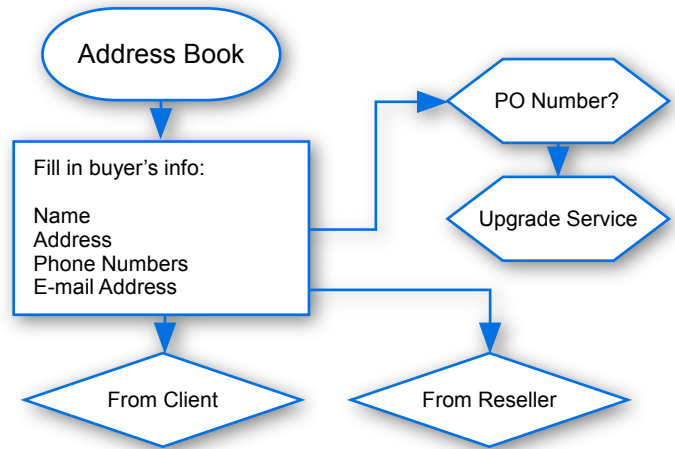


CREATING FLOWCHARTS IN CANVAS

Learn how to create flowcharts using several specialized tools in Canvas. Flowcharts provide a visual representation of each step that is to be taken and each decision that is to be made throughout a process.



Introduction to Flowcharting

In the following tutorial, we will go over the basics of flowcharting, such as the common shapes and tools you will use to create these shapes.

Flowcharts use standard symbols to represent a type of operation or process to be performed. The use of standardized symbols provides a common language for people to visualize problems and also makes flowcharts easier to read and understand.

Types of Flowcharts

There are four basic types of flowcharts: Basic, Process, Deployment, and Opportunity.

Basic flowcharts quickly identify all the major steps in a process. They are used to orient a team with the major steps by just giving a broad overview of the process.

Process flowcharts examine the process in great detail. They provide a comprehensive listing of all the major and sub-steps in a process.

Deployment flowcharts are similar to Process flowcharts in that they are very detailed but also indicate the people who are involved in the process. This could be very useful when the process involves cooperation between functional areas.

Opportunity flowcharts highlight decision step and check point. They are used for very complicated processes because they highlight specific opportunities for improvement.

Objectives

After this exercise you will be able to:

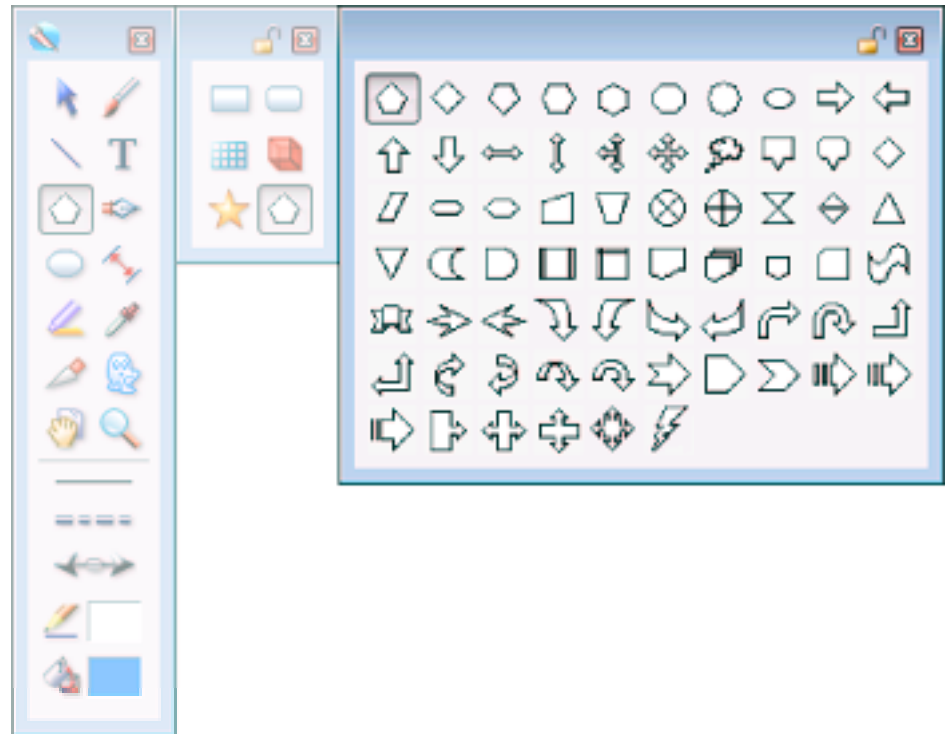
- » Define the type of flowcharts
- » Create a flowchart using Easy Shapes

