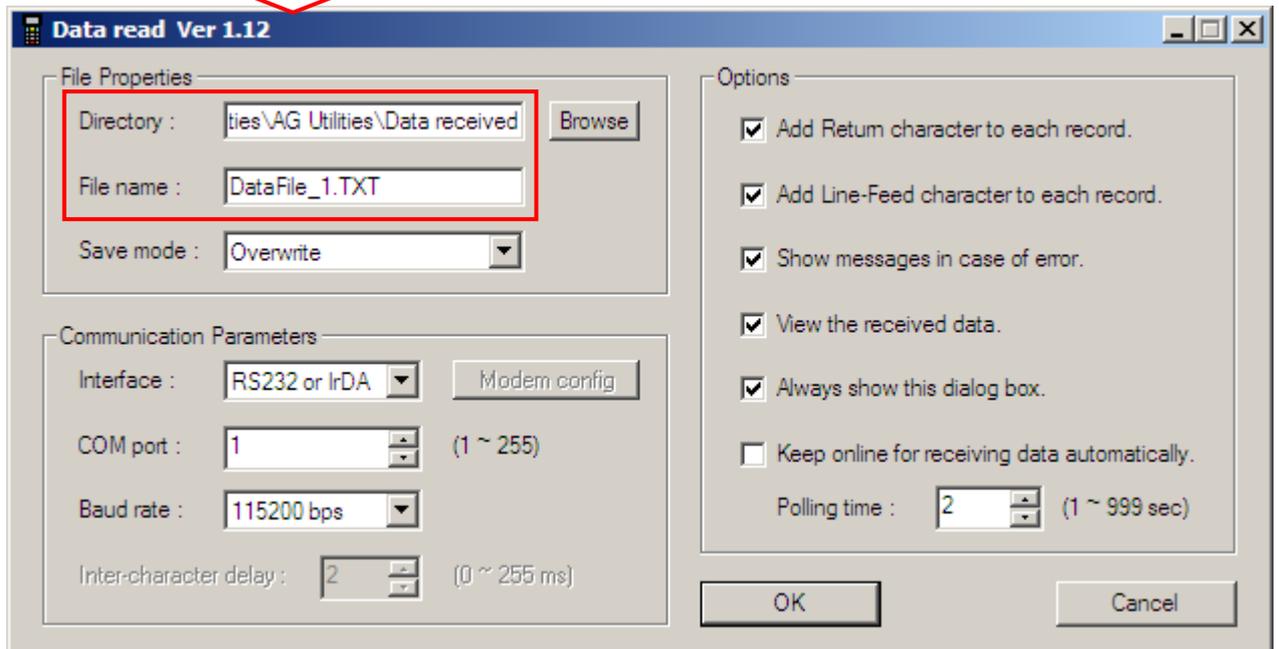
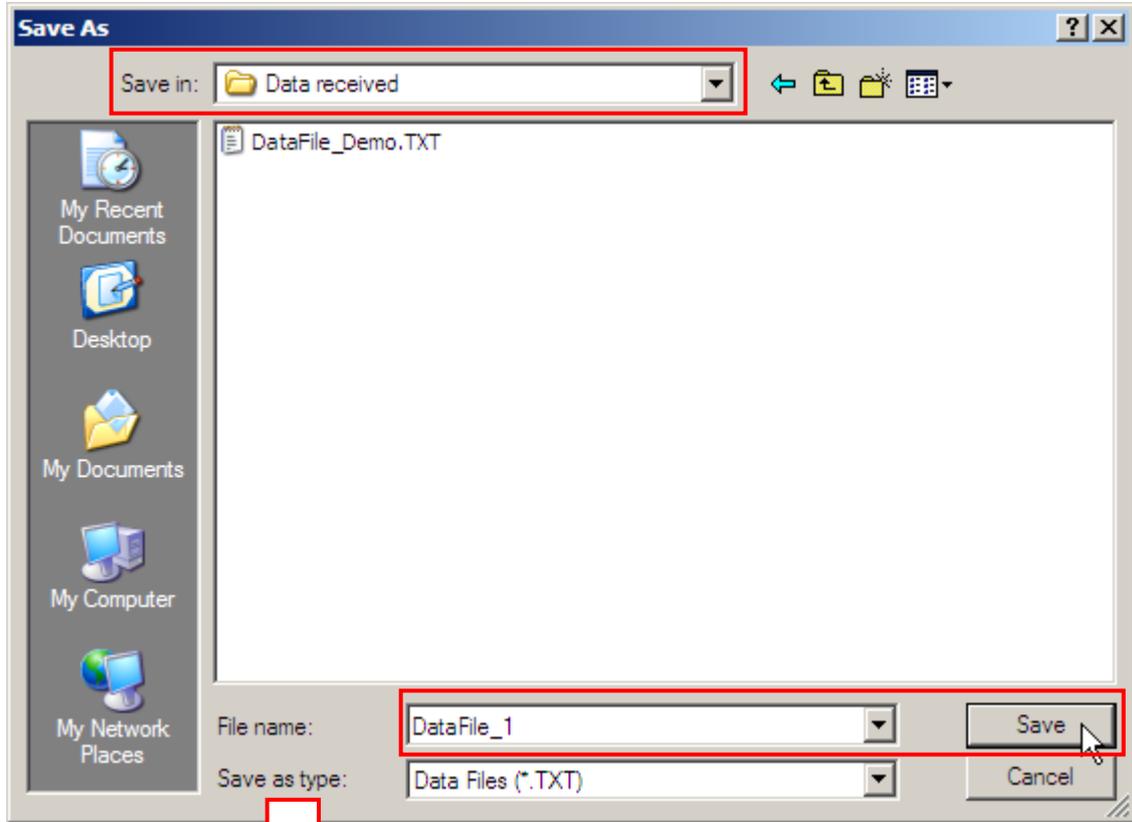
### 1.3.1 DATA\_READ (.EXE) UTILITY

Use **Data\_Read.exe** to upload a data file (\*.TXT) from your mobile computer to the host computer. However, if you want to upload data files over the network via Ethernet Cradles, use [Mobile Link](#) instead.

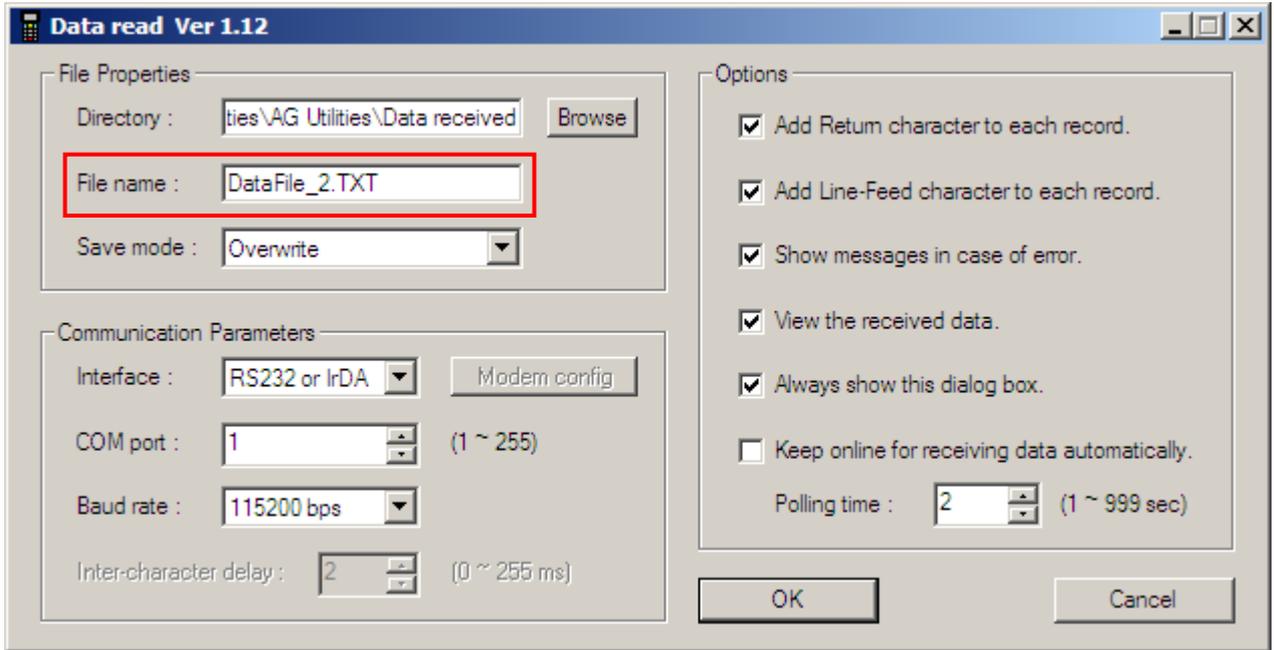


- 1) In the **Directory** box under **File Properties**, type the file path where the data file will be saved to.

Otherwise, click **Browse** to select which directory the data file is saved to. Type the file name and click **Save** in the dialog box as shown below.

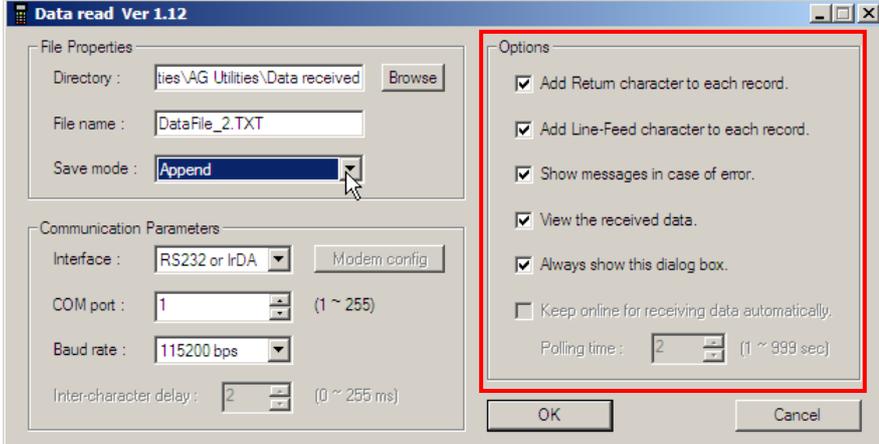
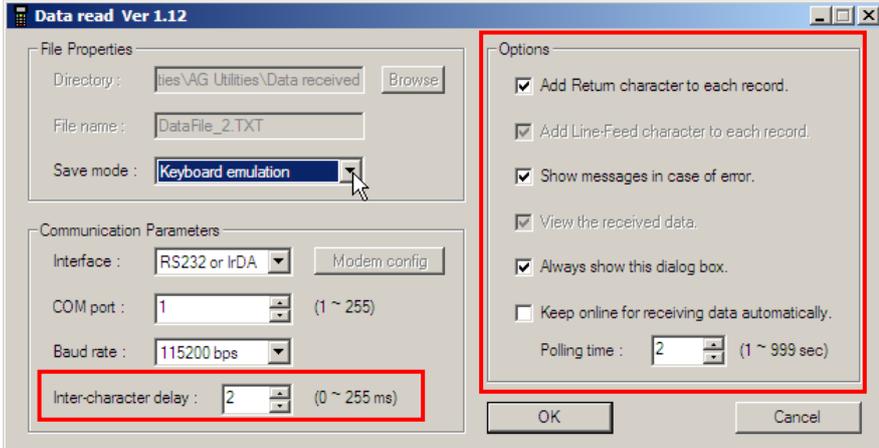


