

2011

Capturx Forms for Microsoft Office Excel

User Guide



Table of Contents

Welcome to Capturx Forms for Excel	4
Welcome to Capturx Forms for Excel.....	4
Capturx Forms for Excel Features	4
Capturx Forms for Excel Requirements.....	5
System Requirements	5
Printer Requirements	5
How Capturx Printing Works	6
Registering and Activating Your Pen and Software.....	7
Registering and Activating Your Software	7
Registering and Activating Your Pen.....	9
The Capturx Digital Pen	11
Overview.....	11
Charging and Maintenance of Your Digital Pen.....	12
Managing Digital Pens	14
Dot Pattern for Printing	18
The Capturx Toolbar (Ribbon) in Excel	19
List of Sections and Options Available on the Toolbar.....	19
Designing Capturx Forms in Excel	24
Creating an Effective Form	24
Making the Paper Form Digital	27
Merging Cells to Create a Writing Area	28
Adding Borders to Your Form	29
Selecting a Capturx Format for the Cells.....	30
Adding and Using the Eraser	38
Adding and Using Send to Phone	39
Sorting Worksheets on the Form	41
Naming a Worksheet.....	42
Completing Your Form	43
Ensuring the Form Is Complete	43
Printing the Excel Form	44
Downloading Digital Ink	46
Downloading Data with the Docking Station.....	46
Importing the Ink into Excel Files	49
Reviewing and Editing the Imported Pen Data.....	50

Using Review Options	50
Capturx Review Pane	52
Sheet Status Information	53
Viewing the Sheet Status Information	53
Capturx Help and Support Options	54
Using and Viewing the Help and Support Options.....	54
Appendices:	55
Appendix A: Using Custom Expressions	55
Appendix B: How to Monitor Dot Pattern	58
Appendix C: Collecting and Sharing Data Across Teams	59
Appendix D: Additional Dot Pattern for Printing	62
Appendix E: Receiving Emailed Ink	64
Appendix F: Best Practices for Writing on Forms.....	65
Appendix G: Capturx Excel Functions	66
Appendix H: Upgrading to Version 1.2.....	67

Welcome to Capturx Forms for Excel

Welcome to Capturx Forms for Excel

Thank you for your purchase of Capturx Forms for Excel. Capturx is an add-in to Microsoft® Excel® that extends paper-based workflows to Microsoft Office®.

Capturx Forms for Excel Features

Capturx Forms for Excel enables users to design forms in Excel, print them on ordinary paper, and have the handwritten data automatically digitized and formatted back into the original Excel fields or uploaded to a Capturx server*.

Users get the ease-of-use and independence of working with Excel and paper, while also getting structured data. The structured data can be kept in Excel, provided to IT for easy integration into backend systems, or uploaded to a Capturx server*. Teams get the simplicity of working with pen and paper with all the advantages of immediate access to structured digital data.

With Capturx, you will be able to:

- Easily design forms in Excel. Capturx provides users with the power and flexibility to create or use their own existing forms with a familiar software application – Microsoft Office Excel. No new tools to buy or scripting languages to learn.
- Simply collect data on paper. Forms are printed on ordinary paper with a special watermark that enables them to be used with a digital pen. Teams can fill out paper forms in any environment without extra equipment or training. The pen leaves behind a written paper record while instantly digitizing the information for use with Excel.
- Immediately access rich data in Excel. Capturx automatically downloads the data and inserts it into the right formatted cells within Excel. Teams can view, share, and store the original ink strokes and the converted digital data for each form. Capturx also provides summary data tables which can be used for analysis within Excel or integrated into other databases or back end systems.

This guide describes the process for using Capturx Forms for Excel and provides a comprehensive explanation of its features. See Getting Familiar with the Capturx Toolbar for information on the Capturx Forms for Excel user interface.

* To use a Capturx-enabled Excel form with Capturx Forms Service (Adapx-hosted Web server) or Capturx for SharePoint, your organization will need to license the related software and service. For more details, please visit: <http://www.adapx.com/capturx-forms-publish>

Capturx Forms for Excel Requirements

System Requirements

- Microsoft Windows XP SP3 (32-bit), Windows Vista SP2 or Windows 7 SP1 (32-bit or 64-bit)
- Microsoft Office 2007 SP2 (Excel and Word, 32-bit) or Microsoft Office 2010 (Excel and Word, 32-bit)
- Memory: A minimum of 512MB of RAM is required, though 1GB of RAM or more is suggested for optimal results.

Printer Requirements

- 4-color PostScript printer
- 256MB of RAM for your printer (512MB of RAM recommended)
- Some color printers may require settings to be adjusted for optimal use.
- To see a sample list of compatible printers please visit:
<http://www.adapx.com/printer-sample-list>

How Capturx Printing Works

Capturx Forms for Excel includes technology which turns ordinary pieces of paper into extensions of your computer desktop applications through a special digital watermark (dot pattern). The dot pattern is printed on each page, so that your handwriting can be stored in a digital pen and integrated into the correct file. The dot pattern is unique for each page and appears as a light background on printed pages. The digital pen has a sensor which reads the dot pattern as it writes, tracking the pen's location on that unique sheet as you write.

The dot pattern is printed with high precision using black ink, which is the only color "visible" to the digital pen. The information in the file, which is visible to humans, is printed using your printer's yellow, magenta, and cyan inks. Any visible lines that look black are actually combinations of these colors.

An initial Capturx Forms for Excel purchase includes enough dot pattern to print thousands of pages. Dot pattern is like printer toner: it gets used up as you print. Additional dot pattern is available for purchase and download from Adapx. You can obtain additional dot pattern by contacting: sales@adapx.com.

Capturx printouts must be made with a 4-color postscript printer. A broad range of printers have been tested for use with Capturx technology including: HP, Okidata, Oce, Ricoh, and Canon.

To learn more about specific printers, please visit: http://www.adapx.com/printers/Sample_List

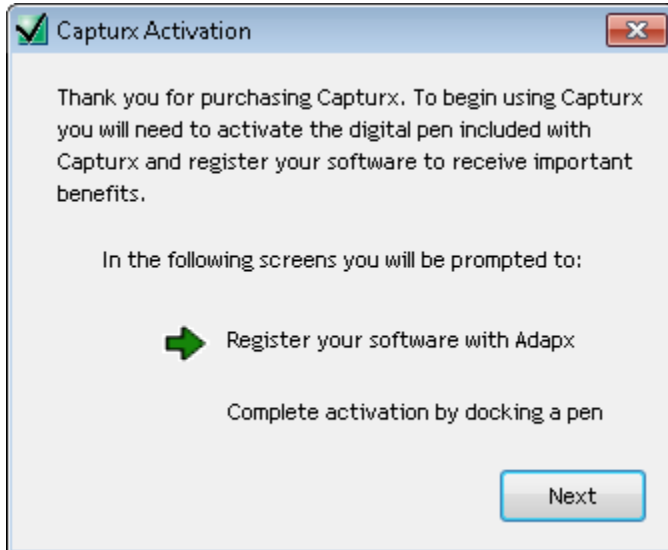
See [Charging and Maintenance of Your Digital Pen](#) for information on the digital pen and how it is used.

See [Appendix B: How to Monitor Dot Pattern](#) for information on how to choose and obtain the amount of pattern that best meets your needs.

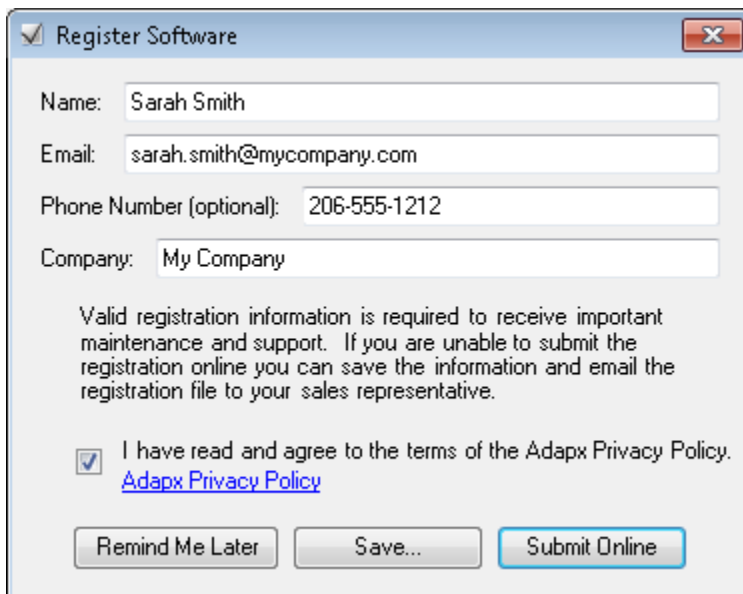
Registering and Activating Your Pen and Software

Registering and Activating Your Software

When you first access Capturx for Excel by selecting the Capturx ribbon in Excel, you will see the following activation screen:



The green arrow shows your current step in the activation process. To register your software with Adapx, select the **Next** button. This will open the Register Software form.

A screenshot of a Windows-style dialog box titled "Register Software". The dialog box has a green checkmark icon in the top-left corner and a close button (X) in the top-right corner. It contains several text input fields: "Name:" with the value "Sarah Smith", "Email:" with the value "sarah.smith@mycompany.com", "Phone Number (optional):" with the value "206-555-1212", and "Company:" with the value "My Company". Below the fields, there is a paragraph of text: "Valid registration information is required to receive important maintenance and support. If you are unable to submit the registration online you can save the information and email the registration file to your sales representative." Below this text is a checked checkbox followed by the text "I have read and agree to the terms of the Adapx Privacy Policy." and a blue hyperlink "Adapx Privacy Policy". At the bottom, there are three buttons: "Remind Me Later", "Save...", and "Submit Online".

To complete the registration process and start the activation process:

1. Fill in the form with the required information.
2. Select the **Submit Online** button.

Capturx Forms for Microsoft Office Excel

Note: If your computer is offline, you can select the **Save** Button to save your registration information.



To complete the software activation, dock the pen and select the **Next** button.

Registering and Activating Your Pen

The first time a pen is docked, you will see the Capturx Pen Startup Wizard. The green arrow shows your current step in the activation process. A check mark indicates the parts of the process that have been completed and a warning sign indicates a procedure that failed.



All new pens shipped with Capturx for Excel have activation keys. You should not need to click on the "Use Offline Key" button. Please contact Adapx technical support for assistance if you are unable to activate your pen.

To register and activate your pen:

1. Select the **Activate** button to open the registration form

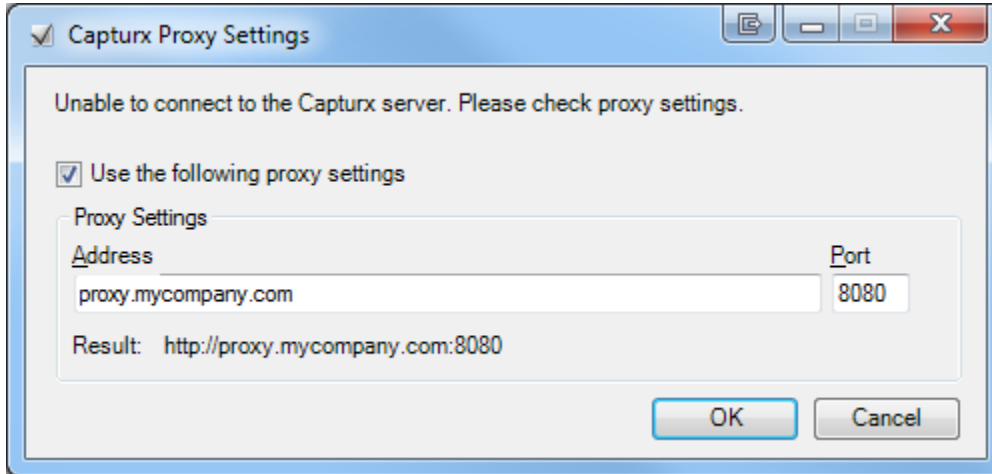
2. Fill in the form with the required information.
3. Select the **Submit Online** button.

Note: If your computer is offline, you can select the **Save** Button to save your registration information.

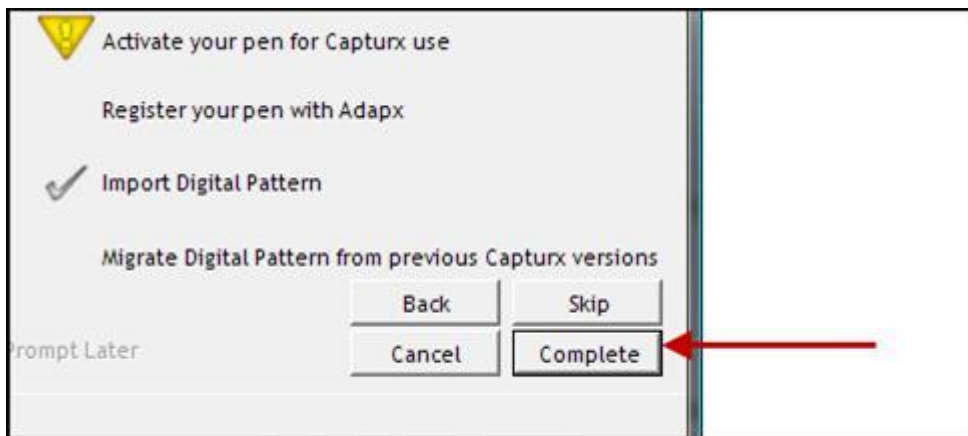
If your connection uses a proxy server, you may have to enter proxy information to complete the activation.

To provide the proxy information:

1. The Adapx Proxy Settings window will appear when you select **Activate**



2. Check the **Use the following proxy settings** check box and enter the proxy address for your company and select the **Ok** button.



When you have completed the procedures for registering and activating your pen, select the **Complete** button at the bottom of the wizard.