Required knowledge to perform this exercise:

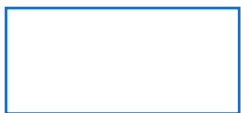
- » Open palettes
- » Move an object
- » Draw or place an shape

BASIC SHAPES

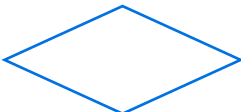
The following are some of the most common shapes used in the construction of flowcharts and what they are used for. All of these shapes can be found in the Easy Shapes palette located in the Toolbox.



Ovals are used to represent starting and ending points to the flowchart process.



Rectangles are used to describe an action taken or a task completed.



Diamonds contain questions requiring a "Yes" or "No" decision.



Document is used to represent a paper document produced during the flowchart process.



Multi-Page Document is used to represent a document with multiple pages.



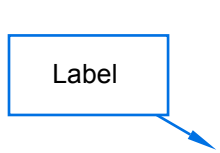
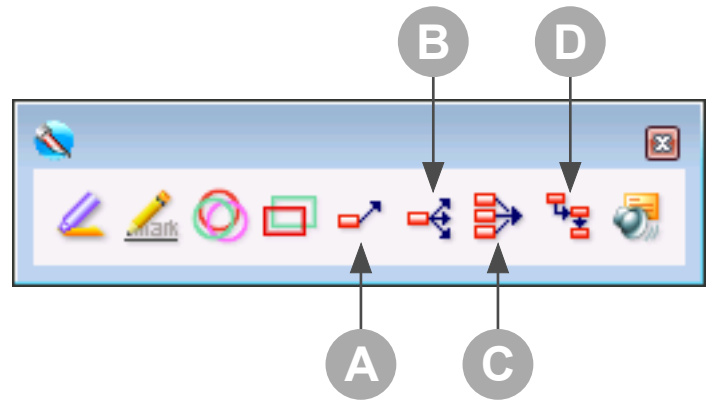
Data Input/Output uses a skewed rectangle to represent a point in the process where data is entered or retrieved.



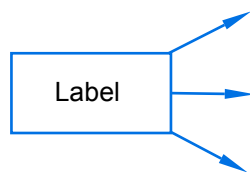
Off Page Connector is used to show that the flow continues on a different page.

STEP 1: USING ANNOTATION TOOLS

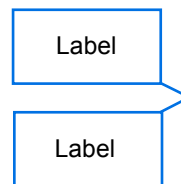
In this step we start to understand how to use the **Annotations Tools**. Use these tools to add labels or callouts to your diagrams or illustrations or even create a dynamic flowcharts. One of the advantages of using the Annotation tools is, that a connector line with arrowhead is created each time automatically.



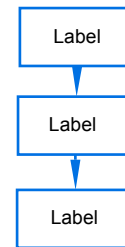
(A) Basic:
Canvas creates a single object shape complete with one connector line.



(B) Multiple Sources:
This options creates a single object shape with multiple connector lines.