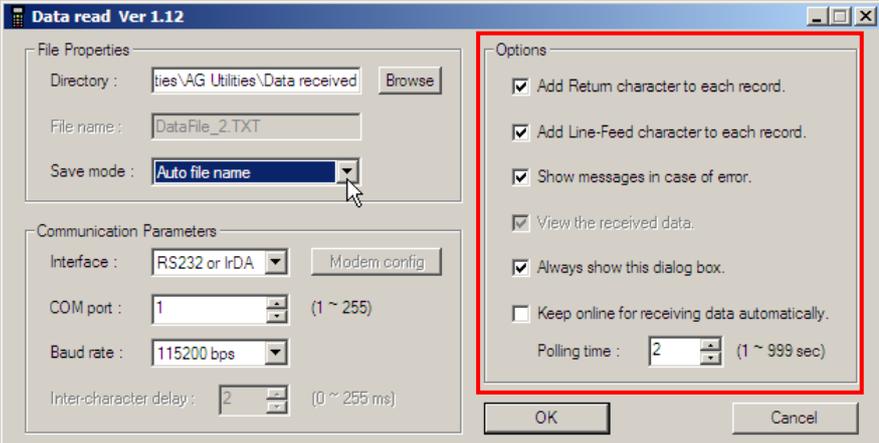
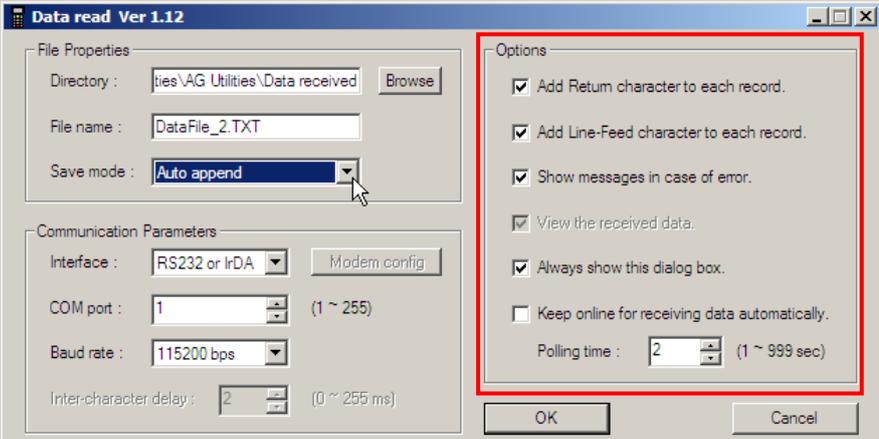
- 2) If you want to save another data file to the same directory as specified above, simply type the file name here.



- 3) In the **Save mode** box under **File Properties**, select the appropriate file mode.
- 4) Under **Options**, select appropriate settings for the file mode you selected in step 3.

Save Mode	Description
<ul style="list-style-type: none"> <li>Overwrite</li> <li>Append</li> <li>Keyboard emulation</li> <li>Auto file name</li> <li>Auto append</li> <li>Name by first record</li> </ul>	<p>Overwrite: If the file name you give is the same as of an existing file, the uploaded data will overwrite the original data. Otherwise, it will create a new file.</p>

Save Mode	Description
<p>Overwrite  <b>Append</b>                      Keyboard emulation                      Auto file name                      Auto append                      Name by first record</p>	<p>Append: If the file name you give is the same as of an existing file, the uploaded data will be appended to the original data. Otherwise, it will create a new file.</p> 
<p>Overwrite                      Append  <b>Keyboard emulation</b>                      Auto file name                      Auto append                      Name by first record</p>	<p>Keyboard emulation: Data is emulated as typed text and sent to the active window.</p> <ul style="list-style-type: none"> <li>▶ In the <b>Inter-character delay</b> box under <b>Communication Parameters</b>, type or select a value that matches the computer response time of the keyboard interface. Such delay time is inserted between every character being transmitted. The longer the delay time is, the slower the transmission speed will be.</li> </ul> 

Save Mode	Description
<p>Overwrite Append Keyboard emulation <b>Auto file name</b> Auto append Name by first record</p>	<p>Auto file name: The uploaded data will be saved to the specified directory with a file name that is automatically generated based on the system date and time.</p> <ul style="list-style-type: none"> <li>▶ The best practice requires specifying reasonable polling time with <b>Keep online for receiving data automatically</b> enabled.</li> </ul> 
<p>Overwrite Append Keyboard emulation Auto file name <b>Auto append</b> Name by first record</p>	<p>Auto append: If the file name you give is the same as of an existing file, the uploaded data will be appended to the original data. Otherwise, it will create a new file.</p> <ul style="list-style-type: none"> <li>▶ The best practice requires specifying reasonable polling time with <b>Keep online for receiving data automatically</b> enabled.</li> </ul> 

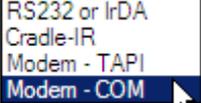
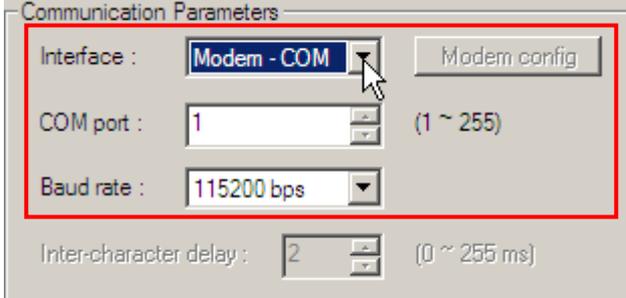
- Overwrite
- Append
- Keyboard emulation
- Auto file name
- Auto append
- Name by first record

Name by the first record: The received data will be saved to a file named by its first record.

- ▶ For example, in Batch Application Generator you may design Form 1 to allow only one line for a specific file name and proceed to other forms for collecting data. Thus, the first record will be used to keep its file name. However, if the file name you give is the same as of an existing file, the uploaded data will overwrite the original data.

5) In the **Interface** box under **Communication Parameters**, select the upload interface.

Interface	Description
<div style="border: 1px solid black; padding: 2px;"> <ul style="list-style-type: none"> <li style="background-color: #000080; color: white;">RS232 or IrDA</li> <li>Cradle-IR</li> <li>Modem - TAPI</li> <li>Modem - COM</li> </ul> </div>	<p>RS-232 or IrDA interface is available on 711/8000/8300/8500 Series Mobile Computers.</p> <ul style="list-style-type: none"> <li>▶ Proceed to configure COM port and baud rate settings.</li> </ul>
<div style="border: 1px solid black; padding: 2px;"> <ul style="list-style-type: none"> <li style="background-color: #000080; color: white;">RS232 or IrDA</li> <li style="background-color: #000080; color: white;">Cradle-IR</li> <li>Modem - TAPI</li> <li>Modem - COM</li> </ul> </div>	<p>Cradle-IR interface is available on 711/8000/8300/8500 Series Mobile Computers. Cradles or IR-Transceivers are required.</p> <ul style="list-style-type: none"> <li>▶ Proceed to configure COM port (1~255) and baud rate settings.</li> </ul>
<div style="border: 1px solid black; padding: 2px;"> <ul style="list-style-type: none"> <li style="background-color: #000080; color: white;">RS232 or IrDA</li> <li style="background-color: #000080; color: white;">Cradle-IR</li> <li style="background-color: #000080; color: white;">Modem - TAPI</li> <li>Modem - COM</li> </ul> </div>	<p>Modem interface is available on 8000/8300/8500 Series Mobile Computers. Modem Cradles are required.</p> <ul style="list-style-type: none"> <li>▶ Select Modem-TAPI when using TAPI-compliant communication application on the host computer. Proceed to configure modem if necessary.</li> </ul> <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p style="text-align: center; margin: 0;">Communication Parameters</p> <div style="border: 2px solid red; padding: 2px; display: flex; align-items: center;"> <span style="margin-right: 10px;">Interface :</span> <div style="display: flex; align-items: center;"> <div style="border: 1px solid gray; padding: 2px;">Modem - TAPI</div> <div style="margin: 0 5px;">▼</div> <div style="margin-left: 10px;">Modem config</div> </div> </div> <p style="margin-top: 10px;">COM port : <input style="width: 50px;" type="text" value="1"/> (1 ~ 255)</p> <p style="margin-top: 10px;">Baud rate : <input style="width: 50px;" type="text" value="115200 bps"/></p> <p style="margin-top: 10px;">Inter-character delay : <input style="width: 50px;" type="text" value="2"/> (0 ~ 255 ms)</p> </div>

	<p>Modem interface is available on 8000/8300/8500 Series Mobile Computers. Modem Cradles are required.</p> <ul style="list-style-type: none"><li>▶ Select Modem-COM when using COM port based modem, and proceed to configure COM port and baud rate settings.</li></ul> 
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Note: Mobile Link is provided for mobile computers to establish a connection with the host via Ethernet Cradles. However, it only allows uploading data currently.

---

6) Click **OK** to start the upload process.

### 1.3.2 COMMAND LINE CONFIGURATION

You can use the command line to download the lookup file as well. At the command line prompt, use the following command line arguments:

```
Data_Read <File name>,<Upload via>,<COM Port>,<Baud rate>,<Save mode>,  

  <Add CR character>,<Add LF character>,<Show error>,<Show data>,  

  <Show dialog box>,<Keep online>,<Polling time>,<Inter-Char delay>
```

For example,

```
Data_Read DataFile_1.TXT,1,1,1,1,1,1,1,1,1,0,1,2,0
```

```
// RS-232/IrDA, COM 1, 115200 bps, Overwrite, Add CR, Add LF, Show error message,  

  Show data, Hide dialog box, Keep online, Polling time 2 seconds, No Inter-Char  

  delay
```

If command line arguments are not given, you may select the appropriate parameters from the dialog box that pops up. Each argument is explained in the table below.

Argument	Description
File name	Max length: 256 bytes
Upload via	Range: 1 ~ 4 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1 (R) : RS-232 or IrDA</li> <li>▶ 2 (I) : Cradle-IR</li> <li>▶ 3 (T) : Modem-TAPI</li> <li>▶ 4 (M) : Modem-COM</li> </ul>
COM port	Range: 1 ~ 255 (It is set to 1 by default in the utility program.)
Baud rate	Range: 1 ~ 5 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1 (115200) : 115200 bps</li> <li>▶ 2 ( 57600) : 57600 bps</li> <li>▶ 3 ( 38400) : 38400 bps</li> <li>▶ 4 ( 19200) : 19200 bps</li> <li>▶ 5 ( 9600) : 9600 bps</li> </ul>
Save mode	Range: 1 ~ 5 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: Overwrite</li> <li>▶ 2: Append</li> <li>▶ 3: Keyboard emulation</li> <li>▶ 4: Auto file name</li> <li>▶ 5: Auto append</li> </ul>

---

Add CR character	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Add LF character	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Show error	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Show data	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Show dialog box	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Keep online	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 0 by default in the utility program.)
Polling time	Range: 1 ~ 999 sec	(It is set to 2 by default in the utility program.)
Inter-Char delay	Range: 0 ~ 255 ms	(It is set to 2 by default in the utility program.)