If you encounter any issues, contact Adapx Technical Support:

<http://www.adapx.com/Support/Contact-Technical-Support.html>

The Capturx Digital Pen

Overview

The Capturx digital pen is a sophisticated computing device that converts any handwritten paper-based information into electronic data that can be modified, manipulated, or shared in leading applications you already use.

Although the digital pen looks and feels like a regular ballpoint pen, it contains an integrated digital sensor, an advanced image microprocessor, and a mobile communications device for wireless connection. As you write, the digital pen scans your writing in conjunction with a digital watermark (dot pattern) that is printed by Capturx software along with the visual information in your form. With more than 75 snapshots per second, our digital pen determines what is written or drawn, and all this data is then stored in the pen's memory until you download it to a PC or send it to someone via email using Capturx Pen Manager or Capturx Mobile.

- The Capturx pen can be used with Fisher pressurized ink pen cartridges, filled with Rite in the Rain® proprietary ink, enabling teams to write in any position and in any condition.
- The Capturx pen stays charged for five to seven days of typical use with built-in Lithium-ion rechargeable battery. Charging time approximately 2.5 hours (150 min), from 0% to 100% via cradle and USB adapter. The digital pen can endure a standby time (without cap) of 10 hours.
- The Capturx pen can be used for 2 hours (120 minutes) continuously, and holds up to 50 pages of letter-sized paper completely filled with single-spaced writing.
- Model # AMP-1221. Weight 1.06 oz. Dimensions 6.02x.75x.6 inches without cap; 6.18x.83x.71 inches with cap.
- Data Communication: USB 1.1 standard (also supports USB 2.0 standard), Bluetooth® available – supported by Capturx Mobile with a smartphone; not supported to a PC.
- For use: 32 to 104 degrees Fahrenheit at relative humidity levels of 10-85%
- For storage: -4 to 113 degrees Fahrenheit at relative humidity levels of 10-90%
- Ruggedness tested on 'standard' 4 foot drop while capped.
- Pen can be used in inclement weather and rain, but it is not submersible.

Charging and Maintenance of Your Digital Pen

The pen looks and feels just like an ordinary ballpoint pen and you use it in the same way. There are no keys to press. You activate the pen simply by removing the cap and deactivate it by replacing the cap. The pen needs to be charged before you can use it to capture data.

To change your ink cartridge:

1. To remove the ink cartridge from the pen, use small pliers or use the hole in the pen cap to grab the ink tip, angle the cap and pull.
2. To place the cartridge in the pen, take one of the ink cartridges and gently slide it into the hole at the tip until it is completely seated and does not fall out. It's normal for the cartridge to feel slightly loose.

To charge the pen:

1. Attach the docking station to a PC via the USB port.
2. Fully insert the uncapped pen in the docking station.
3. The gold connection points on the pen and docking station need to be aligned and the pen needs to be firmly placed in the docking station.
4. When you first receive your digital pen, you will need to keep the pen in the docking station for four hours for it to fully charge.

Note: When your pen is uncapped, it is using power. To prevent your battery from running low, do not leave the cap off the pen for extended periods of time.



See [How Capturx Printing Works](#) for information on how the digital pen and paper work together to capture your data. For information on how to use the pen and docking station to download data, see [Downloading Digital Ink](#).

Managing Digital Pens

Capturx Pen Manager is used to manage settings for the digital pen and to process handwritten ink saved on the pen. To use Capturx Pen Manager to manage your digital pen, it must be inserted into a docking station which is connected to a PC's USB port.









Pen management features and options include:

- Entering and saving contact details to the pen
- Assigning a password to the pen
- Viewing the remaining time left on the battery of the pen
- Setting how you want the pages to download
- Enabling or disabling the Bluetooth feature on the pen
- Registering the pen

You can view the activity of the Pen Manager and access it by double-clicking on the icon in your system tray.



Four states of the icon are used to show you status:

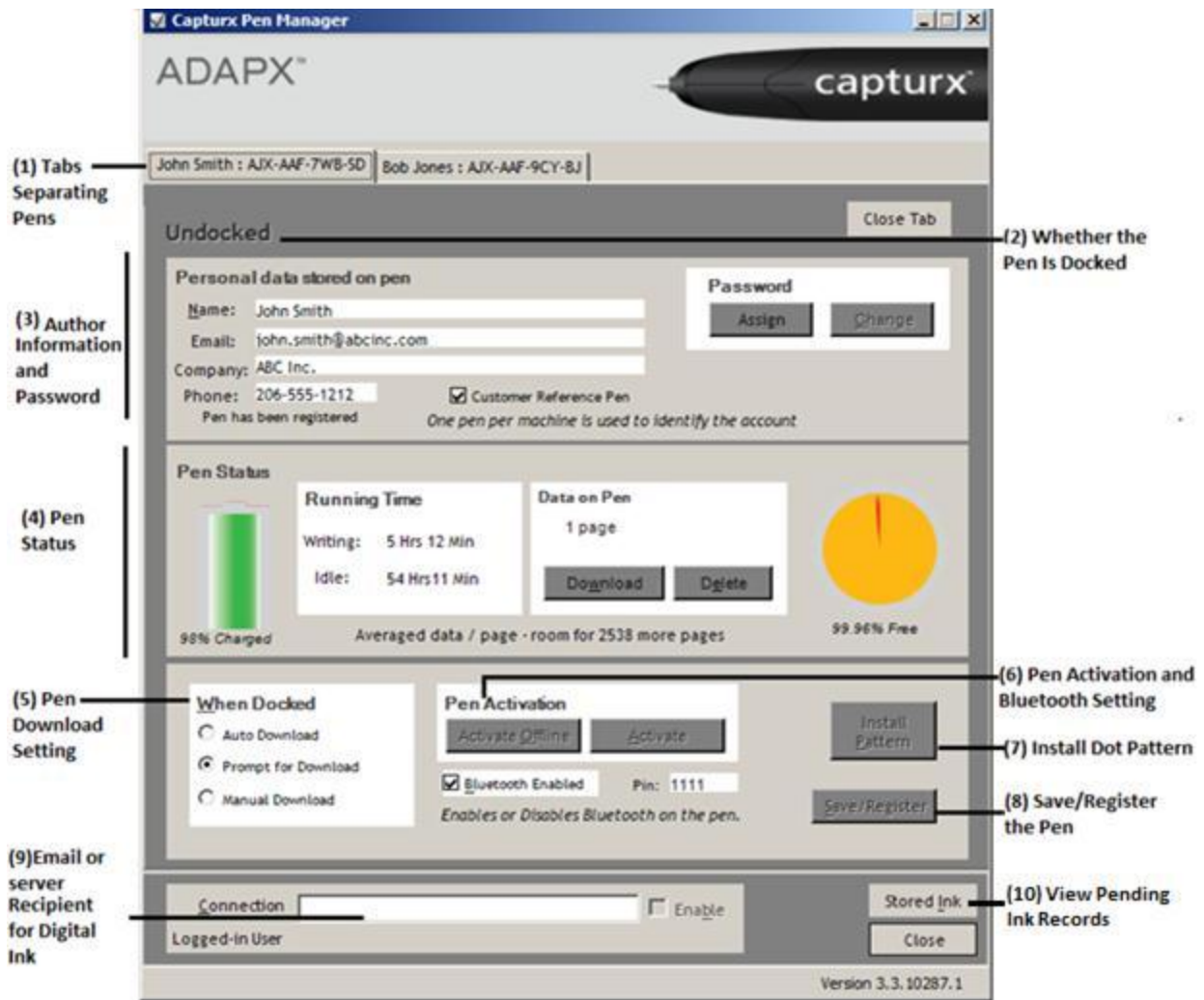
	Displays this icon	One or more pens are docked
 	Animated icon that flashes between the two states	One or more pens have unprocessed ink in their memory
  	Animated icon that flashes between the four states	Pen is processing ink records - either downloading ink records from the pen or importing from an XID file to the personal computer
	Displays this icon	One or more pens are locked
	Displays this icon	No pens docked

Hovering over the system tray icon with your mouse pointer will provide you with the battery charge information and the memory status of the pen.

Capturx Pen Manager is divided into tabs for each pen that has been docked. On each tab, you will find pen-specific information and settings. Each of these is identified by the number in the diagram and chapters below with descriptions:

1. Tabs Separating Pens

2. Whether the Pen Is Docked
3. Author Information and Password
 - Customer Reference Pen
4. Pen Status
5. Pen Download Setting
6. Pen Activation and Bluetooth Setting
7. Install Dot Pattern
8. Save/Register the Pen
9. Email or Server Recipient for Digital Ink



(1) Tabs Separating Pens

Tabs are used to separate the Pen Manager options for each individual pen. Selecting a tab will show you the options for the tab (pen) you have selected. The "Close Tab" button is used to close the particular tab you have open. You can only close the tab for a pen which is not currently docked.

(2) Whether the Pen Is Docked

This section will automatically display “Docked” or “Undocked” based on whether or not your digital pen is inserted in a docking station which is connected to the USB port of the PC.

(3) Author Information and Password

This section is used to identify the author who will be associated with all handwriting downloaded from a specific pen. This allows anyone who reviews a completed form to know who wrote in each field.

If you registered your pen during the original activation process, the information you entered will already be saved. If not, you can type the information in the fields at any time.

After typing your information, select the **Save/Register** button.

An optional feature is to **Assign a Password** to your digital pen. By assigning a password, you prevent someone else from accessing the data which you’ve stored on the pen, or from viewing the personal information you have entered. Once you assign a password, you will be asked to enter it before you can download data from the pen. The password options include:

- Delete Button: Use this button to delete the password on your pen.
- Change Button: Use this button to change the password you have previously assigned to the pen.

Keep your password in a safe place.

The **Customer Reference Pen** is used to designate the pen serial number that is sent to Adapx to identify the account. You may be asked to supply this serial number when ordering additional Capturx products and dot pattern refills. Capturx will select the first pen that you dock as your CRP. After docking other pens, you may select one of them as your CRP.

Note: If your password is lost, you **cannot** retrieve it and you will need to contact Adapx Technical Support.

(4) Pen Status

This section displays the following information:

- Battery Status: Percent charged, writing time, and idle time left on the pen
- Data on Pen: Percentage of free space left on the pen, pages remaining, and the number of current pages on the pen ready to download. You can also manually delete and download the current pages stored on the pen by selecting the relevant button.
- Based on average data per page, an estimate of how many additional pages you can store on the pen before the next download.

(5) Pen Download Setting

This section allows you to select one of three download settings:

- **Auto Download** – Data is automatically downloaded as soon as Capturx detects a connected pen with stored data.
- **Prompt for Download** – When Capturx detects a connected pen with stored data, you are prompted for permission to download the data.
- **Manual Download** – With the pen connected, the system will wait for you to initiate download using the **Download** button on the Pen Status section of Capturx Manager.

(6) Pen Activation and Bluetooth Setting

To begin using Capturx Forms for Excel, you must have an activated pen. Although activating the pen is part of the initial registration process, you may want to activate additional pens or to activate your pen separate from the initial registration process. You have the choice to **Activate** online via the Internet or **Activate Offline** using an offline key. The digital pen has the online key stored on it, so this is the recommended alternative. To activate offline by manually entering your software activation key, please contact Adapx Technical Support for assistance.

By default, your digital pen has **Bluetooth Enabled**, along with a displayed Bluetooth **Pin**. The Enable Bluetooth option allows you pair your pen with a supported mobile device, and to send ink data directly from the pen to the mobile device to an email recipient or server. For more information on Capturx Mobile, go to: <http://www.adapx.com/mobile>

(7) Install Dot Pattern

Although you received dot pattern when you first installed your pen, you may need additional pattern. The **Install Pattern** button is activated when your organization has at least one credit for a pattern refill.

(8) Save/Register Pen

Selecting the **Save/Register** button will save the changes you made and update the pen's registration information sent to Adapx with the information shown in section 3.

(9) Email or Server Recipient for Digital Ink

Instead of importing data directly into an Excel file on your PC, you can send your stored ink to an email recipient or to a Capturx-enabled Server by entering the email recipient address or server URL in the **Connection** field and selecting **Enable**.

Ink Records routed to Capturx-enabled server

1. Enter a URL for a Capturx-enabled Server in the **Connection** field.
2. Select **Enable**.
3. Dock the pen once the data is collected.
4. Records written on forms printed from the Capturx-enabled Server will be uploaded to that server.
5. All other ink records on the pen will be imported to the correct files on the local PC.

Ink Records routed to an email recipient

1. Enter an email address formatted as name@domain.com in the Connection field
2. Select **Enable**.
3. Dock the pen once the data is collected.
4. Capturx will create an email using your default email client with the sender being whichever address is entered into the Connection field. The ink records will be contained in an .XID file (Adapx Ink Document) attached to the email.

(10) View Pending Ink Records

Ink records are available to view in the Capturx Pen Manager prior to being uploaded into the associated file and application. The Stored Ink Dialog can be selected from the Pen Manager.

Dot Pattern for Printing

When you first register and activate Capturx software and a digital pen, you will automatically have access to A2 dot pattern for Capturx printing. With A2 dot pattern, you can print almost 4,000 pages which are tabloid size or smaller. If you are under a Software Assurance Agreement, you can request a pattern refill each year. At that time, you can select a different size if preferred. For example, if you only print letter size forms, you can use your annual pattern credit for A4 which will give you more than 6,000 printed pages.