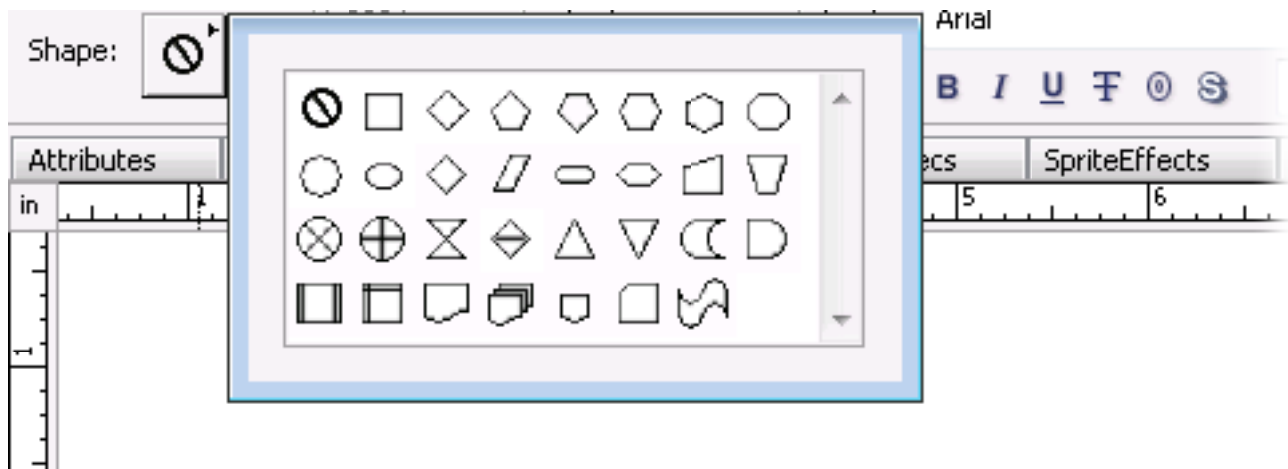


(C) Multiple Notes:
Canvas creates a multiple objects shapes with one connector line.



(D) Flowchart:
Canvas creates a single object shape with one connector line simultaneously in sequence.


Note: When using Annotations tools A-D, you should select the object shape from the Shape popup palette on the Properties bar before you begin designing; however, you can change the object shape after it has been drawn, if necessary. When you use the EasyShapes tool, you first select an object shape from the EasyShapes popup palette.



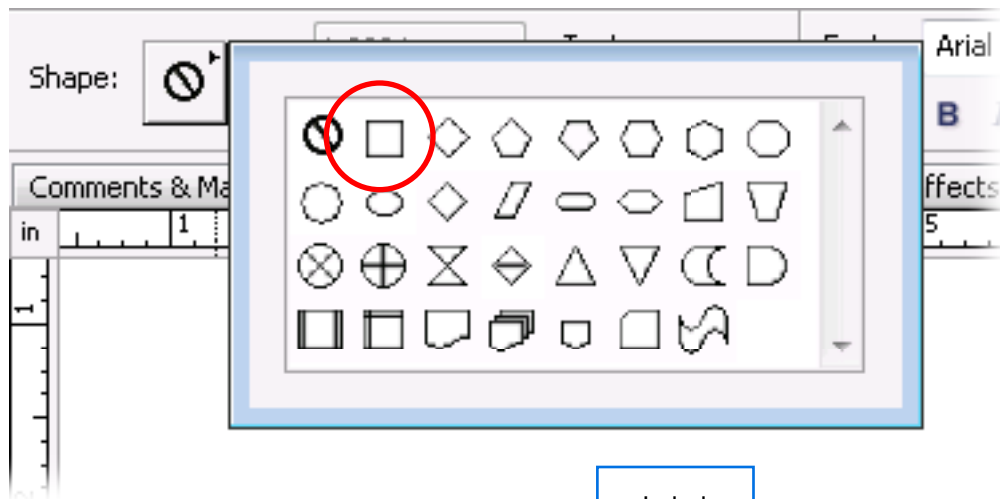
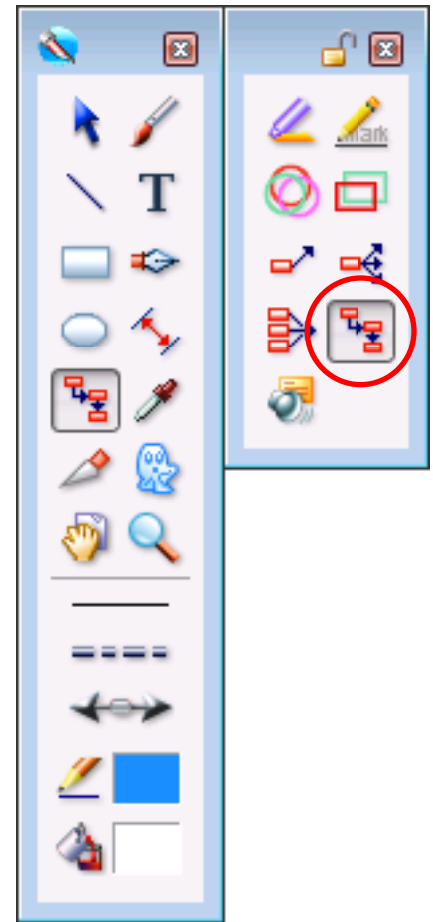
Note: You have the choice of using either the EasyShapes tool or Flow-chart tool. With the Flowchart tool, the object shape and connector line are created simultaneously. If you use the EasyShapes tool, you will have to create your connector lines afterwards with a Smart Lines tool (see "Connecting objects with Smart Lines").