## UTILITIES FOR WLAN APPLICATION GENERATOR

Without the need to run any WLAN Application Generator or Wireless Database Manager programs, you can make use of the following AG utilities to handle the following tasks. Alternatively, you may use command lines in your own code.

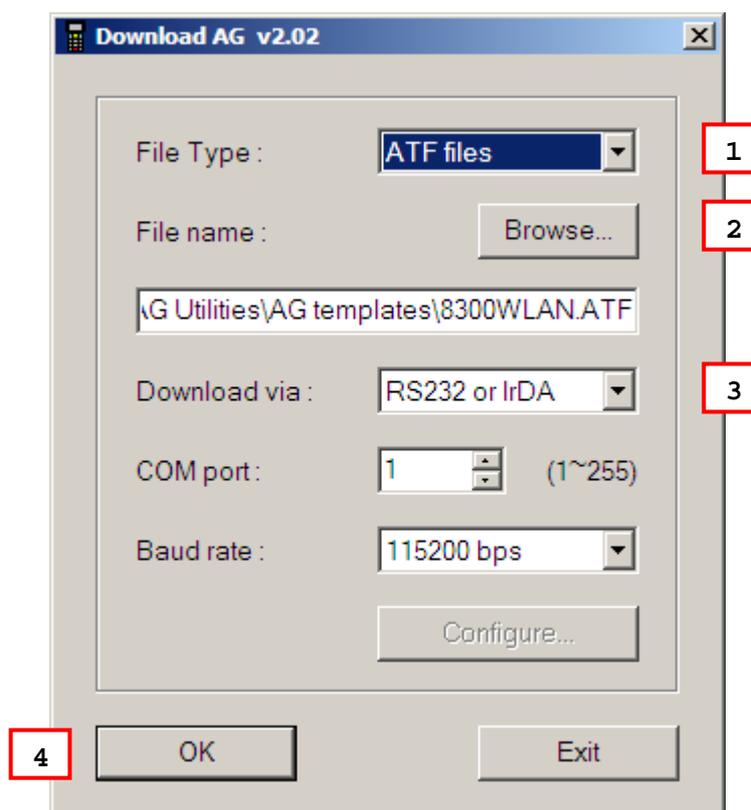
- ▶ AG\_Load.exe : download the template file (.ATF) to mobile computers
- ▶ WLAN\_Read.exe : send any collected data from mobile computers to host

### 2.1 DOWNLOAD APPLICATION

Refer to [1.1 Download Application](#) for details.

#### 2.1.1 AG\_LOAD (.EXE) UTILITY

Use **AG\_Load.exe** to download the WLAN AG template file (\*.ATF) from the host computer to your mobile computer.

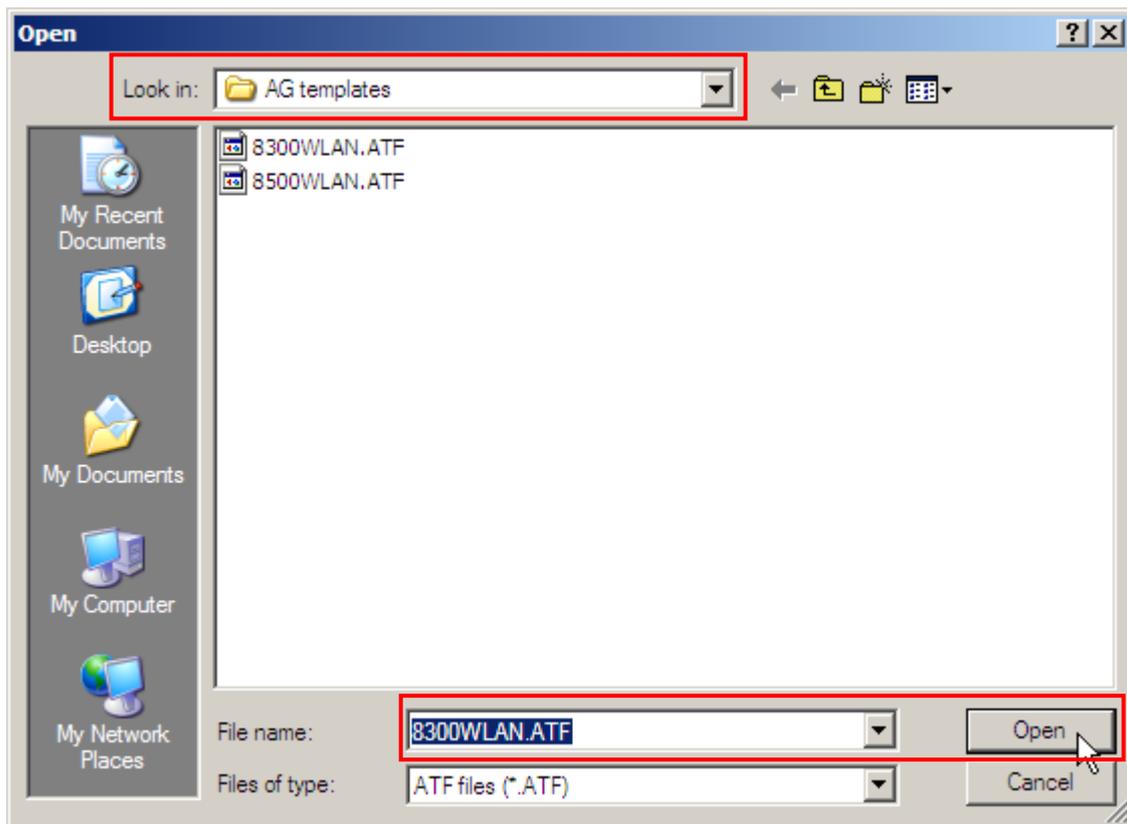


Note: This utility AG\_Load.exe cannot be used with 8500 Series Mobile Computer. You must use the program AG8500WLAN.exe to download its template file.

1) In the **File Type** box, select the file type of the target WLAN AG template file.

File Type	Description
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The AGX format is used by the template file of Batch AG programs for 8000/8300 Series Mobile Computers:
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The ATX format is used by the template file of Batch AG program for 711 Mobile Computer:
<ul style="list-style-type: none"> <li>AGX files</li> <li>ATX files</li> <li>ATF files</li> </ul>	The ATF format is used by the template file of WLAN AG programs for 8000/8300 Series Mobile computers. <ul style="list-style-type: none"> <li>▶ AG8061RF.exe</li> <li>▶ AG8071RF.exe</li> <li>▶ AG83x0WLAN.exe</li> </ul>

2) In the **File name** box, type the file path where the WLAN AG template file is located. Otherwise, click **Browse** to locate the WLAN AG template file you want to download. Click **Open** in the dialog box as shown below.



3) In the **Download via** box, select the download interface.

Download via	Description
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	RS-232 or IrDA interface is available on 8000/8300 Series Mobile Computers. ▶ Proceed to configure COM port and baud rate settings.
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	Cradle-IR interface is available on 8000/8300 Series Mobile Computers. Cradles or IR-Transceivers are required. ▶ Proceed to configure COM port (1~255) and baud rate settings.
<div style="border: 1px solid black; padding: 2px;">                     RS232 or IrDA                      Cradle-IR                      MODEM                 </div>	Modem interface is available on 8000/8300 Series Mobile Computers. Modem Cradles are required. ▶ Proceed to configure modem if necessary.

The screenshot shows a dialog box titled "Download AG v2.02". It contains several fields: "File Type" is set to "ATF files"; "File name" has a "Browse..." button; the file path is "\G Utilities\AG templates\8300WLAN.ATF"; "Download via" is set to "MODEM" and is highlighted with a red rectangular box; "COM port" is set to "1" with a range "(1~255)"; "Baud rate" is set to "115200 bps"; and there is a "Configure..." button. At the bottom are "OK" and "Exit" buttons.

4) Click **OK** to start the download process.

## 2.1.2 COMMAND LINE CONFIGURATION

You can use the command line to download the WLAN AG template file as well. At the command line prompt, use the following command line arguments:

AG\_Load <File name>,<COM port>,<Baud rate>,<Download via>,<File type>

For example,

AG\_Load SAMPLE.ATF,1,1,1,3 //COM 1, 115200 bps, RS-232/IrDA, ATF file

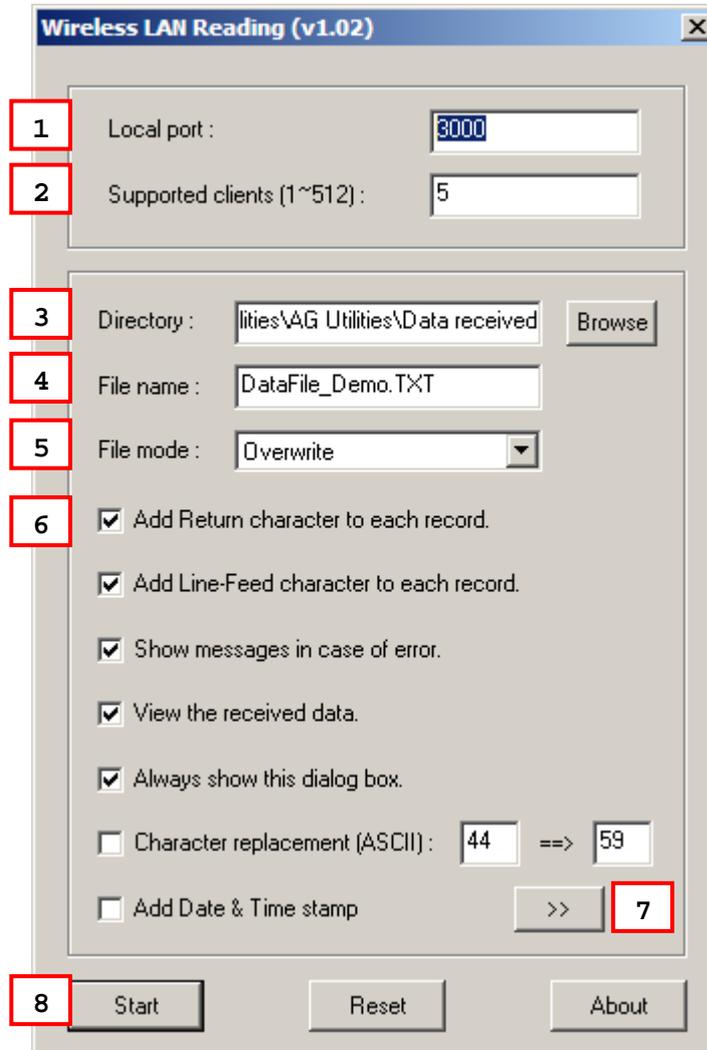
If command line arguments are not given, you may select the appropriate parameters from the dialog box that pops up. Each argument is explained in the table below.