Size	mm × mm	in × in	Approx. US equivalent	No. of sheets/Refill
A4	210 × 297	8.3 × 11.7	letter: 8-1/2" x 11"	6,144 sheets
A2	420 × 594	16.5 × 23.4	tabloid: 11" x 17"	3,872 sheets
A0	841 × 1189	33.1 × 46.8	E-size or large plotter	1,952 sheets

What you plan to print

Option to choose

I will ONLY print LETTER size sheets (8-1/2" x 11") from this computer

→ Select A4

I want the option to print LETTER (8-1/2" x 11") and TABLOID (11" x 17") size sheets

→ Select A2

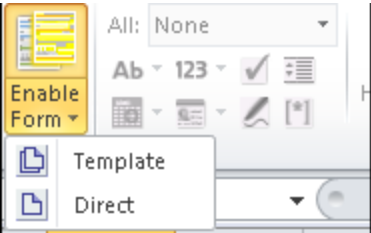
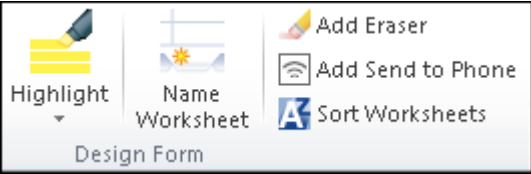
I want the option to print large sizes using a plotter (you will still be able to print smaller sizes)


→ Select A0

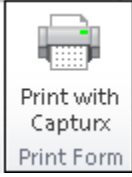
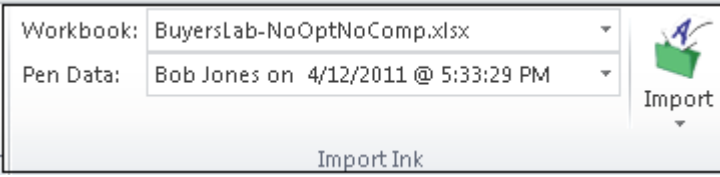
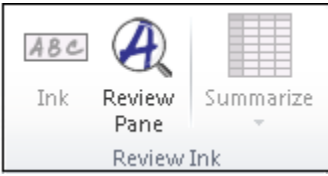
If you run out of dot pattern before your annual refill, please see [Appendix D: Additional Dot Pattern for Printing](#) for details on how to order a refill from Adapx.

The Capturx Toolbar (Ribbon) in Excel

List of Sections and Options Available on the Toolbar

<p>Capturx Section</p>	<p>Capturx Template</p>  <p>To let Capturx know that this form will be used with digital pens, you need to select the Enable Form button on the far left of the toolbar. This button has a sub-menu with two options. The Template option creates a template so you can print and use multiple copies of the same form. Template is the option which fits most workflows. The Direct option creates a single copy of the same form.</p>
<p>Design Form Section</p>	<p>Designing the Form</p>  <p>Moving towards the right along the toolbar, next is the Design Form section. Capturx works with standard Excel formatting – enabling you to leverage existing worksheets and knowledge of Excel. Capturx also supports some specialized formats to improve digital conversion of handwriting, such as names or addresses.</p> <p>Each data entry field in your form will have two formats – an Excel format which will affect how the converted text looks (number field with 2 decimal places) and a Capturx format which will affect how the handwriting is converted.</p> <p>Note: Handwritten Ink is a Capturx format used to capture the image of a signature or a sketch. The software won't try to convert the image into text.</p> <p>The Design Form Section provides the following menus and options:</p> <ul style="list-style-type: none"> • The All drop-down menu is where you can access all Capturx formats available. • Icons for the most popular Capturx formats are available directly

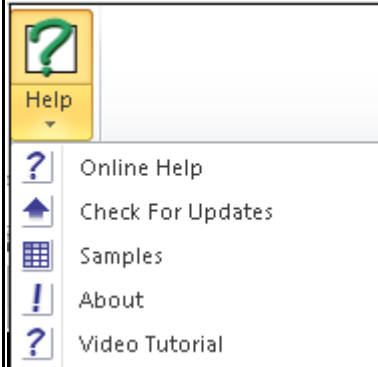
	<p>from the toolbar for quick formatting.</p> <ul style="list-style-type: none"> • The Add Eraser button allows you to place an eraser tool in the currently selected cell of the worksheet. The pen user will use the eraser graphic to "start over" on a particular cell that s/he wants to change. By touching the pen tip to the wrong handwriting, then to the eraser, then back to the field and writing the correct handwriting – the Capturx software will only convert the correct handwriting. • The Send to Phone button allows you to place a data push tool into the currently selected cell of the worksheet. When the pen user touches the pen tip to the Send to Phone graphic, Capturx will push all data that is stored on the digital pen to a mobile phone with has the Capturx Mobile app installed. For more information about Capturx Mobile, please visit: www.adapx.com/mobile. • When a handwritten form is imported into Excel, a new worksheet is added to the template Excel file. To customize the name of each new worksheet to be based on a handwritten field (such as Order Number), select the correct Excel cell and then click on the Name Worksheet button. • The Highlight button gives you a view of your form with Capturx formatting visibly displayed. When you have finished formatting, this is a good way to do a final check of the Capturx formatting before you print the form. <p>See Selecting a Format for the Cells for information on the Formatting section and how to use these options.</p>
<p>Capturx Server Section</p>	<p>Publishing and Opening the Form to/from a Capturx Server</p>  <p>Only use this section if you use Capturx Forms Service or Capturx for SharePoint for printing, ink importing, reviewing, and editing of forms designed in Excel.</p> <p>This section enables you to:</p> <ul style="list-style-type: none"> • Select Publish to make the form available on Capturx Forms Service or Capturx for SharePoint. • Select Open to access a form published to Capturx Forms Service or Capturx for SharePoint. The form will be opened in Excel, so that you can see the formatting selected during form design.
<p>Print Sheet</p>	<p>Printing the Sheet</p>

<p>Section</p>	 <p>When you have finished designing the form, it's time to print. Use the Print with Capturx button to print empty copies of your form.</p> <p>Using the Capturx printing feature, print a copy for each form that will be completed in the field. Each printout will be unique and able to be used with a digital pen. Photocopies will not work with the digital pen or with Capturx software.</p> <p>Note: You need to use a Capturx print button when you print so the sheet will contain the dot pattern. If you print using the standard Excel menu item, the paper form will not be usable with a digital pen. See Printing the Excel Form for information on this option and how it is used.</p>
<p>Import Ink Section</p>	<p>Importing the Ink</p>  <p>Once data is downloaded from a digital pen or an emailed XID file, the Import Pen Data button will appear. For the selected Workbook, you can Import the most recent downloaded data or Import All downloaded data.</p> <p>This section enables you to:</p> <ul style="list-style-type: none"> • Select the Workbook for which you want to import data • Select which Pen Data you want to import -- based on information listing the author, time, and download date • Select Import Pen Data to import the ink into the selected workbook
<p>Review Ink Section</p>	<p>Reviewing the Changes Made to the Form</p> 

	<p>You will be able to review both the image of the handwritten ink and the converted data using the Capturx Review Pane and the Ink button.</p> <p>The Review Section enables you to:</p> <ul style="list-style-type: none"> • Use the Ink button to display the original ink marks written on the page. Click the Ink button again to return to the converted text view. • Review the information collected with your digital pen in the field by selecting Review Pane. This pane will display per cell -- the image of the handwritten ink, the results of Capturx handwriting recognition based on the Capturx format, the author of the handwriting, and the timestamp of the handwriting. The review pane will appear on the right hand side of your screen. You can drag & drop the review pane if you would prefer to have it located in a different position. • Select the Summarize button when you want Capturx to generate a summary of the data that was collected on all your imported forms. The summary data will be on its own worksheet and can be exported as a .csv or other format for use in back-end systems. Note: The Summarize button is only click-able when you are on the template worksheet. <p>See Using the Review Options for more information about the review options and how they are used.</p>
<p>Sheet Status Section</p>	<p>Checking the Worksheet Status</p> <p>This section displays the information about when the worksheet was last printed and when the ink was last reviewed.</p> <div data-bbox="418 1182 813 1350" style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Last Printed: 4/12/2011 4:52:59 PM Last Imported: not imported yet</p> <p style="text-align: center;">Sheet Status</p> </div> <p>See Viewing Status Sheet Information for more information about the Sheet Status and the information it provides.</p>
<p>Help Section</p>	<p>Accessing Help and Online Training</p> <p>The Help section enables you to:</p> <ul style="list-style-type: none"> • View the Online Help. • Check for Updates to the software. This option will take you to a Software Updates dialog that allows you to view if there is a new version of Capturx Forms for Excel available, and to select how often you want to check for updates. If your use of Capturx includes a Software Assurance Agreement, you can download a new version of the software when one is available. • View and use Samples of Excel forms to practice using Capturx. • Select About to view the Capturx Forms for Excel version and

copyright information.

- Select **Video Tutorial** to visit a Web page with video tutorials designed to train users on the different features of Capturx for Excel.



Designing Capturx Forms in Excel

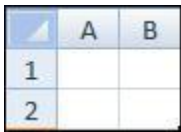
Creating an Effective Form

Check Page Layout

Check your layout by selecting print preview through the Excel menu. This will give you a dotted line outline of space you have on each printed page.

Flexibility in Cell Size

Before you design a form, it is a best practice to adjust the rows and columns into a grid of small boxes, similar to graph paper. This will allow you to easily merge cells to make the field size required, instead of adjusting column and row size for each field. . See the [Merging Cells to Create a Writing Area](#) topic for information about how to merge cells



	A	B
1		
2		

Give Pen Users Room to Write

You can make your form easier to use and improve the handwriting recognition by making the cells large enough to accommodate the user's handwriting. You can make the cells taller or wider by merging cells features to make larger cells. See the [Merging Cells to Create a Writing Area](#) topic for information about how to merge cells

Make It Clear Where the User Should Write on the Form

You can make your form easier to use by making it visible where the user is expected to write on the form.

- Put borders around the cells where you want them to write and by
- Add field label close to the data entry field.
- Don't place borders around cells where you don't want the user to write.
- Include instructions which make it clear on the form what type of input you are expecting (such as the items in the defined wordlist).

Select the Capturx Format for Best Handwriting Recognition

You can improve handwriting recognition accuracy by selecting the format that most closely matches the data being collected. For instructions, see [Selecting a Format for the Cells](#).

- Use structured fields, such as check boxes, as often as possible. These are easiest for the person completing the form and have the most accurate handwriting recognition.
- Limit the use of fields defined as "Text". Handwriting recognition is the most accurate when there are parameters which limit what the technology expects (for example: wordlists, date, city).
- Create a wordlist of valid entries to limit converted text to items that you define.
- Use checkboxes to turn on a value. Note: When the check box cell is empty, Capturx interprets the check box state as FALSE.

- Using “Custom Expression”, design a custom format if none of the preset formats meet your needs for a specific field. Note: Using Custom Expressions is an advanced technique; some programming knowledge may be required. See [Using Custom Expressions](#) for more information.

Format for Signature Capture

If you want any handwritten data to stay as an ink image, select the “Handwritten Ink” Capturx format. This is a good option for signatures, sketches, or freehand writing that does not need to be converted to digital text. The handwritten ink data won’t appear in converted data or on summary data tables. See the [Selecting a Format for the Cells](#) topic for information about the format options and how they are used.

Use an Image in Your Form

You can copy and paste images in your form, such as diagrams for inspections. If you want to collect structured data in the image make sure the underlying cells are enabled for that type of formatted data. Make sure that the user knows where to fill in the data to get the information in the correct cells. You can do this by underlining the cell, making a border around the cell, and by making your image transparent so that the underlying cell borders can be seen when printed. If you want basic freehand ink collected, keep all the background cells formatted as “None” and the ink image will show in “Ink” view. If you want the ink image to show in the converted text view, format the cells(s) as “Handwritten Ink”.

Customize Column Headings in the Capturx Summary Sheet

When you click on the “Summarize” button in the Capturx toolbar, Capturx creates a summary sheet of all imported forms. By default, the column headings will be the cell address (i.e. A1). To get a data table with column headings which are user friendly and/or match a map to a back-end system, use Excel’s standard “Define Name...” (“Name a Range” in Office 2007) functionality to define the cell field names when you design forms on your template. To create a name range, go to the Template worksheet, select a data entry field, right click, select “Define Name...” (“Name a Range” in Office 2007) and assign the appropriate name.

Note: If you use Capturx Forms Service or Capturx for SharePoint, defining a name for a cell will result in the column name in SharePoint.

Simplify Form with Checkboxes

Create a check box in its own cell with a label in an adjacent cell. When the check box cell is left empty by the pen user, Capturx interprets the checkbox state as FALSE.

Designing Forms for Searching

If you want to convert and easily search shorthand codes written in forms, we recommend creating special cells for shorthand codes. You can use wordlists that include all of the abbreviations to ensure that special abbreviations are recognized.

Scaling Pages

Capturx Forms for Microsoft Office Excel

In Excel 2007, worksheets with images or shapes can only be Capturx printed at 100% scale. Example images are: corporate logos, the Capturx eraser, and the Capturx send to phone tick box. Do not adjust the scale of the page during printing if you use Excel 2007 and have images on the form you've designed. This limitation does not apply to Excel 2010.

Making the Paper Form Digital

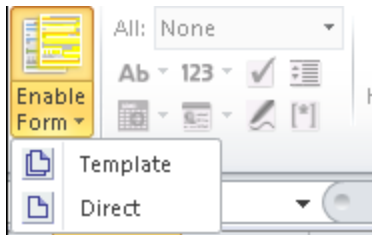
To let Capturx know that this form will be used with digital pens, you need to select the **Enable Form** button on the far left of the Capturx toolbar. This button has a sub-menu with two options.

The **Template** option creates a template so you can print and use multiple copies of the same form. The digital ink from each printout will be imported into a separate worksheet. Template is the option which fits most workflows.

The **Direct** option creates a single copy of the same form. The digital ink from each printout will be imported into the same worksheet. This is sometimes used when a form is shared between different people who are located in different cities. One person fills out the top section on his printout, one person fills out the bottom on her printout, and all of the digital ink is combined into the same Excel worksheet. Or, a form is populated with data before printing and the handwriting will be imported into the same form.

To make your paper form digital:

1. Go to the template worksheet of the form you want to use.
2. Select the **Enable Form** button in the Capturx section of the ribbon and select the desired **Template** or **Direct** option.