STEP 2: STARTING YOUR FLOWCHART

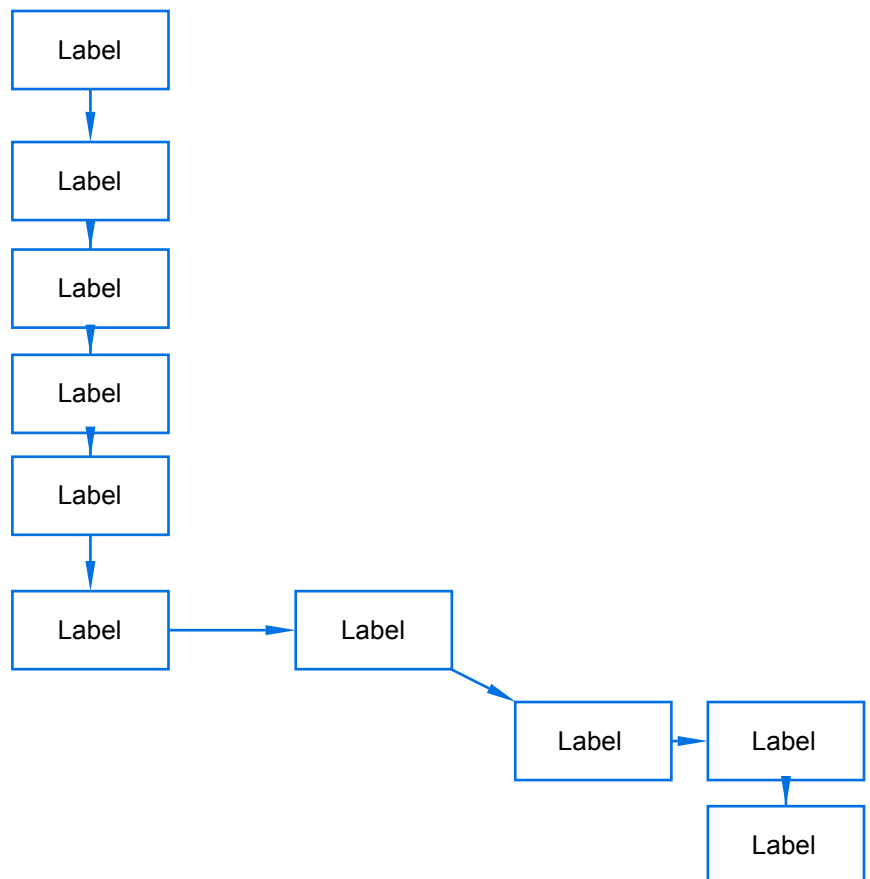
First select the Annotation Note-Flowchart icon  to begin the flowchart.

By default, no shape is selected. We need to select a shape to start the first level of our flowchart. To select the shape click on the Annotation Note-Flowchart icon , then on the left side of the properties bar. Open the Shape menu and select the rectangle shape from the palette.

NOTE: The Shapes popup palette is only available if the EasyShapes tool is selected.