Argument	Description
File name	Max length: 256 bytes
COM port	Range: 1 ~ 255 (It is set to 1 by default in the utility program.)
Baud rate	Range: 1 ~ 5 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: 115200 bps</li> <li>▶ 2: 57600 bps</li> <li>▶ 3: 38400 bps</li> <li>▶ 4: 19200 bps</li> <li>▶ 5: 9600 bps</li> </ul>
Download via	Range: 1 ~ 3 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: RS-232 or IrDA</li> <li>▶ 2: Cradle-IR</li> <li>▶ 3: Modem</li> </ul>
File type	Range: 1 ~ 3 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: AGX file</li> <li>▶ 2: ATX file</li> <li>▶ 3: ATF file</li> </ul>

## 2.2 REAL-TIME RECEIVE DATA

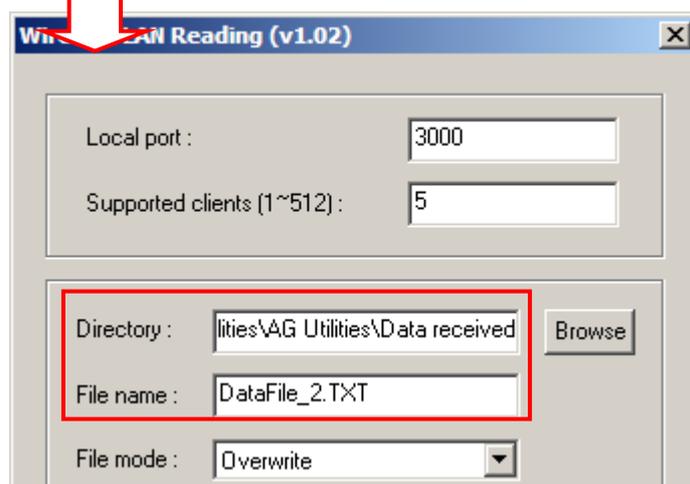
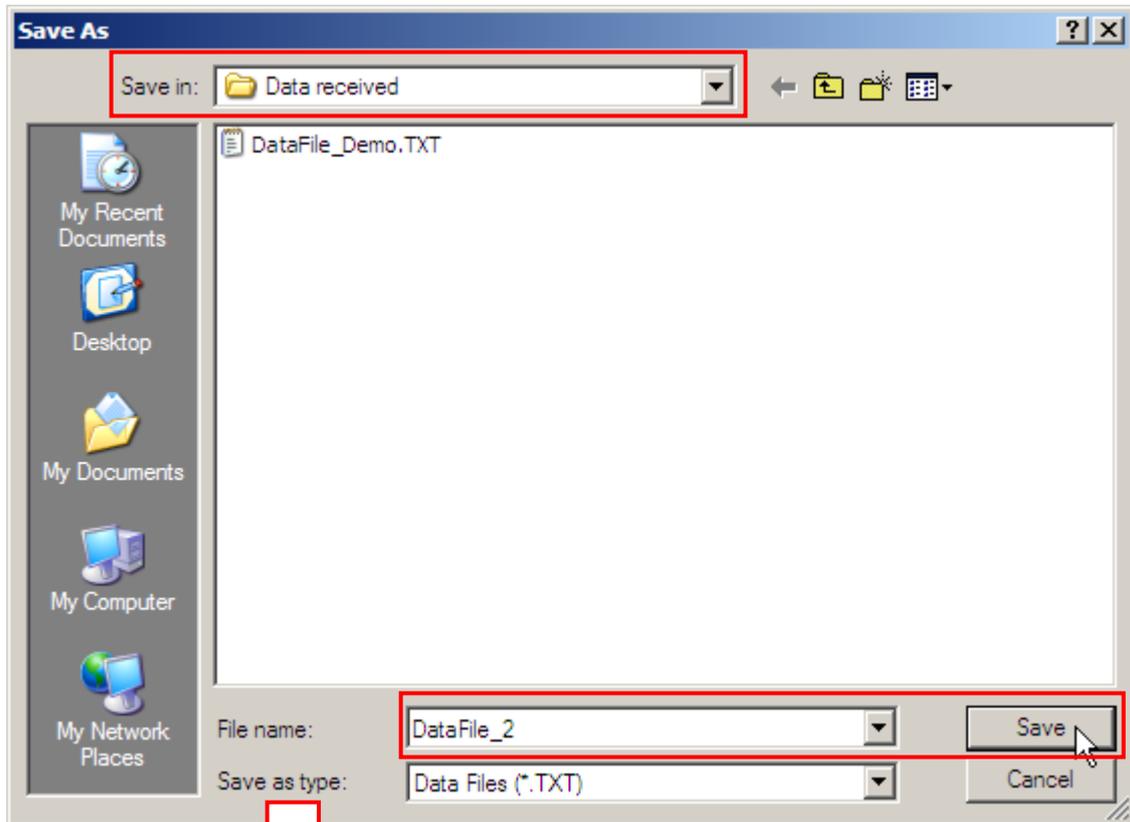
### 2.2.1 WLAN\_READ (.EXE) UTILITY

If no lookup file is in use, you can use **WLAN\_Read.exe** to send any collected data from your mobile computer to the host computer in a real-time way.

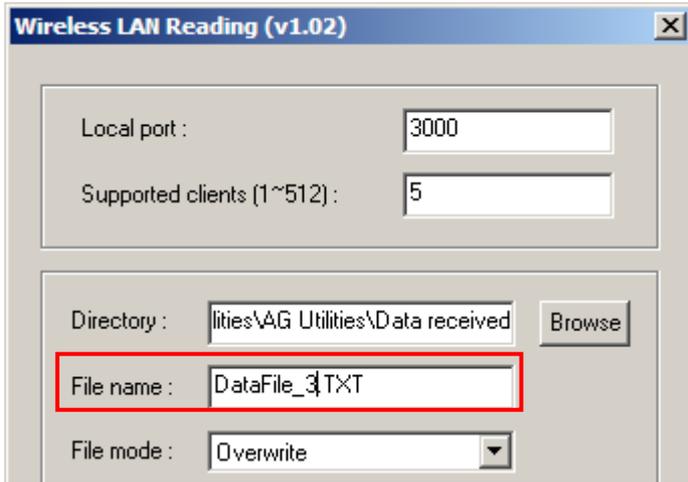


- 1) In the **Local port** box, type the local port you want to use.
- 2) In the **Supported clients** box, type the maximum number (1 ~ 512) of client devices that are allowed to connect to the local port.
- 3) In the **Directory** box, type the file path where the data will be saved to.

Otherwise, click **Browse** to select which directory the data file is saved to. Type the file name and click **Save** in the dialog box as shown below.



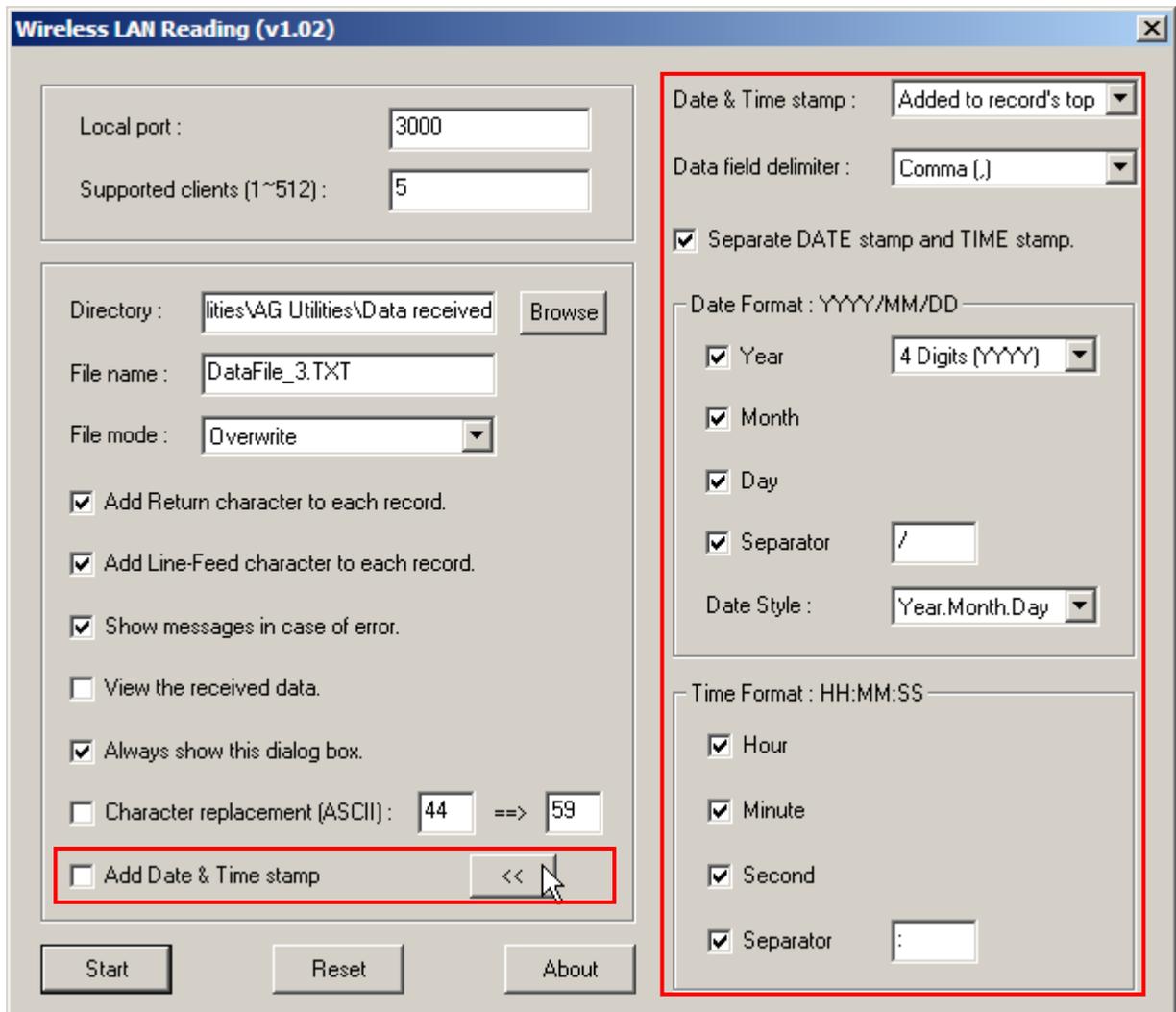
- 4) If you want to save data to another file under the same directory as specified above, simply type the file name here.



- 5) In the **File mode** box, select the appropriate file mode.  
 6) Under the **File mode** box are options associated with the file mode. Select appropriate settings for the file mode you selected in step 5.

File Mode	Description
Overwrite Append New name Named by the first record	Overwrite: If the file name you give is the same as of an existing file, the received data will overwrite the original data. Otherwise, it will create a new file.
Overwrite Append New name Named by the first record	Append: If the file name you give is the same as of an existing file, the received data will be appended to the original data. Otherwise, it will create a new file.
Overwrite Append New name Named by the first record	New name: If the file name you give is the same as of an existing file, it will fail to create file. Otherwise, it will create a new file.
Overwrite Append New name Named by the first record	Name by the first record: The received data will be saved to a file named by its first record. <ul style="list-style-type: none"> <li>▶ For example, in WLAN Application Generator you may design Form 1 to allow only one line for a specific file name and proceed to other forms for collecting data. Thus, the first record will be used to keep its file name. However, if the file name you give is the same as of an existing file, the uploaded data will overwrite the original data.</li> </ul>

- 7) Click  to view more options associated with the Date & Time stamp.