Merging Cells to Create a Writing Area

As discussed earlier, it is a best practice to increase the size of data entry fields by merging cells, not by adjusting rows and columns. This section explains how to merge cells within Microsoft Excel.

In the example below, we have set up a Name entry field. Let's assume that the name Brenda Williams was written on the form. Since the name is written on two separate cells, Capturx will try to associate the Brenda ink with Cell B2 and Williams with C2. However, since this is rarely the intended behavior, the forms designer should merge these cells into a field large enough for the expected handwriting.

	A	B	C
1			
2	Name:	John	Smith

	A	B	C
1			
2	Name:	John	Smith

To merge a group of cells:

1. Highlight or select a range of cells.
2. Right-click on the highlighted cells and select **Format Cells**.
3. Click the **Alignment** tab and place a check mark in the check box labeled **Merge cells**.

To merge a group of cells and center the text, you can also use the **Merge and Center** button on the Excel tool bar.

1. Highlight or select a range of cells.
2. Click the **Merge and Center** button on the Alignment tool bar or pull-down that same menu to align the merged cells differently (e.g., left).



Merging the name field above produces

	A	B	C
1			
2	Name:	John Smith	

	A	B	C
1			
2	Name:	John Smith	

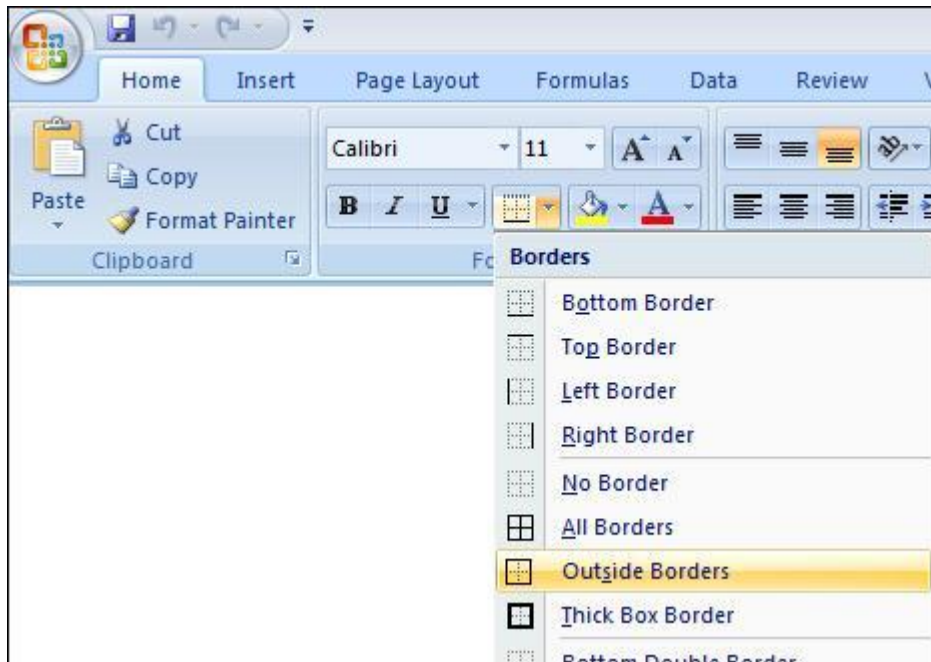
Note: when designing forms, you will discover that it is easier to begin with many, thinner columns. This allows for a lot of customized placement on the page, and these thinner columns also make merging that much more important.

Adding Borders to Your Form

Borders encourage pen users to write in the lines. This is important for legibility when others are reviewing what was written. By adding borders around the fields of your form where you want people to write, you encourage them to keep inside those borders.

To add borders to your form:

1. Select a cell
2. Click the **Borders** icon on Excel's Home Ribbon and select **Outside Borders** or **Thick Box Border**.



Selecting a Capturx Format for the Cells

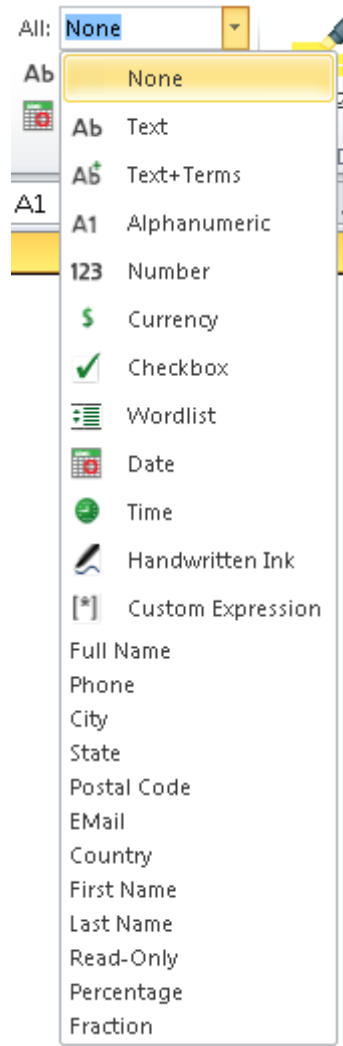
After you have merged the cells to create the writing area on the form, it's time to assign each entry cell an Excel format and a Capturx format. The Excel format affects how the converted text looks (number field with 2 decimal places) and the Capturx format affects how/if the handwriting is converted to text. This section explains how to use the Capturx formats.

Before you begin formatting, please be aware of the following:

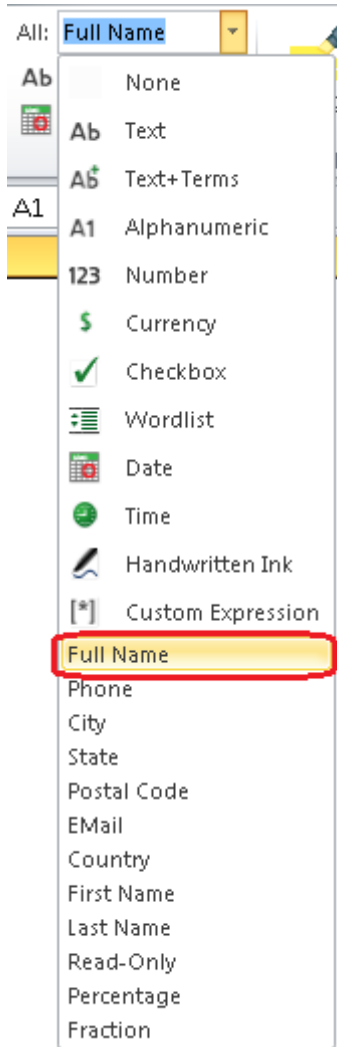
- Although available in Excel, Scientific Number format is not supported by Capturx.
- To improve recognition, use separate fields for date and time

To format a cell:

1. Select the cell you want to format.
2. Return to the Capturx Toolbar and format the cells using a selection from either the **All** drop-down menu or other Capturx ribbon buttons.



3. In this example, we want to format the cells as a Full Name.



Note: Excel formatting selections are accessible on the Excel Home Ribbon or by right-clicking on the cells and using the "Format Cells" dialog. Capturx formatting options are only available from the Capturx toolbar.

Specialized Formats

Capturx Forms for Excel includes specialized formats that can be used to optimize the handwriting recognition experience. These include:

- Checkbox
- Email
- Phone
- First Name
- Last Name
- Full Name
- Postal Code
- City

- State
- Country
- List
- Read-Only
- Handwritten ink (ink image within form, no text conversion)
- Custom Expression (design a custom format -- is an advanced technique)
- Text + Terms (convert ink to text with additional dictionary words or terms)

Adding New Terms for Text Conversion

The handwriting recognition software uses a dictionary to help match handwriting to proper words. By using words, the handwriting software can still perform well when individual letters within a word can be difficult to discern. Per cell, you can add new words and terms to augment the standard dictionary so they can be recognized by the handwriting dictionary. This section shows you how to add new words to the dictionary within an existing workbook. **Note:** This functionality is not supported by Capturx Forms Service or Capturx for SharePoint.

Adding new words requires:

- Creating a list and defining a name.
- Choosing the **Text + Terms** Capturx format to specify the custom terms you want to add to for a specific cell

You add custom words or terms for a specific field by using the Capturx **Text + Terms** format. When a cell has this format, the handwriting recognition will use the handwriting dictionary plus your custom words and terms to select converted text.

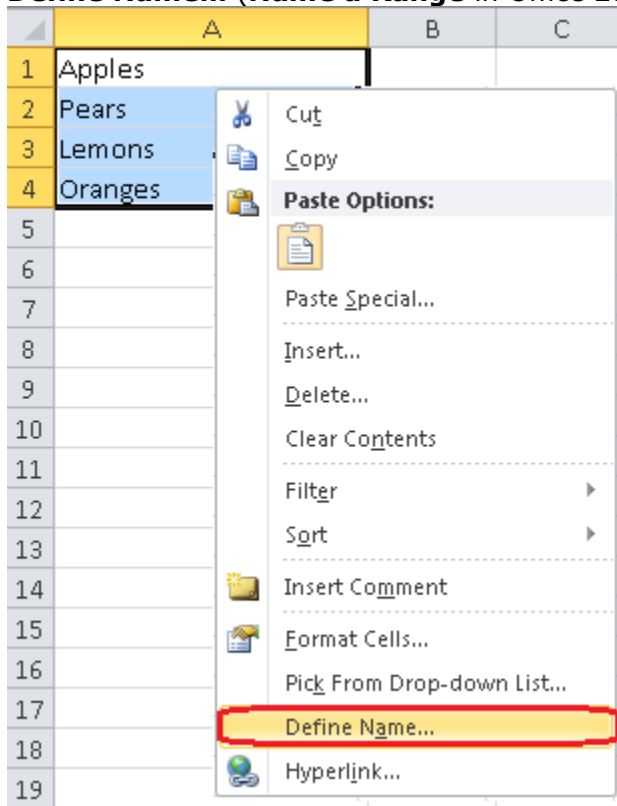
1. Select a new worksheet and enter the words or terms you want in separate cells.



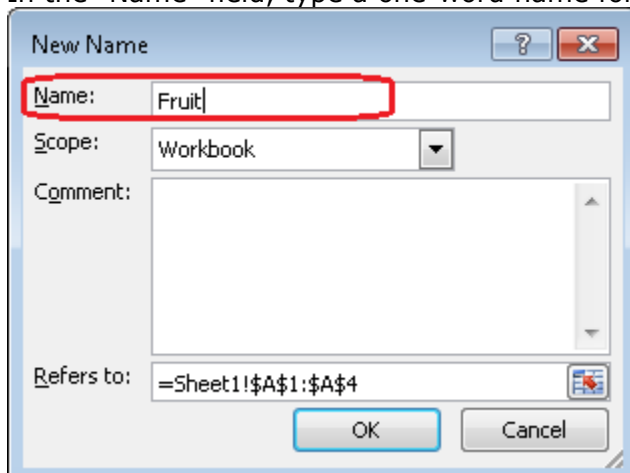
	A
1	Apples
2	Pears
3	Lemons
4	Oranges

2. Use your mouse to select the cells.

- Right click on the cells you have filled with custom words or terms, and select the **Define Name... (Name a Range** in Office 2007) option.

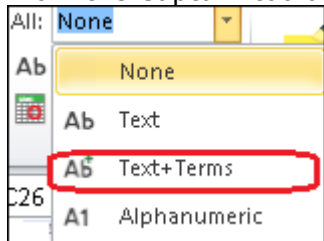


- In the "Name" field, type a one-word name for the list (for example, Fruit).

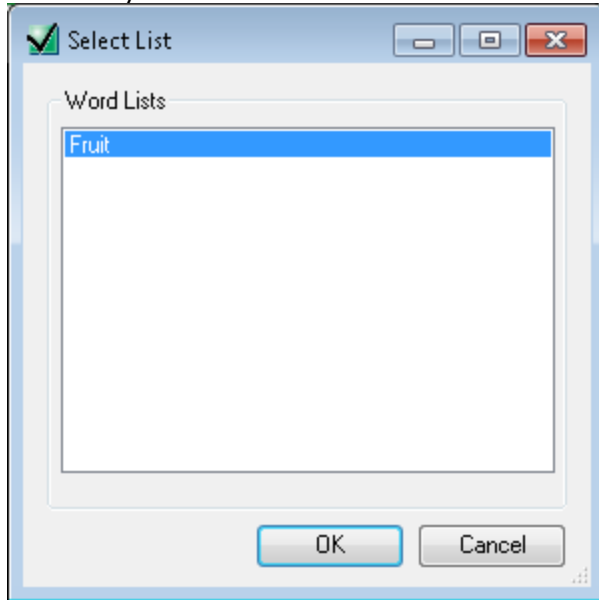


- Select **OK**.
- Go to the worksheet for the Capturx form template you are working on.
- Select the cell you want to format.

- From the Capturx toolbar, select the Capturx format: **Text +Terms**.



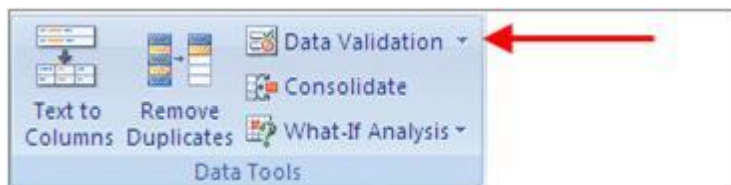
- From the list shown, select the Name of the list of terms you want to add to the dictionary and select **OK**



Using the Excel Data Validation Feature

When data is reviewed using Capturx Forms for Excel, validation rules will not activate as they normally would when typing values into cells. To discover whether a validation rule you have written may have failed turn on Validation Circles. To turn on validation circles:

- On the *Data* tab, in the *Data Tools* group, click the arrow next to Data Validation.