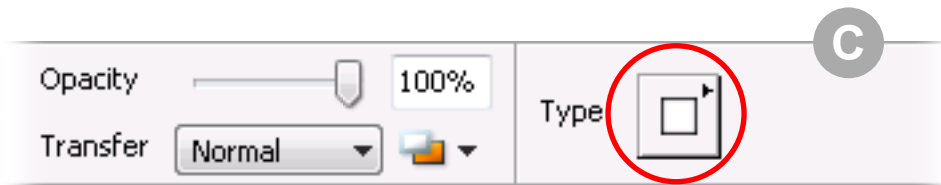
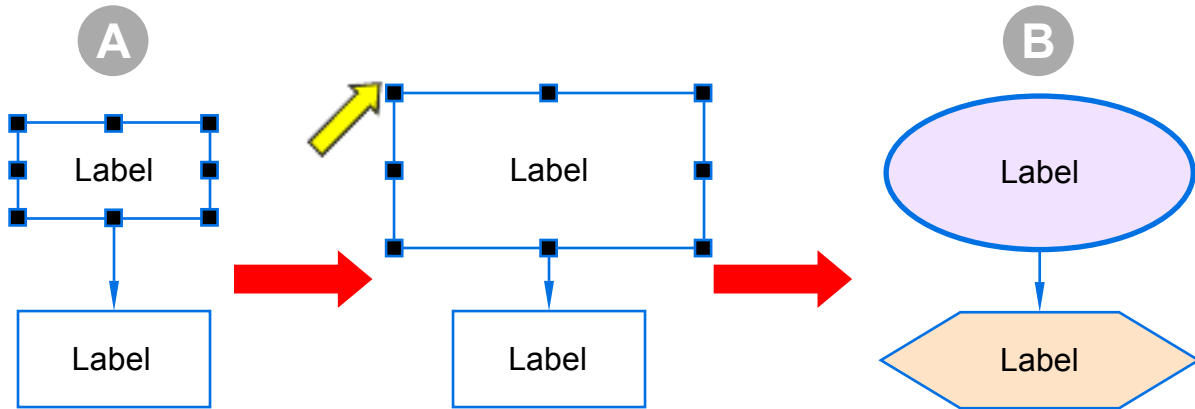


Create a flowchart as shown. **Press Esc** when you have finished creating the callout(s). You can also **double-click** after completing the last item.



STEP 3: ADJUSTING SHAPES

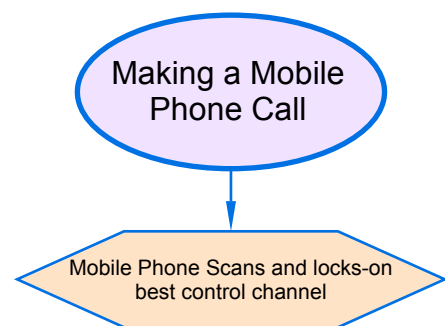
Now select the first shape to enlarge proportionally. (A) To do so press **Shift + Ctrl + Alt** at the same time, and drag the top right corner up to enlarge. (B) Now that the shape is large we can change it to an oval shape. Select the rectangle shape. Then in the Properties bar, select the (C) EasyShape Type and select the oval. After that you can change the ink of the fill and stroke at any time.