- 8) Click **Start** to receive data immediately.

## 2.2.2 COMMAND LINE CONFIGURATION

You can use the command line to download the lookup file as well. At the command line prompt, use the following command line arguments:

```
Wlan_Read <File name>,<File mode>,<Add CR character>,<Add LF character>,  

<Show error>,<Show data>,<Show dialog box>,<Replace delimiter>,  

<Character_1>,<Character_2>,<Add Date & Time stamp>,<Stamp position>,  

<Separate Date & Time stamp>,<Field delimiter>,<Year>,<Year format>,  

<Month>,<Day>,<Separate Date>,<Date separator>,<Date style>,  

<Hour>,<Minute>,<Second>,<Separate Time>,<Time separator>,  

<Local port>,<Supported client number>
```

If command line arguments are not given, you may select the appropriate parameters from the dialog box that pops up. Each argument is explained in the table below.

Argument	Description
File name	Max length: 256 bytes
File mode	Range: 1 ~ 4 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 1: Overwrite</li> <li>▶ 2: Append</li> <li>▶ 3: New name</li> <li>▶ 4: Name by the first record</li> </ul>
Add CR character	Range: 0 ~ 1 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 0: Disable</li> <li>▶ 1: Enable</li> </ul>
Add LF character	Range: 0 ~ 1 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 0: Disable</li> <li>▶ 1: Enable</li> </ul>
Show error	Range: 0 ~ 1 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 0: Disable</li> <li>▶ 1: Enable</li> </ul>
Show data	Range: 0 ~ 1 (It is set to 1 by default in the utility program.) <ul style="list-style-type: none"> <li>▶ 0: Disable</li> <li>▶ 1: Enable</li> </ul>

Show dialog box	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Replace delimiter	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 0 by default in the utility program.)
Character_1	One ASCII character for the original delimiter	(It is set to 44 (comma) by default in the utility program.)
Character_2	One ASCII character for the new delimiter	(It is set to 59 (semicolon) by default in the utility program.)
Add Date & Time stamp	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 0 by default in the utility program.)
Stamp position	Range: 0 ~ 1 ▶ 0: Top ▶ 1: Bottom	(It is set to 0 by default in the utility program.)
Separate Date & Time stamp	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Field delimiter	Range: 0 ~ 4 ▶ 0: Comma (,) ▶ 1: Colon (:) ▶ 2: Semicolon (;) ▶ 3: Slash (/) ▶ 4: Backslash (\)	(It is set to 0 by default in the utility program.)
Year – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Year format	Range: 0 ~ 1 ▶ 0: 4 digits (YYYY) ▶ 1: 2 digits (YY)	(It is set to 0 by default in the utility program.)
Month – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Day – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)

Date – add separator	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Date separator	One character	(It is set to slash (/) by default in the utility program.)
Date style	Range: 0 ~ 2 ▶ 0: Year.Month.Day ▶ 1: Month.Day.Year ▶ 2: Day.Month.Year	(It is set to 0 by default in the utility program.)
Hour – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Minute – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Second – add info	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Time – add separator	Range: 0 ~ 1 ▶ 0: Disable ▶ 1: Enable	(It is set to 1 by default in the utility program.)
Time separator	One character	(It is set to colon (: ) by default in the utility program.)
Local port	Range: 1 ~ 65535	(It is set to 3000 by default in the utility program.)
Supported client number	Range: 1 ~ 512	(It is set to 5 by default in the utility program.)



## MOBILE LINK

**Mobile Link** is provided for mobile computers to establish a connection with the host via Ethernet Cradles, and it only allows uploading data currently.

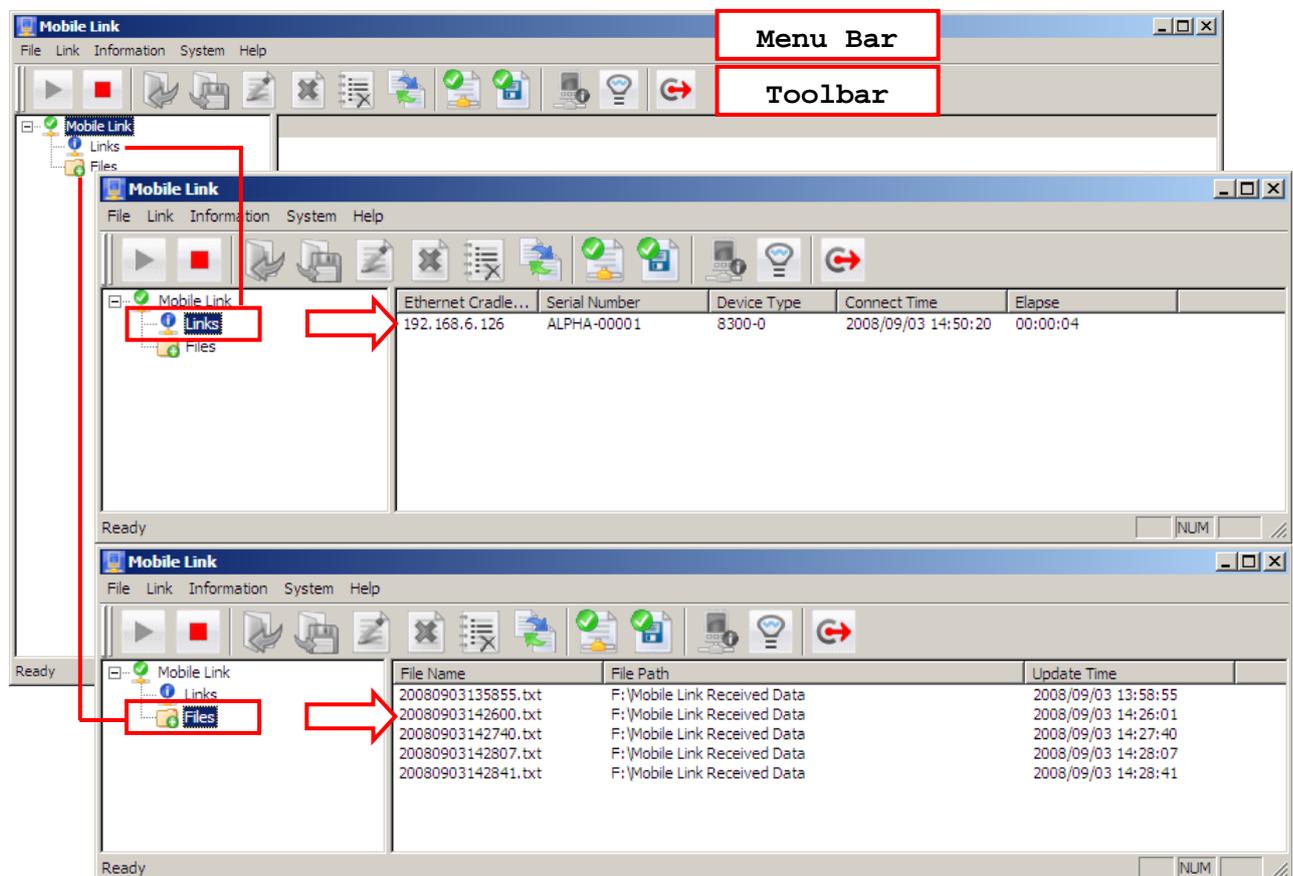
### 3.1 LOOKING AT THE WORK AREA

#### 3.1.1 PREREQUISITES

- ▶ You must have configured your Ethernet Cradle to work in Data Mode and connect to the host computer with correct host IP and port number.
- ▶ You must select "Ethernet" for the upload interface on the mobile computer.

By default, it is set to automatically start the link service upon execution of **Mobile Link**. Once you select to upload data from the mobile computer, you can view the link status and file status respectively as shown below.

Note: On the **System** menu, click **Link Properties**, and then change the **Auto Start Link Service** setting.



### 3.1.2 MENU BAR & TOOLBAR BUTTONS

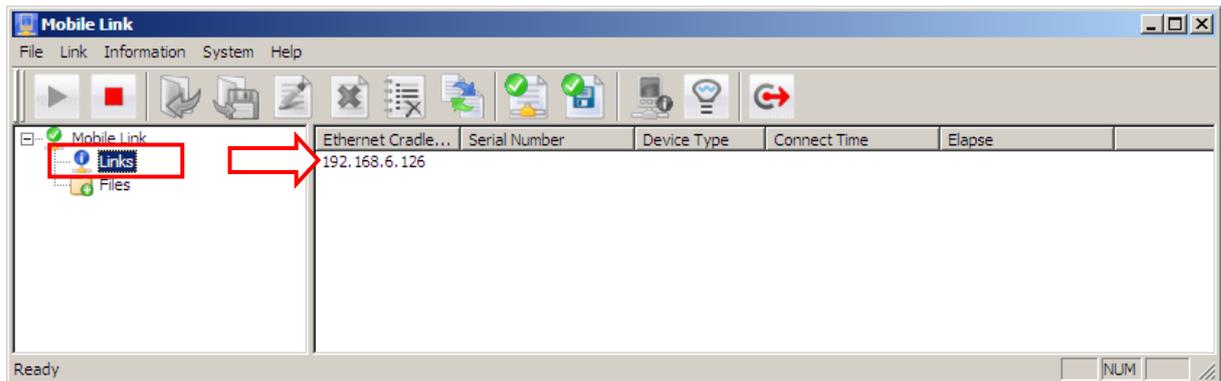
<b>File Menu</b>		
Open		Open a selected data file.
Save As		Save a selected data file to a different file path.
Rename		Rename a selected data file.
Delete File		Delete a selected data file.
Remove from List		Remove a selected data file from the file list.
Convert		Convert a selected data file to Excel file format.
Exit		Close the Mobile Link program.
<b>Link Menu</b>		
Start		Start the link service.
Restart		Re-start the link service.
Stop		Stop the link service.
<b>Information Menu</b>		
Device Information		Get system information about a specific mobile computer.
<b>System Menu</b>		
Link Properties		Configure link properties.
File Properties		Configure file properties.
<b>Help Menu</b>		
About Mobile Link		View information about the Mobile Link program.

## 3.2 RECEIVING DATA OVER THE NETWORK

### 3.2.1 VIEW LINK STATUS

- 1) Connect your Ethernet Cradle to the host computer over the network.

In **Mobile Link**, click **Links** on the left pane of the work area and the IP address of Ethernet Cradle will be displayed on the right pane.

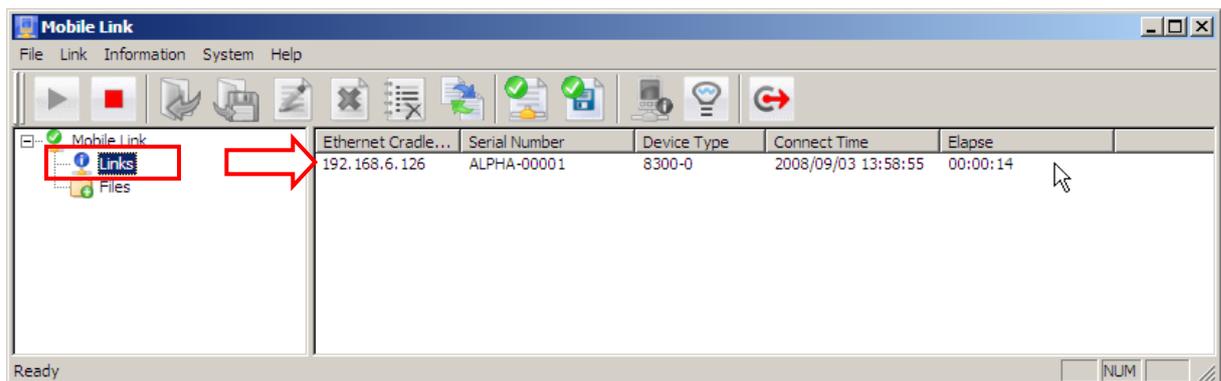


Note: You must have configured your Ethernet Cradle to connect to the host computer with correct host IP and port number.