2. Click **Circle Invalid Data**.

Creating Custom Expressions

Custom Expressions provide options for advanced formatting with Capturx Forms for Excel. This allows the form designer to express complex formats such as serial numbers, employee ID numbers, etc. We recommend standard formats be used unless the form designer has experience writing custom expressions and functions. Although advanced to use, custom expressions are the best way to guarantee highly accurate translation of your ink for complex alphanumeric expressions. See [Appendix A: Using Custom Expressions](#) for detailed information on custom expressions and how they are used.

Note: If the expected values are all known, then a Wordlist format may be your best and easiest method to implement.

Creating a Wordlist

For a field where you know all the potential entries, create a wordlist for the best handwriting recognition. Capturx will compare the handwriting with your list and look for an exact match. This section instructs how to create and select a wordlist.

Note: When adding new terms, please remember the following:

- See the "When adding new terms to the dictionary" note above for a list of conditions for naming a range.
- Capturx looks for an exact match, so enter all acceptable terms. If the pen user writes "Miller" and "Miller Construction" is in the wordlist, Capturx won't find a match.

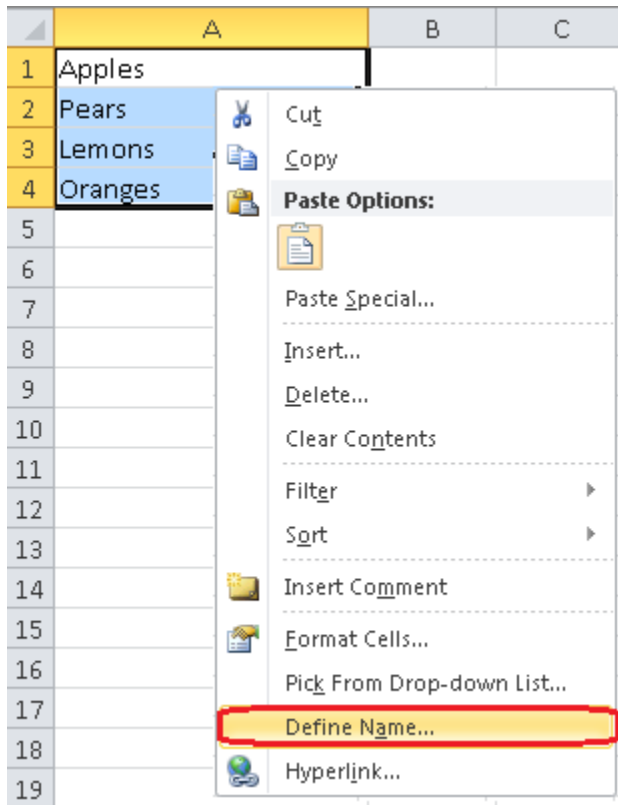
You need to use a single column when naming the range you want to use, if you want to see a wordlist drop-down menu when you are making corrections on imported forms.

To create and select a wordlist:

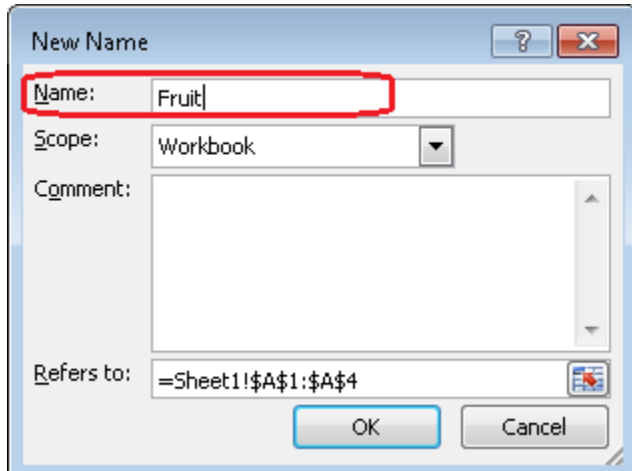
1. Select a new worksheet and enter the words or terms you want in separate cells.

	A
1	Apples
2	Pears
3	Lemons
4	Oranges

2. Use your mouse to select the cells.
3. Right click on the cells you have filled with a wordlist, and select the **Define Name...** (**Name a Range** in Office 2007) option.



4. In the "Name" field, type a one-word name for the list (for example, Fruit).



5. Select **OK**.

6. Go to the worksheet for the Capturx form template you are working on.

7. Select the cell you want to format.

8. From the Capturx toolbar, select the Capturx format: **Wordlist** and pick the appropriate Wordlist from the displayed options.

Excluding Cells from Digital Ink

You may want to exclude certain cells on the form from tracking digital ink. For example, you may have a calculated field and don't want a stray ink stroke in that field. To exclude Capturx digital ink and Capturx converted text to be placed in a cell, select **None** as the Capturx format. Capturx will save the ink image at the page level (visible in 'Ink' view) only.

The Read-Only Format

The Read-Only format is designed for use with Capturx server and pre-population scenarios. Recognized ink on read-only cells will not overwrite the pre-populated text value.

Adding and Using the Eraser

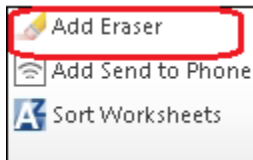
The **Add Eraser** button allows you to place an eraser tool in the currently selected cell of the worksheet. The pen user will use the eraser graphic to "start over" on a particular cell that s/he wants to change. By touching the pen tip to the wrong handwriting, then to the eraser, then back to the field and writing the correct handwriting – the Capturx software will only convert the correct handwriting.

Before you use the eraser, please keep in mind the following:


- 1 Do not place the eraser over a cell that has been Capturx enabled
- 2 If you print a worksheet that spans multiple pages, you can only use the eraser on the specific page it was printed on.
- 3 If you accidentally check the eraser icon, you can place the ink in a non-formatted area.
- 4 Do not change the size of the eraser graphic on your form.

To add an eraser to your form:

1. Select the cell where you would like to place an Eraser.
2. Click on the **Eraser** button in the Capturx Design Form ribbon.



This will place the Eraser graphic on your form in the cell that you selected.

Name		
Street		
City		

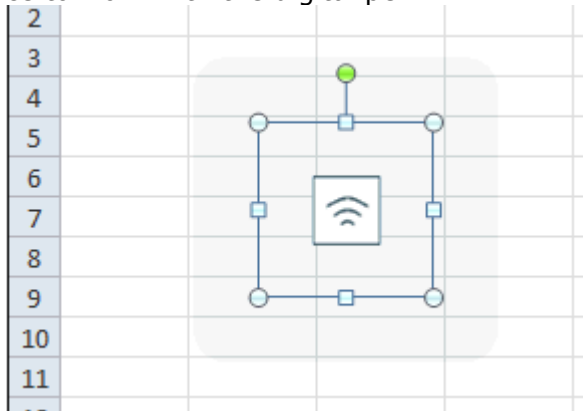
To delete the Eraser, select the Eraser graphic with your mouse and select the **Delete** key

Adding and Using Send to Phone

The **Add Send to Phone** button allows you to place a tick box into the currently selected cell of the worksheet. When the pen user touches the pen tip to the Send to Phone tick box, Capturx will send all data that is stored on the digital pen to a mobile phone which has the Capturx Mobile app installed. For more information about Capturx Mobile, please visit: www.adapx.com/mobile.

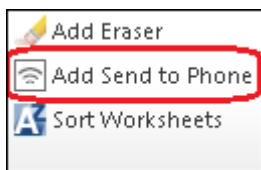
To add Send to Phone to your form:

1. Select the cell where you would like to place a Send to Phone tick box.
Note: Although the printed tick box is small, the design element needs additional space to work with the digital pen.




- The innermost square is where the user taps the pen, and is what will be visible on the printed form
- The medium-sized square shows the limit of how close to the edge of the page that you can place the tick box.
- The gray region indicates the area which cannot overlap another Capturx-enabled cell.

2. Click on the **Add Send to Phone** button in the Capturx Design Form ribbon.



This will place the Send to Phone tick box on your form in the cell that you selected.

Capturx Forms for Microsoft Office Excel

Text	Currency	Currency
Text	Currency	Currency
	Subtotal	Currency
	Tax	Currency
	Shipping	Currency
	Miscellaneous	Currency
	Balance Due	Currency

The Send to Phone tick box will always print at a fixed size, even if you specify a zoom factor in print setup, manually resize the image, manually rotate the image, or choose shrink to fit in print setup. When you print or publish, Capturx will force the image to the correct size. If this occurs, Capturx will prompt you to check the new size and print (or publish) again.

To delete the Send to Phone tick box, select it with your mouse and select the **Delete** key.

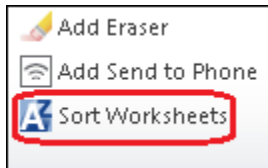
Sorting Worksheets on the Form

You may want to sort all of your worksheets in alphabetical order. Before you use the Sort Worksheets option, you need to keep in mind the following:

- If the name of the workbook starts with a number, a letter should be placed in front of the number so the worksheets are sorted correctly

To sort worksheets on the form:

1. Select the workbook you want to sort.
2. Select **Sort Worksheets**.



Naming a Worksheet

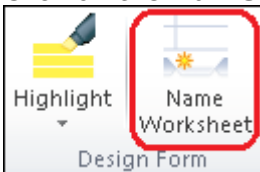
When a handwritten form is imported into Excel, a new worksheet is added to the template Excel file. To customize the name of each new worksheet to be based on a handwritten field (such as Order Number), select the correct Excel cell and then click on the Name Worksheet button.

To name a worksheet:

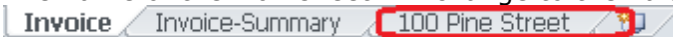
1. Select a cell in your form.

Name	
Street	
City	

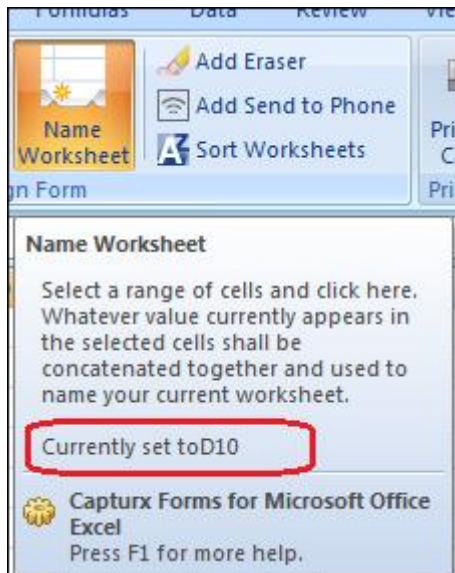
2. Click on the **Name Worksheet** button.



The name of the worksheet will change to the value of the cell you selected.



To check which cell will be used to name worksheets, hover over the "Name Worksheet" button in the Capturx ribbon:



Completing Your Form

Ensuring the Form Is Complete

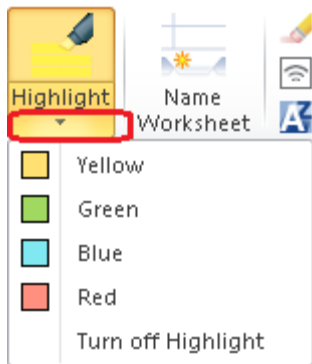
Capturx has a **Highlight** feature which makes it easy to double-check the Capturx formatting for each cell. A final quality check is import so that imported ink is converted correctly.

To ensure the form is complete and to review your formatting selections:

1. Open the template worksheet of the form you want to review.
2. Select the **Highlight** button in the Design Form section of the ribbon.



3. Select which color you would like to use in highlighting by clicking on the arrow on the bottom part of the button.



The Capturx-formatted cells will be highlighted and show the Capturx formatting you assigned for each cell. If a cell has not yet been assigned a Capturx format, it won't have a highlighted background. Select the Highlight button again to turn it off.

Name		Full Name
Group Number		Text

Printing the Excel Form

This section describes the process for printing your Excel form with dot pattern. For an overview of dot pattern, see [Dot Pattern Printing](#).

Please keep the following items in mind before printing your form:

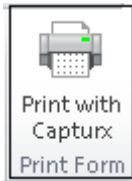
- If either the folder containing your Excel workbook or the workbook itself are marked read-only, then Capturx will prompt you to "Save As" your workbook before you can print with Capturx.
- Capturx Forms for Excel does not support printing on both sides of a single sheet of paper (duplex printing).
- Capturx Forms for Excel is an add-in that requires both the Excel application for printing AND the use of .XLSX or .XLSM Excel file types. To work with an existing .XLS file type, please open the file and save it to an .XLSX format before enabling for Capturx.

Printing the Form

Once a form has been designed and Capturx-enabled, it is ready for printing. Printing is done by selecting the **Print with Capturx** button on the Capturx Forms toolbar. If no worksheet has been Capturx-enabled, the button and the menu option in the figures below will be disabled.

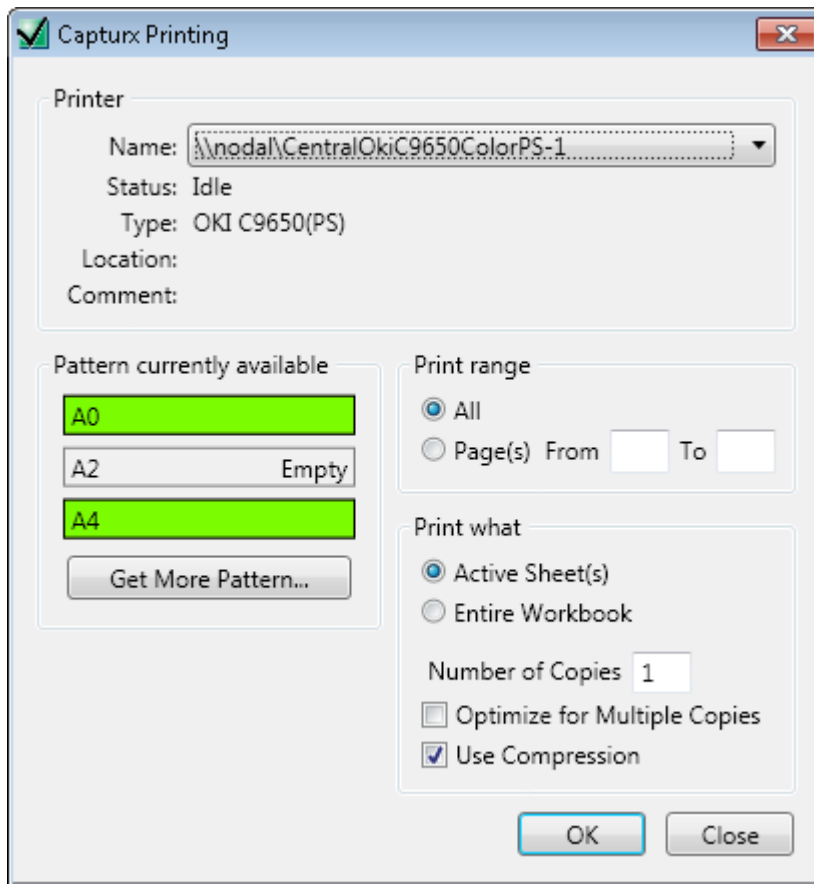
To print the Excel form:

1. Select the **Print with Capturx** button on the Capturx Forms toolbar:



After clicking on the print option, a custom print dialog will appear showing you the status of the print job and the amount of dot pattern you have left.