- 2) Seat the mobile computer into your Ethernet Cradle, and start with uploading data.

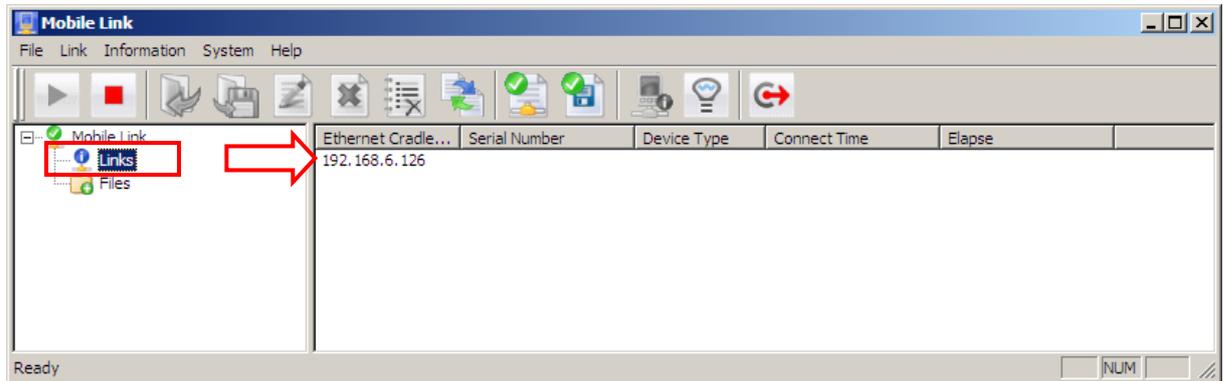
In **Mobile Link**, more information about the connection will be displayed on the right pane. The connection details include:

- ▶ Ethernet Cradle IP
- ▶ Serial Number (of the mobile computer)
- ▶ Device Type (of the mobile computer)
- ▶ Connect Time (start time)
- ▶ Elapse (time elapsed upon completion of receiving data)



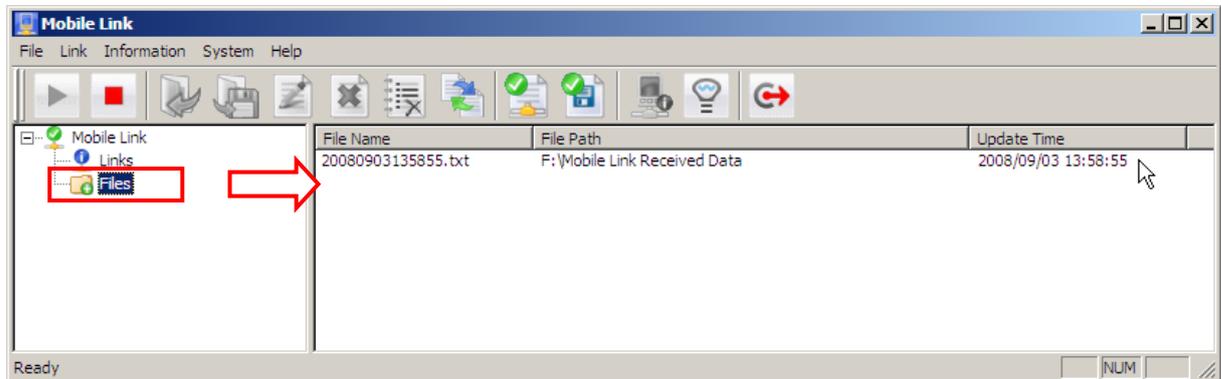
Note: You must select "Ethernet" for the upload interface on the mobile computer.

- 3) Except for "Ethernet Cradle IP", the rest information will be cleared upon completion of uploading data.



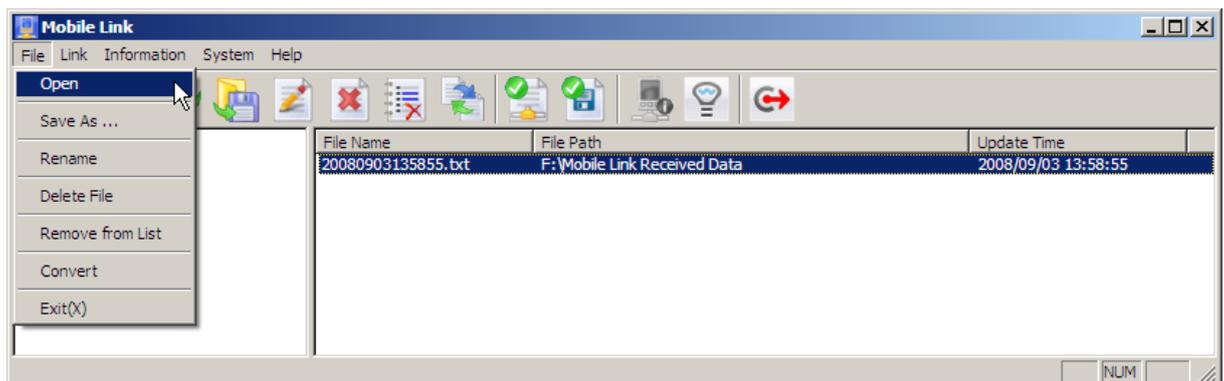
### 3.2.2 VIEW RECEIVED FILES

- 1) In **Mobile Link**, click **Files** on the left pane of the work area and the received file or files will be displayed on the right pane.

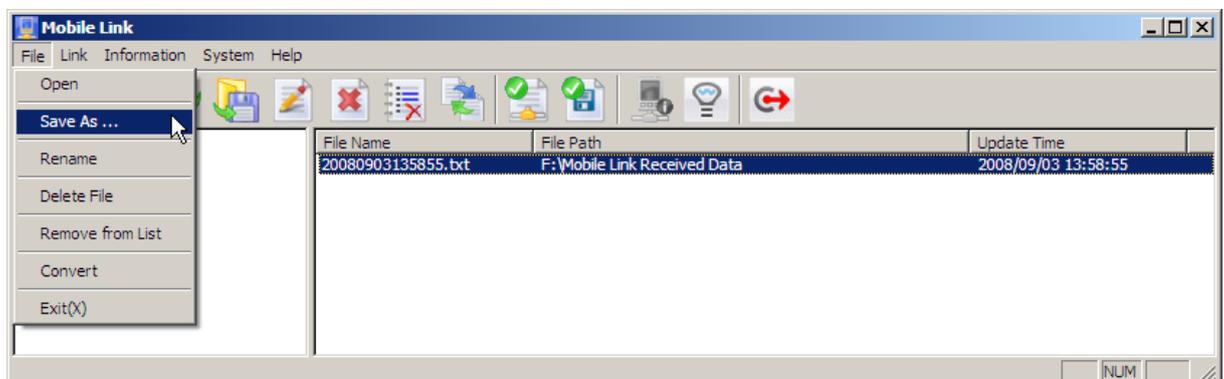


Note: You must have configured your Ethernet Cradle to connect to the host computer with correct host IP and port number.

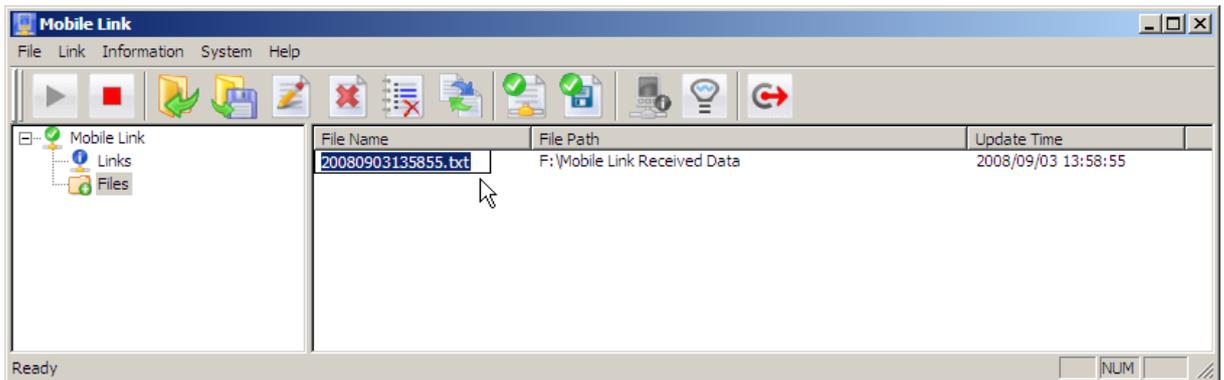
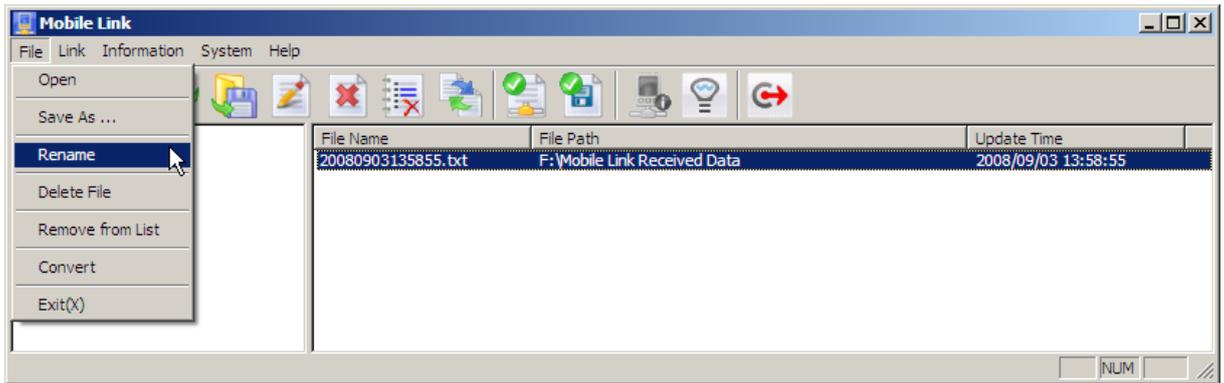
- 2) Click a file from the file list, and choose a command from the **File** menu:
  - ▶ On the **File** menu, click **Open** to open the selected data file.