2. Select a printer which is Capturx compatible, the number of copies that you want to print, and any other settings you want to change.



3. Select the **OK** button to print the form.

Downloading Digital Ink

Downloading Data with the Docking Station

After you have written on your forms, it's time to download the pen data.

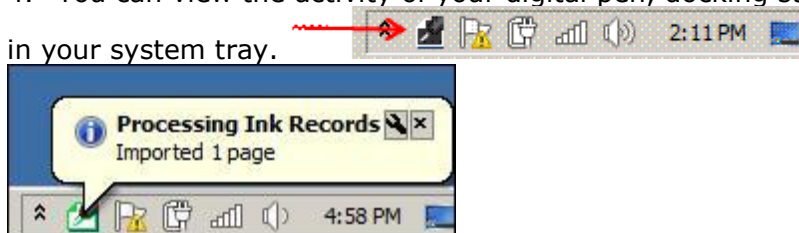
If you want to download the handwriting directly to your computer, connect the docking station to your computer and insert the pen. The following section takes you through that process.

The docking station is used to dock your pen and to connect your pen to a PC or laptop via the USB port. The docking station consists of the base, insert, and the USB slave port you use to connect the docking station to your computer. For more details about the digital pen, see The Capturx Digital Pen.









To download the digital ink from the pen:

1. Attach the docking station to a PC or laptop via the USB port.
2. Fully insert the pen in the docking station. The gold connection points on the pen and docking station need to be aligned and the pen needs to be firmly placed in the docking station.
3. If you have Capturx Pen Manager configured to send your pen data to an email recipient instead of being processed on your computer, the email will be automatically drafted when the download is complete. If not, Capturx Pen Manager will start processing the ink records automatically on the same PC where the pen is docked.
4. You can view the activity of your digital pen, docking station, and Capturx Pen Manager

in your system tray.

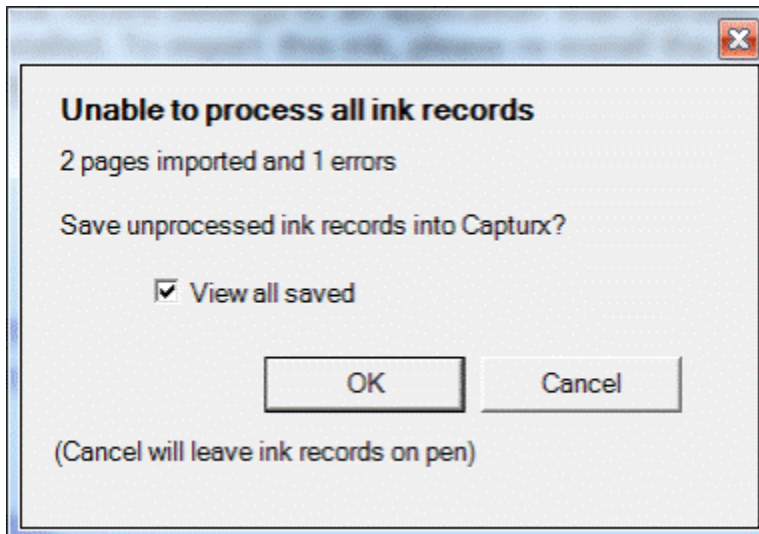


Four states of the icon are used to show you status:

	Displays this icon	One or more pens are docked
 	Animated icon that flashes between the two states	One or more pens have unprocessed ink in their memory
  	Animated icon that flashes between the four states	Pen is processing ink records - either downloading ink records from the pen or importing from an XID file to the personal computer
	Displays this icon	One or more pens are locked
	Displays this icon	No pens docked

Note: If you receive pen data via email instead of a docked pen, open the attached XID file. Capturx Pen Manager will process the ink as if the pen had been physically docked to your computer.

Unsuccessful processing of pen data will result in an error dialog:



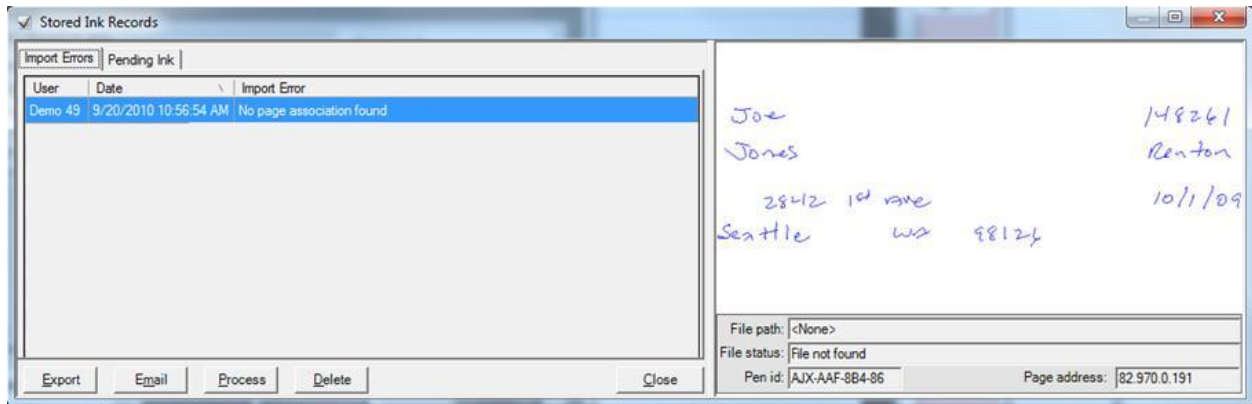
This dialog gives you the choice to leave the data on the pen (to try docking on a different PC) or to store the ink on the current computer while you troubleshoot the error.

If you select the **Stored Ink** button from Capturx Pen Manager, there is an **Import Errors** tab which displays the following information for any pen data which wasn't able to be processed:

- Handwriting image displayed on the right side of the dialog
- Pen User Name
- Date and time record was downloaded

Capturx Forms for Microsoft Office Excel

- Error message



Import errors are most-commonly explained by the following conditions and can be solved with the accompanying actions:

Condition	Action
Ink record was created with an Unactivated Pen	Please activate the pen on this machine before attempting to import the ink.
Capturx is unable to find the correct file	Copy and open the original document on this computer, or import this XID on the computer where the document was printed
Ink record has already been imported	This ink record has already been imported. This can happen if you accidentally try to import the same file more than once.
Unable to import ink record	Unexpected error during import. Try rebooting the computer if this does not work contact Adapx customer support - http://www.adapx.com/Support/Contact-Technical-Support.html
Ink record belongs to an application that has been uninstalled	This ink record belongs to an application that has been uninstalled. To import this ink, please re-install the application or import it on a computer that has the application installed.

Importing the Ink into Excel Files

Once data is downloaded from a digital pen or an emailed XID file, and processed by Capturx Pen Manager, the **Import Pen Data** button will appear in the Capturx Forms for Excel toolbar. For the selected **Workbook**, you can **Import** the most recent downloaded data or **Import All** downloaded data.

The **Import Ink** options allow you:

- Select the **Workbook** for which you want to import data
- Select which **Pen Data** you want to import -- based on information listing the author, time, and download date
- Select **Import Pen Data** to import the ink into the selected workbook



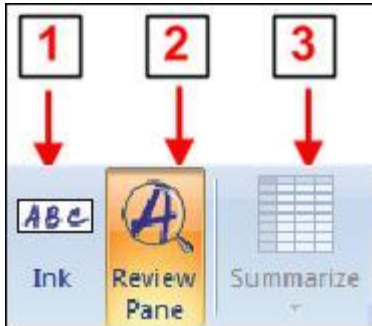
The following information will help you become familiar with the Review section of the ribbon and the options it provides:

- 1 The *Workbook* drop-down shows you all workbooks with pen data ready to import.
- 2 The *Pen Data* option provides information on each pen data item ready for import – with author, time, and date.
- 3 The *Import Pen Data* button is used to import the ink into the selected Workbook You can click the arrow to select *Import All* if you have multiple pen data items waiting for import into the same workbook.

Reviewing and Editing the Imported Pen Data

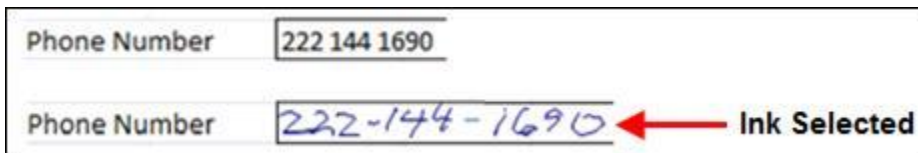
Using Review Options

The Review Section of the Capturx Forms for Excel tool bar enables you to view **Ink**, use the **Review Pane**, and **Summarize** all of the imported Capturx pen data.

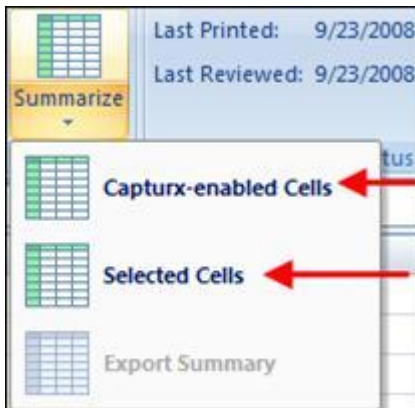


The following information will help you become familiar with the Review section of the ribbon and the options it provides:

- 1 The *Ink* button toggles between showing you the value for each cell and showing you the ink originally written in that cell.

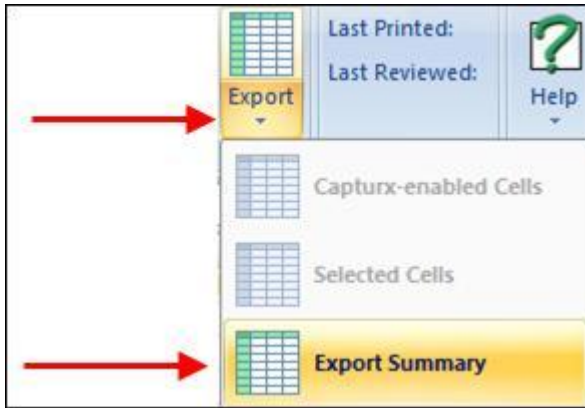


- 2 The *Review Pane* option opens and closes the [Capturx Review Pane](#). The Review Pane enables you to review the converted text for each cell, and to edit the text as-needed.
- 3 The *Summarize* button is used to show you a summary of the data collected from multiple worksheets of the form. You can view a summary of either all the Capturx-enabled cells or of only the cells you select.



The *Export Summary* takes the summary you created using the Summarize option

and exports it to a new workbook.



Capturx Review Pane

The Capturx **Review Pane** enables you to review and edit the converted text. This pane will display per cell: the image of the handwritten ink; the results of Capturx handwriting recognition based on the Capturx format; the author of the handwriting; and the timestamp of the handwriting. The review pane will appear on the right hand side of your screen. You can drag & drop the review pane if you would prefer to have it located in a different position.

To use the review pane:

1. Open the Excel file with the form you want to review.
2. Select the **Review Pane** button to display the Review Pane.

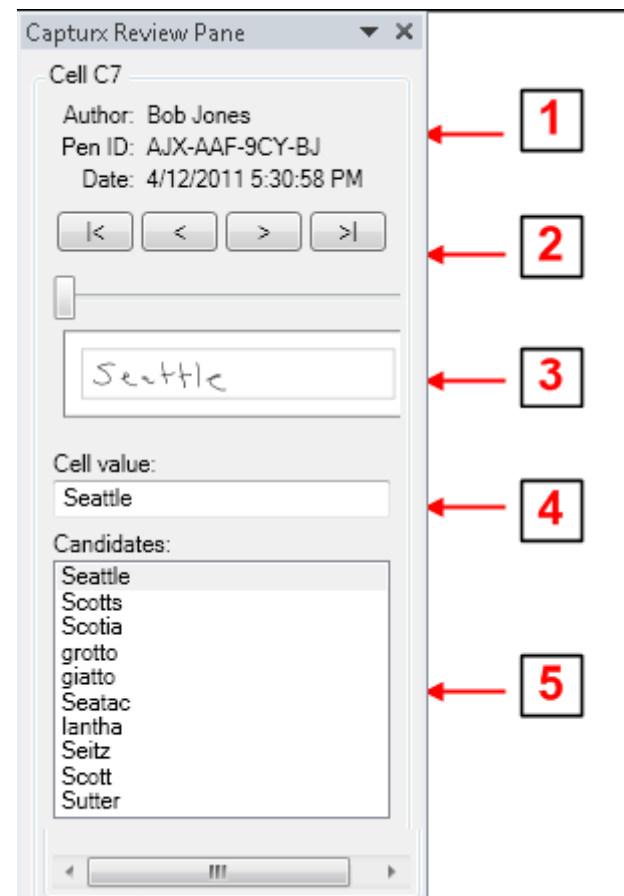


The following table shows you the review pane and the features and options it provides:

Review Pane Options and Features

1. The top of the Review Pane shows user and status information including:
 - Current Cell Selected
 - Author and Pen identification number
 - Date and time of the last ink written in that cell.
2. *Navigation buttons* used to navigate. The navigation buttons will navigate through the cells in left-to-right, top-to-bottom order.
3. The *Original* handwriting image will be displayed. The slider can be used to increase the size of the display. Ink collected prior to use of an eraser will be displayed lighter than any ink drawn after.
4. The *Cell value* field shows the converted text selected as the best match by applying the cell's format.
5. The *Candidates* field shows a list of other possible interpretations of the handwriting.