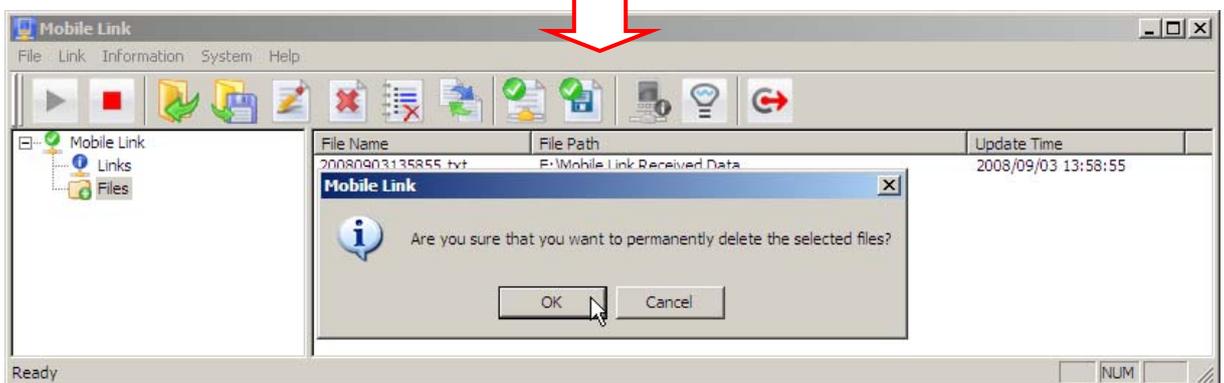
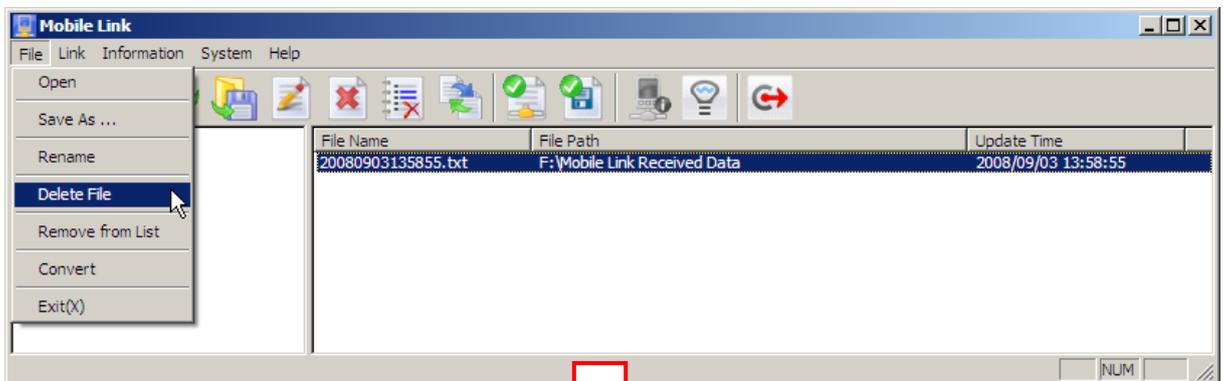
- ▶ On the **File** menu, click **Save As** to save the selected data file to a different file path.



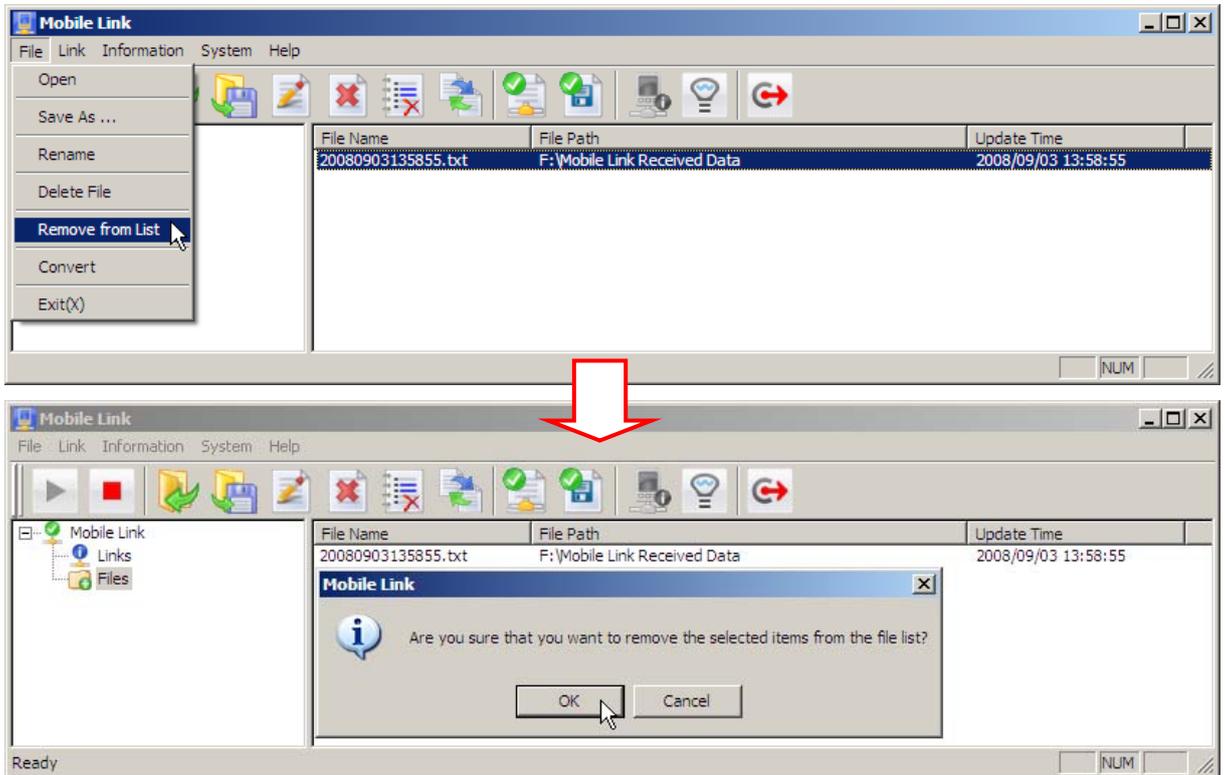
- ▶ On the **File** menu, click **Rename** to rename the selected data file.



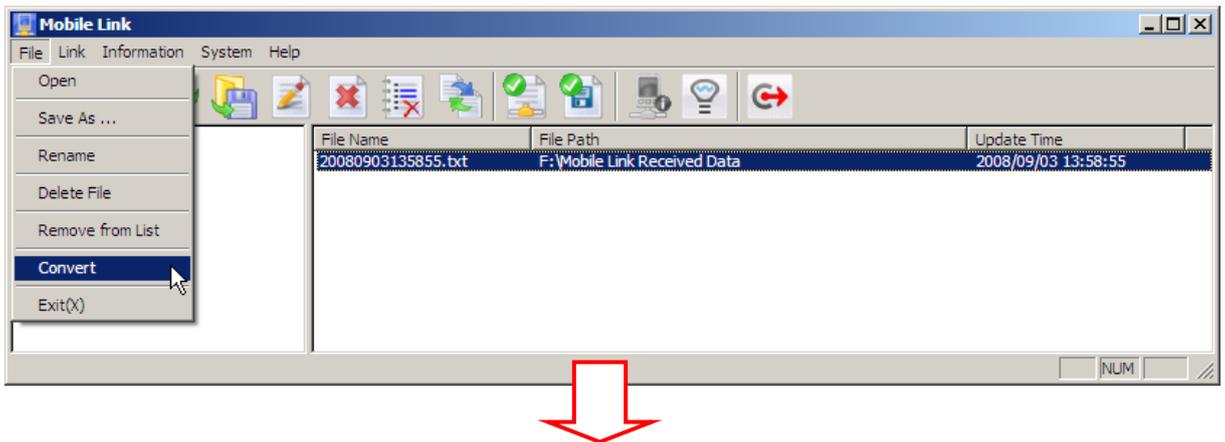
- ▶ On the **File** menu, click **Delete File** to delete the selected data file.

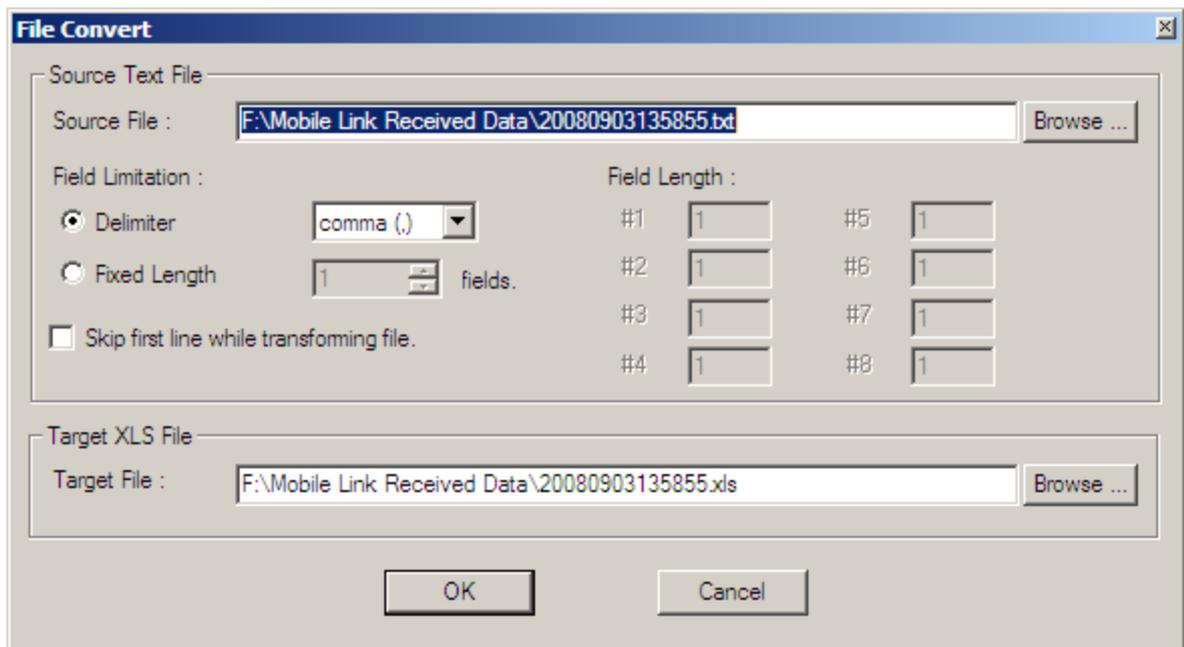


- ▶ On the **File** menu, click **Remove from List** to remove the selected data file from the file list.



- ▶ On the **File** menu, click **Convert** to convert the selected data file to Excel file format.

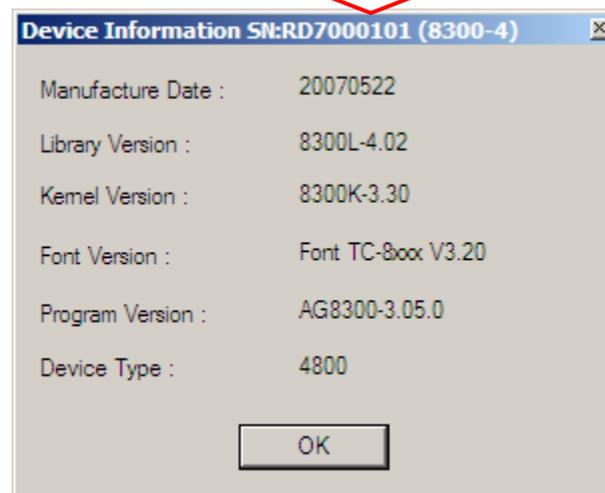
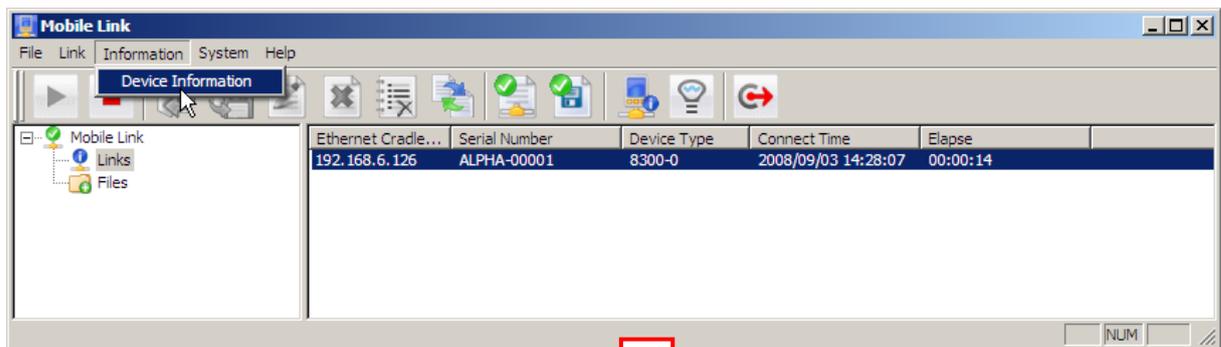




### 3.2.3 VIEW DEVICE INFORMATION

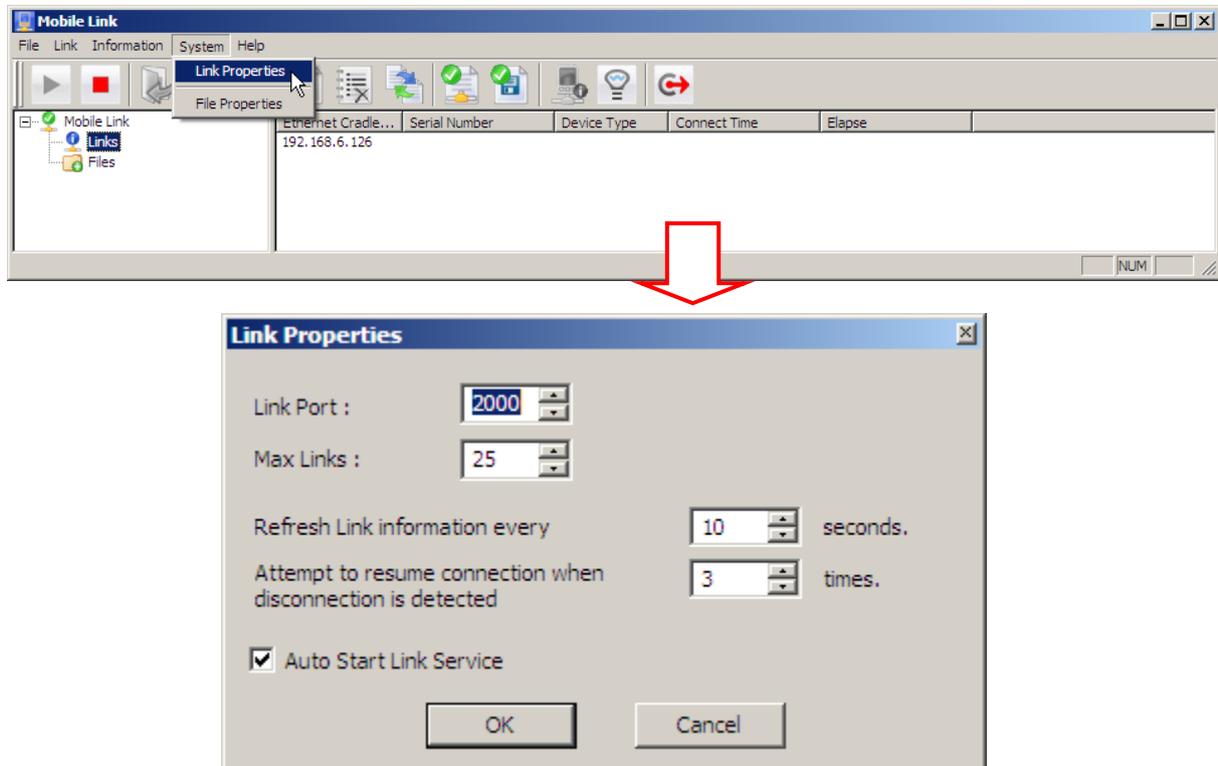
In **Mobile Link**, you can also view the device information while a mobile computer is uploading data.

- 1) Click an entry from the link list that provides detailed information on each of the current connections.
- 2) On the **Information** menu, click **Device Information** to view system information of a specific mobile computer, such as:
  - ▶ Serial Number (on the title of the dialog box)
  - ▶ Manufacture Date
  - ▶ Library Version
  - ▶ Kernel Version
  - ▶ Font Version
  - ▶ Program Version
  - ▶ Device Type



### 3.2.4 CHANGE CONNECTION SETTINGS

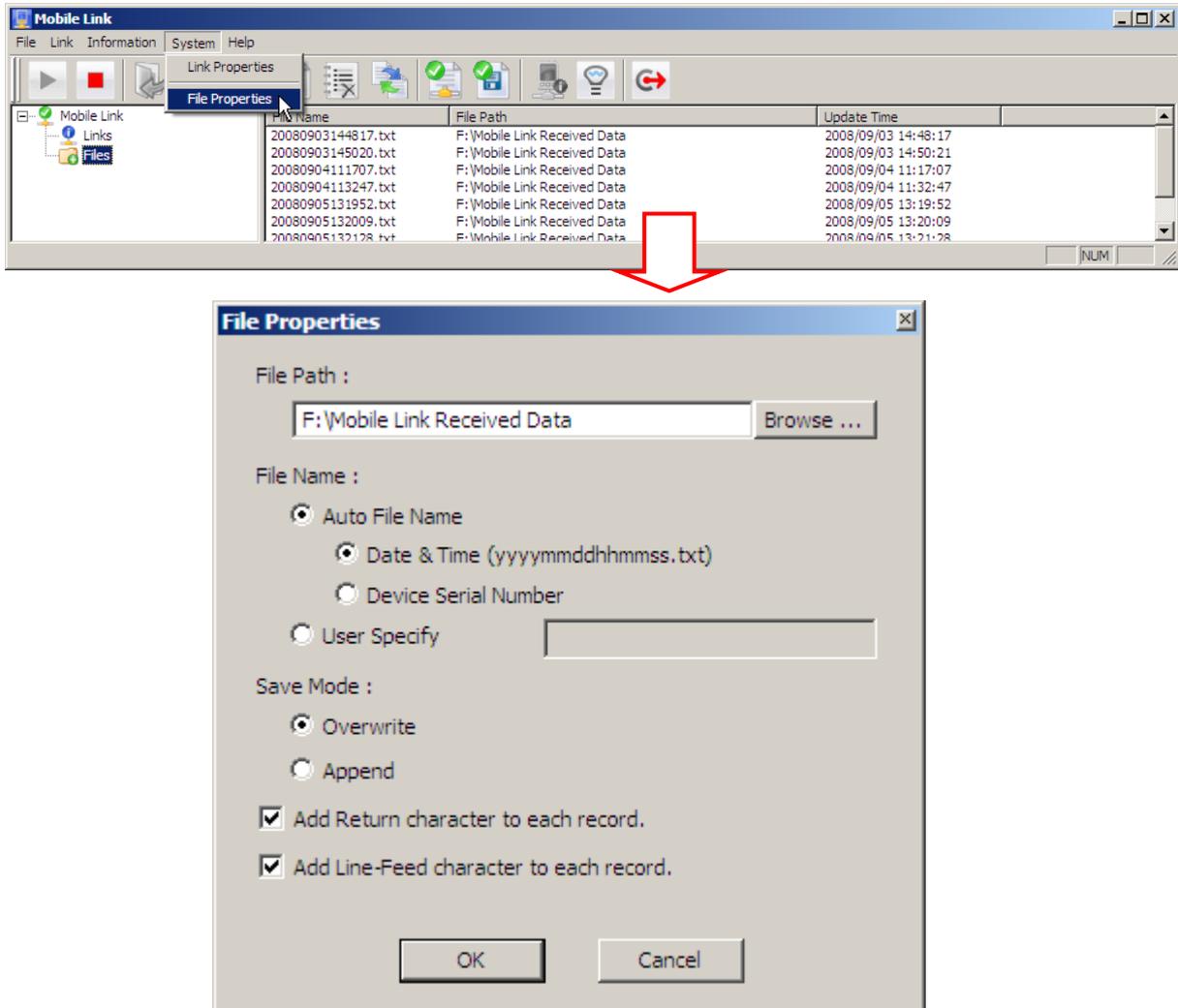
You must have configured your Ethernet Cradle to connect to the host computer with correct host IP and port number. On the **System** menu, click **Link Properties** to change the following settings:



- ▶ **Link Port:** The port number is "2000" by default. You may change it in **Mobile Link**, as well as on your Ethernet Cradle.
- ▶ **Maximum Links:** It allows up to 25 mobile computers to upload data by default. You may change the number to meet your needs.
- ▶ **Refresh Link Information:** Type or select an appropriate period of time for **Mobile Link** to refresh the link status, in units of second.
- ▶ **Attempt to resume connection when disconnection is detected:** Type or select how many times **Mobile Link** will try to resume connection.
- ▶ **Auto Start Link Service:** By default, it is set to automatically start the link service upon execution of **Mobile Link**. You may disable it if necessary.

### 3.2.5 CHANGE DATA FILE SETTINGS

On the **System** menu, click **File Properties** to change the following settings:



- ▶ **File Path:** By default, the received data files will be saved in the same folder where the **Mobile Link** program is saved. Type the file path where the data files will be saved.
- ▶ **File Name:**
  1. **Auto File Name — Date & Time**  
By default, each data file will be saved by automatically giving it a name based on the date and time it is received. The file name will be “yyyymmddhhmmss.txt”, where you have 4 digits for year (yyyy), followed by 2 digits for month (mm), followed by 2 digits for day (dd), followed by 2 digits for hour (hh), followed by 2 digits for minute (mm), and finally, 2 digits for second (ss).
  2. **Auto File Name — Device Serial Number**

You may change it to save file by the serial number of the mobile computer. However, if you keep uploading data from the same mobile computer, the original file will be overwritten by a later copy, which may contain different data.

3. User Specify

In the **User Specify** box, type the file name you want to use.

▶ Save Mode

1. Overwrite

If the file name is the same as of an existing file, the uploaded data will overwrite the original data. Otherwise, it will create a new file.

2. Append

If the file name is the same as of an existing file, the uploaded data will be appended to the original data. Otherwise, it will create a new file.

▶ By default, it will add Return character to each record. However, you may change it if necessary.

▶ By default, it will add Line-Feed character to each record. However, you may change it if necessary.