Review Pane

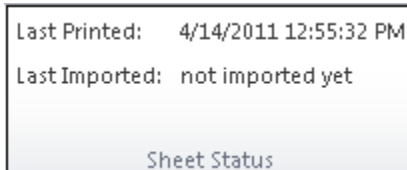


Sheet Status Information

Viewing the Sheet Status Information

This section of the Capturx Forms for Excel toolbar displays the information about when the worksheet was last printed and when the ink was last imported.

After you have printed and/or imported the workbook, the Sheet Status section of the ribbon will show you the date and time when these events occurred.



Capturx Help and Support Options

Using and Viewing the Help and Support Options

Selecting the Help button allows you to:

- View the **Online Help**.
- **Check for Updates** to the software. This option will take you to a Software Updates dialog that allows you to view if there is a new version of Capturx Forms for Excel available, and to select how often you want to check for updates. If your use of Capturx includes a Software Assurance Agreement, you can download a new version of the software when one is available.
- View and use **Samples** of Excel forms to practice using Capturx.
- Select About to view the Capturx Forms for Excel version and copyright information.
- Select **Video Tutorial** to visit a Web page with video tutorials designed to train users on the different features of Capturx for Excel.



Contacting Adapx Technical Support

You can also contact the Technical Support department directly by email or by phone:

- techsupport@adapx.com
- 877.208.9673

Appendices:

Appendix A: Using Custom Expressions

The most basic custom expressions consist of a single literal character, e.g.: the letter 'a'. Such an expression would match the first occurrence of that single character in a string. Indeed, most characters entered into the Capturx Custom Expressions dialog are treated as the literal text that you write, matching the expression character for character. The expression "Capturx", for example, will only match the letters C - a - p - t - u - r - x, in that order, and the C must be capitalized.

Certain characters, however, have special meanings:

- the Brackets []
- the Backslash \
- the Dot .
- the Vertical Bar |
- the Question Mark ?
- the Asterisk *
- the Plus Sign +, and
- the Parentheses ()

If you want to use any of these characters as a literal in an expression, you need to precede them with a Backslash (e.g., '\\' would match the literal Backslash). If you want to match $1+1=2$, the correct expression is $1\\+1=2$. Otherwise, the Plus sign will take its special meaning rather than its literal meaning.

These special characters allow the expression author to write complex matches for formatted strings like serial numbers, model numbers, or virtually anything that can be written without enumerating every possible sentence using literal characters.

The following sections provide direction as to how to use the special characters and examples of their use in expressions.

Note: the advanced reader may want to search the Internet to learn more about the regular expressions upon which the custom expressions are based.

Special Character

Square Brackets: [] for a list of characters

How This Special Character is Used

Square Brackets let you match a Set of any one of several characters, each of them alternatives. Suppose you want to match the word 'gray', but also want to find it if it was spelled 'grey'. A set will allow you to match either. The expression `gr[ea]y` is interpreted as "g, followed by r, followed by either an e or an a, followed by y."

Within a Set, a Dash can be used to specify a range of characters. Instead of `[01234567890abcdefABCDEF]` we can write `[0-9a-fA-F]`. Elsewhere, it simply matches the

	normal dash character.
The Dot: . for any character	The '.' (Dot) matches any single character outside of a Set, but not inside of a Set. It is very convenient when the expression you are developing has a position that can contain any character. However, it is often better to use a Set to constrain the expression rather than the Dot, because a Set or negated Set can be more precise. And, the more precise your expression, the more accurately Capturx will be able to translate the handwriting.
The Vertical Bar: for alternatives	The Vertical Bar is the special character equivalent of "or". It allows you to describe expressions that contain alternates. "Mike Michael" will match either Mike or Michael in the expression. You can add as many alternatives as you want, e.g.: cat dog mouse fish.
Parentheses: () for grouping	Place parentheses around multiple characters to group them together. You can then apply a Question Mark, Plus or Star to the group. Parenthesis can be used to limit the scope of the alternatives. I could shorten our previous expression that matched Mike or Michael with creative use of parentheses. The expression Mi(ke chael) matches the same thing.
The Question Mark: ? for optional	The '?' (Question Mark) means optional. It is placed immediately after a character, Set, or Group that is allowed, but not required in an expression. If you wanted to match the English or American versions of the word 'flavor' you could use the expression flavou?r, which is interpreted as "f, followed by l, followed by a, followed by v, followed by o, followed by an u, which is optional, followed by r."
The Plus and Star: + and * for repetition	Like the Question Mark, the Asterisk and Star is used to match the preceding character, Group, or Set zero or more times. The Plus can be used to describe an expression where the preceding character, Group, or Set must appear at least once.

Examples of How These Special Characters are Used

Social Security Number:

In the US, social security numbers are structured as follows: three digits, followed a group of 2 digits, followed by a group of 4 digits. The digit groups can be delineated either by space, hyphen, period, or nothing at all (9 digits).

Here's the custom expression that describes US social security numbers:

```
[0-9][0-9][0-9][- .]?[0-9][0-9][- .]?[0-9][0-9][0-9][0-9]
```

Let's analyze this expression a bit. It starts out with a digit in the range of 0 to 9 ([0-9]), followed by 2 more digits, also the range of 0 to 9 ([0-9][0-9]). The next group ([- .]?) is a bit more interesting. The characters inside the '[']' are alternatives if enumerated as is the case here. The characters '-', '.', and ' ' (space) are alternatives (one can be chosen). If the '-' is in this set, then it must be the first character (otherwise it is denoting a character range, as in 0-9). The '[']' is followed by '?', which indicates that choosing one of the characters listed inside the '[']' is optional (which will allow the user to write 9 digits without inserting any separator in between the number groups).

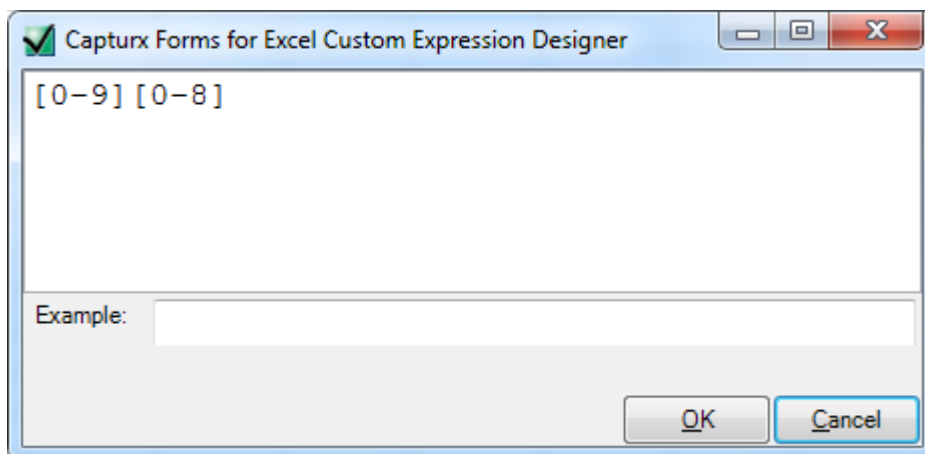
Part number:

The second example is a timesheet charge code. Here's the expression that describes the timesheet charge code:

```
(FIN|ADMIN|DEV|TEST)\.[0-9][0-9][A-Z][a-c]
```

The first part ((FIN|ADMIN|DEV|TEST)) describe a selection of one of the four alternative letter sequences. That is followed by the Dot '.', which needs to be preceded by '\' otherwise it would allow the user to write any character in this position. Next, there are three Sets for 2 digits and one upper-case letter. The final element ([a-c]) could also have been expressed as (a|b|c).

Note: To edit a custom expression, tab to the formatted cell and then click on "Custom Expression" in the Capturx ribbon. The following dialog will display. Edit the custom expression and click "OK".



Appendix B: How to Monitor Dot Pattern

A certain amount of pattern is required to print the sheet you will use, and these different size patterns are used to print different size pages:

Size	mm × mm	in × in	Approx. US equivalent	No. of sheets/Refill
A4	210 × 297	8.3 × 11.7	letter: 8-1/2" × 11"	6,144 sheets
A2	420 × 594	16.5 × 23.4	tabloid: 11" × 17"	3,872 sheets
A0	841 × 1189	33.1 × 46.8	E-size or large plotter	1,952 sheets

A larger size pattern can be used to print a smaller size page layout. For example, A0 can be used to print a letter-size 8.5" × 11" page layout. However, there are fewer pages in a refill of a larger size pattern, so it is more cost efficient to use the smallest size pattern you can. See [Additional Dot Pattern for Printing](#) for information on how to choose the pattern you will need.

Monitoring Pattern

Capturx Forms for Excel provides you with a Pattern Refill dialog box and a Desktop printing dialog that you use to download pattern and to monitor the amount of pattern you have.



When you're in the Pattern Refill dialog, you have the option to download any size pattern for which you don't already have more than 1000 pages. If you already have more than 1000 pattern pages, the check box for that particular size will be grayed out.

The bars on the pattern control are full/green at 1000 pattern pages or more. If there is less than 800 pages left, you can find out exactly how many pages you have by hovering on that bar, otherwise the hover text just reads "full".

You may need to buy some more pattern refills at some point, although your initial purchase provides you with access to 1 digital pattern shelf per pen Extension Connection license purchase. You can purchase more from Adapx.

Appendix C: Collecting and Sharing Data Across Teams

Teams can work with Capturx Forms for Excel to aggregate data from multiple members. Data can be aggregated by sharing files through email or by posting files on common network locations. By posting forms on a central network location, such as Microsoft Office SharePoint Server, teams can publish forms and data collect data using a central place.

Using Interchangeable Pens

Individual digital pens can be used with multiple Capturx applications, even during the same session. In order to use the digital pen with any given application, the pen must be licensed for that application. Once a pen is licensed for a specific application, such as Capturx Forms for Excel, then it can be used with any copy of Capturx Forms for Excel.

The digital watermarks created and printed with each form, map or design are all unique. The underlying Capturx technology keeps track of each printed file by application, file name and print out. Of course, the file from which any given paper form was printed using Capturx must be accessible by Excel when data is downloaded from the digital pen.

Digital Watermark Records Move with the Files

When forms print, Capturx software makes a record of the unique digital watermark and embeds it with the original file. If that file is sent by email or posted on a network, the file always contains a record of the digital watermarks that were created and printed from that file.

A form can be printed through one PC with an installation of Capturx, moved to a different PC that is also running Capturx, and the data written on the original form can be imported into the original file through that second PC. For example, an administrator can:

1. Print forms using a main office PC and send them through the physical mail to field offices.
2. The administrator could then post the original file from which the forms were printed onto a network location accessible by the field offices.
3. The field teams can complete the paper forms and then download data through a field office PC directly into the original file through the network.

Collecting data into Separate Workbooks and combining worksheets into a master workbook

You can use Capturx Forms for Excel to:

- Create a master workbook for your form
- Share the master workbook with colleagues to print forms and import data
- Copy all of the worksheets from the separate workbooks into a master workbook

Creating and Sharing the Form

You start with a master form workbook which has the original template enabled for Excel. You can then share copies of your master workbook to team members through email or by posting the workbook on a shared network location.

Each team member will save their copy of the workbook using a different, unique name. They can then print forms from their copy of the workbook. They fill out the forms as they ordinarily would and import the data back into their copies of the Excel workbook. When

teams want to combine workbooks, the person with the master workbook collects the other workbooks through email, a thumb drive or a shared network location.

Copying and Moving the Worksheets

The person with the master workbook can simply copy or move the desired worksheets from the other workbooks into the master workbook. They simply select one or more worksheets and use the Edit | Move or Copy Sheet command to add worksheets to the desired workbook. You can also drag and drop selected worksheets from one workbook to another by arranging the windows to display both the source and target workbooks.

If source and target workbooks contain worksheets with the same name, then Excel will add a "(2)" to the end of the name of the new worksheet. "Sheet1" will become "Sheet1 (2)." For ease of use, we recommend that you keep the master template form as the first sheet in all your workbooks, and that you add new worksheets after the template. This will make it easy to print new blank forms with Capturx and to create new summary tables.

Updating your forms in new workbooks

We strongly encourage you to move your template forms into new workbooks and then re-enable those workbooks with Capturx. To do so, you will open your original workbook and move the template to a new workbook, which you will then save under a different name.

To open your original worksheet in Excel:

1. Open your original workbook in Excel
2. Select worksheets in the workbook for your form templates (also copy list worksheets if used)
3. You can also move all existing completed forms
4. Right click on the worksheet tabs located at the bottom of the workbook

To move the worksheets:

1. For each selected worksheet tab choose **Move or Copy**

You will be presented with a dialog and drop down box titled "To Book"

1. Select **(new book)** – this will create a new workbook for your worksheet(s)
2. Be sure to check the check box at the bottom which states Create a copy.
3. Click **OK**

After you've added worksheets to your master, the "create summary" feature will still work to create a data table of all the worksheets present at that time in your workbook. Each of the worksheets must, however, have the same layout and formatting of the original template.

Note: If you try to copy a sheet with ingested ink within the same document or to a different document, the Show Ink button will not be active in the copied sheet and the Review Pane will not be active. Therefore, if you want to see the active Review Pane and to create summary of the moved worksheet, you will need to move the sheet from one workbook to another workbook.

Using a Single Workbook on a Network to Print Forms and Collect Data

Using a Workbook on a Network

Teams can also post a single workbook on a network share which can be used for local printing and importing data. This enables data to be collected into a single location with team members taking turns printing and importing data directly into the master workbook. Each local person can open that file directly from the network location for printing and data importing. Each of those person computers will need to have Capturx software installed and have access to the master workbook.

Using Revision and Version Control

We recommend using document management software that supports version control or revision control of shared files, such as Microsoft Office SharePoint Server. Most document and project management and collaboration software supports version control where teams can check-in and check-out files to avoid accidental data overwriting and loss. Version control is important because every time a team member prints a form or imports data, the master workbook is updated.

When a new form prints, Capturx generates a unique digital watermark. A record of this watermark gets stored in the original Excel workbook, which enables the data later written on that form to be matched and imported into the original workbook. Of course, every time data is imported into the master workbook, the workbook changes again.

If multiple team members have the same file open and are making changes at the same time, then teams can accidentally overwrite each other's data. Version control can help guarantee that only one person is working with the file at a time, either to print or import data. To illustrate the steps, we'll use an example with SharePoint:

1. Publish the master workbook to SharePoint and enable version control. When a team member wishes to print a form, they simply check out the workbook and make a print from their local PC using Capturx Forms for Excel. When finished, they save the document and check it back into SharePoint. The master workbook will keep a record of the digital watermark.
2. To import data, they check the workbook out of SharePoint again and open it. They connect the digital pen, import the data and make any edits. They then save the file and check it back into SharePoint. Each new form record will be created as a new worksheet within that workbook. As more team members repeat the process, more data from each team member will be aggregated into the master workbook.

Since the Capturx digital watermark is stored on the master workbook on the server, team members do not have to import data into the PC from which the form was originally printed. They can use their Capturx pen with any PC that has Capturx Forms for Excel installed and has the ability to open and write to the original file.

Appendix D: Additional Dot Pattern for Printing

The following section outlines the process used to choose the appropriate paper size and to obtain the digital pattern you will need to print your form. You order digital pattern through the Adapx sales department at:

- sales@adapx.com
- 206.428.0800 or 1.877.232.7903

To learn more about dot pattern, please see the [How Capturx Printing Works](#) topic.


Selecting the Optimal Dot Pattern


- You can optimize your use of pattern by selecting the pattern size that best fits the paper size that you will print from this PC
- You will see a choice of different sizes: A4, A2 or A0. Before selecting, see the chart below.


Size	mm × mm	in × in	Approx. US equivalent	No. of sheets/Refill
A4	210 × 297	8.3 × 11.7	letter: 8-1/2" × 11"	6,144 sheets
A2	420 × 594	16.5 × 23.4	tabloid: 11" × 17"	3,872 sheets
A0	841 × 1189	33.1 × 46.8	E-size or large plotter	1,952 sheets

What you plan to print

Option to choose

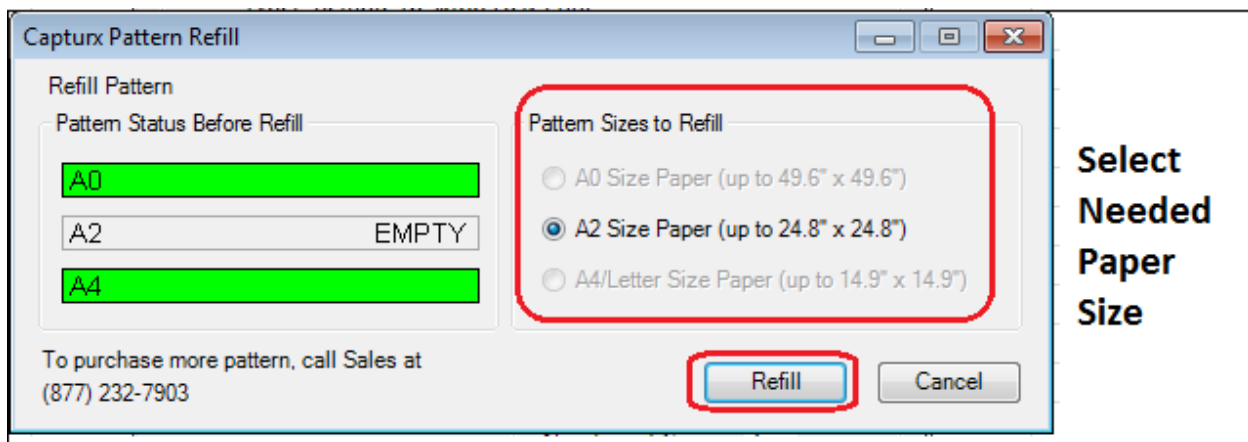
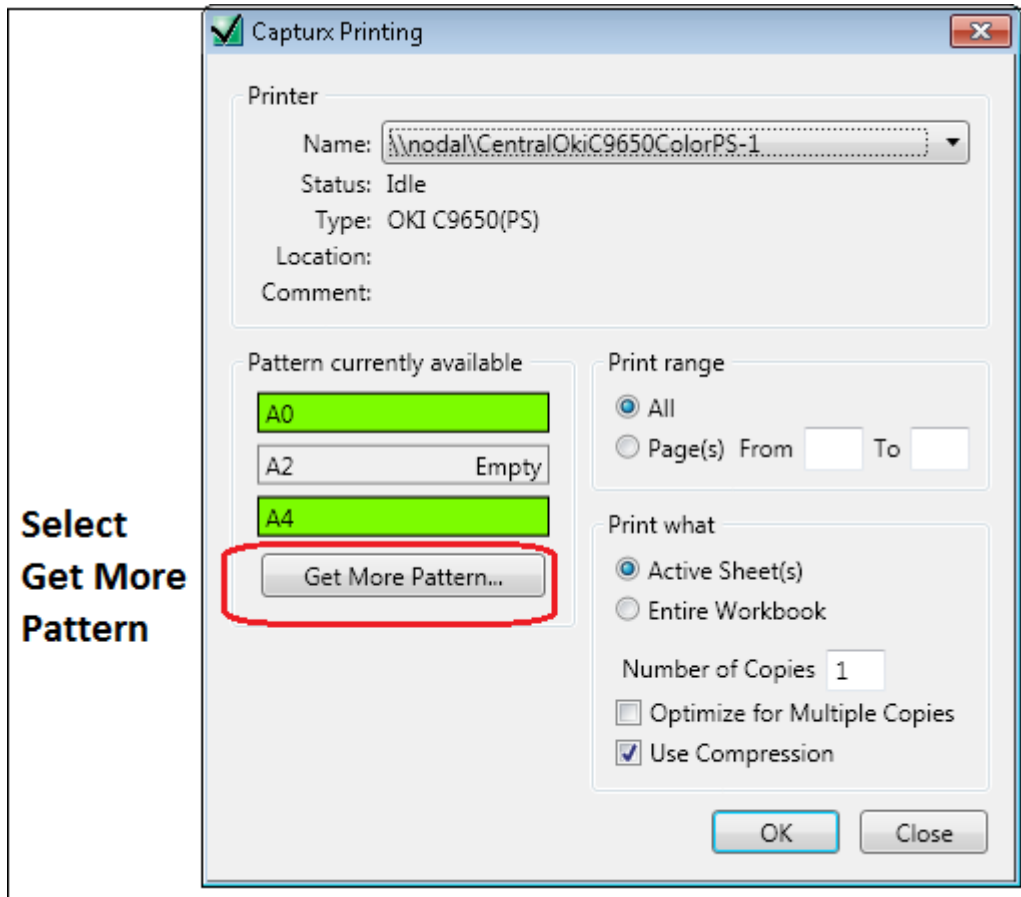
I will ONLY print LETTER size sheets (8-1/2" x 11") from this computer  Select A4

I want the option to print LETTER (8-1/2" x 11") and TABLOID (11" x 17") size sheets  Select A2

I want the option to print large sizes using a plotter (you will still be able to print smaller sizes)  Select A0

Downloading Digital Pattern

You access the Pattern Refill dialog, either via the Get More digital Pattern button on the Capturx Printing tool or by selecting the Install Pattern button on Capturx Pen Manager.



Note: If you do not have any additional pattern available, you will need to contact Adapx to order additional pattern. When making the request you will be required to provide the license number.

Appendix E: Receiving Emailed Ink

To review data that has been emailed from a BlackBerry or a PC, the first step is to check your email inbox for an email message with the subject: "Capturx Mobile: Your data is ready to be imported" or "Capturx XID Mail".

When you open the email message, you will see that it has an attached file. There will be only one attachment, whether the person wrote on:

- one page or multiple pages
- one form or multiple forms
- page(s) from one Capturx application or pages from multiple Capturx applications.

Double-click on the attachment and select Open when prompted. The Capturx software installed on the computer will integrate the digital ink into the correct file. At this point, the Capturx software behavior is the same as if the pen had been physically docked to the computer.

Appendix F: Best Practices for Writing on Forms

When using a digital pen to write on a form, keep the following best practices and strategies in mind:

- Avoid crossing adjacent "t"s with a single horizontal stroke such as in "Seattle".
- Exaggerate your punctuation marks so they are recognized more easily.
- When placing a period and decimal points on the page, make the points thick.
- If you write a number that starts with a decimal point, start with a zero then make a decimal point with a thick point.
- If you use slashes to separate dates, "/", exaggerate the slashes so that they don't look like the number "1". If acceptable, change to a hyphen style (11-3-2011).
- Make large thick dots when writing email and internet addresses.
- Write in the same direction and orientation as the printed form.
- Digital pens do not work well at the edges of the page. Allow a 12.7 millimeter margin from the edge of the page to ensure that your ink is captured correctly.
- Don't use double-quotes to represent for "same entry as the cell above". Capturx will convert double-quotes as double-quotes.
- When marking a check box, ensure your check mark is centered and inside the border of the cell.

Appendix G: Capturx Excel Functions

The Capturx Excel Functions enable you to:

- Write Excel macros that retrieve metadata (ink time, author, sheet ids)
- Automate selected Capturx operations such as printing

Installation instructions and full documentation are located in the Capturx Forms for Microsoft Excel installation folder. For a typical installation, this folder is:

```
c:\Users\<<UserName>\AppData\Local\Programs\Adapx\Capturx Forms for Microsoft Office Excel\1.2.11108.4\Capturx Excel Functions
```

Appendix H: Upgrading to Version 1.2

Installation of Version 1.2

Capturx Forms for Excel 1.2 can be installed over your previous version. There is no need to uninstall first.

Exception: If you have Capturx SharePoint Publisher installed, you will need to uninstall it before installing Capturx Forms for Excel 1.2. Starting with Capturx Forms for Excel 1.2, publisher is an integrated feature.

Using Version 1.2

After you install Capturx Forms for Excel version 1.2, you can start creating and using new forms.

Each time you open a form which was designed using an older version of Capturx, you will be prompted to upgrade the form for use with version 1.2. *Best practice is to save a copy of your version 1.1 workbooks, as backup, before opening and upgrading them to 1.2*

Once a workbook (form) is upgraded, it can only be used with Capturx Forms for Excel 1.2. Because of this, it is best to have all computers in your organization upgraded to version 1.2 at the same time.

Note: For workbooks with a lot of stored ink, the file upgrade process may take several minutes.

After upgrading a workbook, the next ink import (from a 1.2 printout) will create a worksheet with a name that has skipped a number. For example: Sheet1-{1} to Sheet1-{3}. This will only happen once, and then the numbering will continue as normal.

You may still have an inventory of paper forms which were printed from an older version of Capturx. These printouts are compatible with the Excel form workbook which has been upgraded to version 1.2. There is no reason to throw them out.

What's Changed in Version 1.2

Capturx recognition formats are distinct from Excel display formats

There are two ways to use this:

1. **Set Capturx formats first**

Capturx-enable the form and select Capturx formats as needed. After ink import, the appropriate Excel format will automatically be set. You don't need to change the Excel formats unless you have specific requirements, such as the number of decimal points to display.

Note: by default, Capturx will select an Excel format with two decimal places.

2. **Set Excel formats first**

Design your form and set desired Excel formats before Capturx-enabling. When you Capturx-enable the form, appropriate recognition formats will be automatically selected. If you later select Capturx formats, Capturx will not change the Excel format you've already specified.

Capturx Formats are stored in Excel comments

The Capturx "Highlight" feature makes these comments visible. Do not edit these comments directly – use the Capturx ribbon to choose a different format. Normally, in Capturx's Highlight mode, the comments are placed exactly over the associated cell. If the comments are moved, double-click the Capturx Highlight button (disable and re-enable highlight) to restore placement.

Note: To limit visibility of the comments created by Capturx, the display of comments and comment indicators is turned off. To make comments visible, in a Capturx workbook or a standard Excel workbook, go to the "Review" ribbon and click "Show All Comments" or change within Excel Options.

Review Pane simplification

The next and previous buttons now navigate in page layout order (formerly navigated by ink time). The Approve and Revert buttons have been removed.

Send to Phone tick box

As an alternative to BlackBerry users carrying a separate Capturx Mobile card, the form designer can now add a Send to Phone tick box directly onto the form.

New Alphanumeric Format

Use this format to improve handwriting recognition in cells that should only contain letters and numbers. (No spaces or symbols are expected.)

Integrated Publisher for Capturx Server Solutions

There is no separate software to install for designing & publishing forms to Capturx Forms Service and Capturx for SharePoint.

Longer Custom Expressions

The maximum size of this Capturx format has been increased from 100 characters to 4096 characters.

For additional details and the most current information about known issues, please go online: <http://www.adapx.com/release-notes/capturx-forms-excel-1.2>.