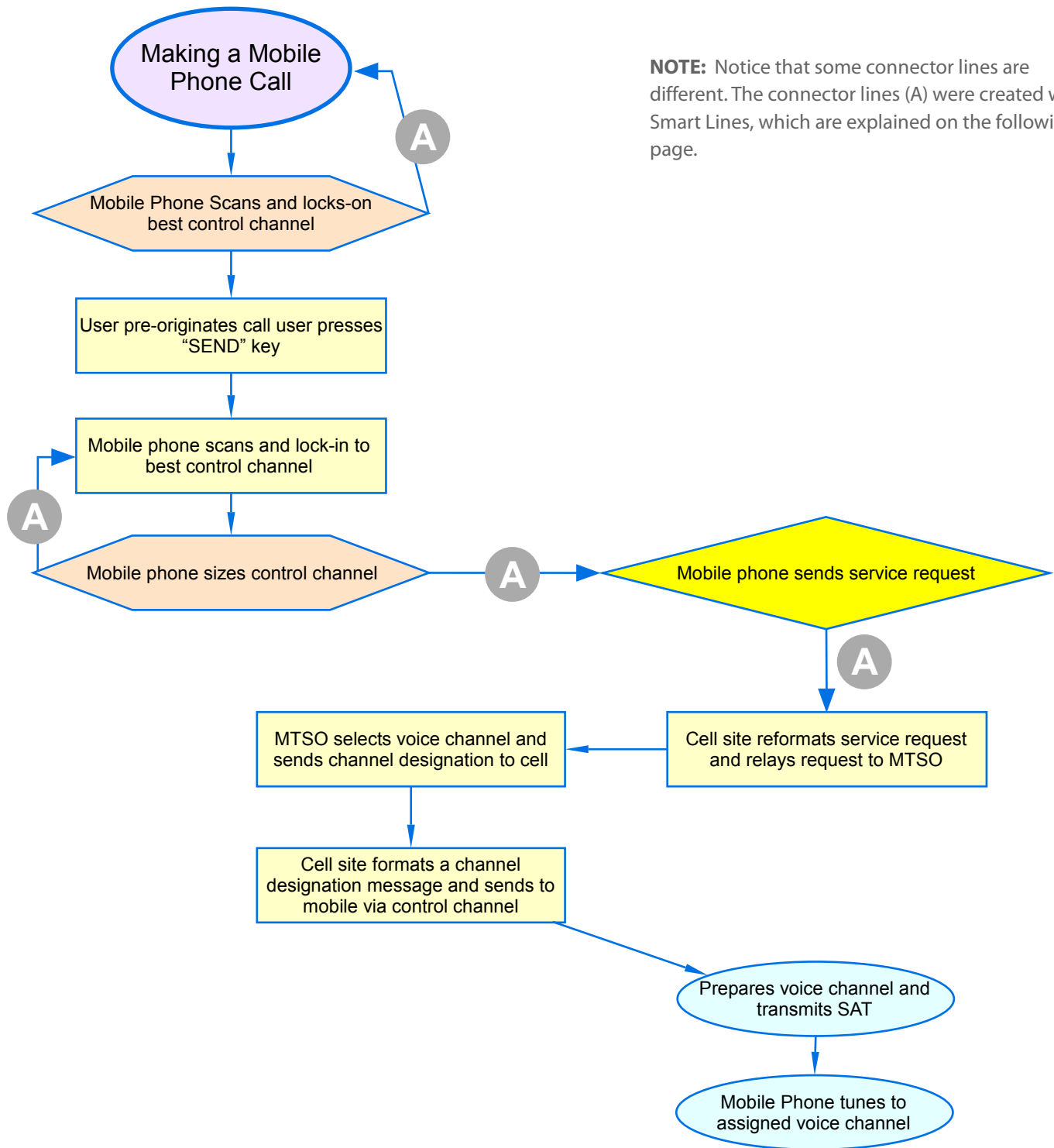
STEP 4: CHANGE THE TEXT

If you have already created your object(s), select the Text tool and click on the text in the object to enter text edit mode. Edit the text as needed using the text settings in the Properties bar and then exit text edit mode.

NOTE: Before you create the annotations object, enter the text in the text field in the Properties bar.



Now that you have changed the size of the shapes and entered the text that you want, the flowchart will look like this.



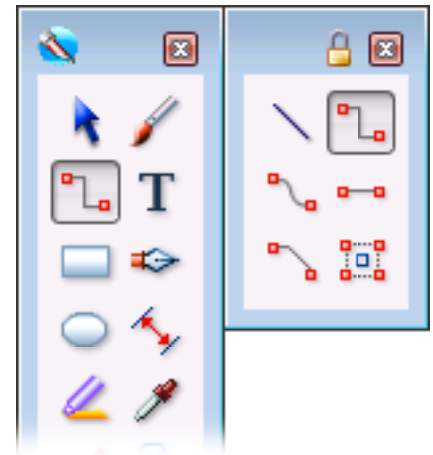
NOTE: Notice that some connector lines are different. The connector lines (A) were created with Smart Lines, which are explained on the following page.

CONNECTING OBJECTS WITH SMART LINES

The Smart Line tool draws dynamic links between objects. Smart Lines are useful for creating organizational charts, flow diagrams, and other illustrations with linked objects.

Use Smart Lines to link one or more objects to a single object. Draw multiple Smart Lines between objects and link Smart Lines to other Smart Lines. Smart Lines change length and angle to maintain connection to the linked objects.

The Smart Line tools consist of the Basic, Kinked, Smooth Kinked, Dogleg Connector, and Connection Point tools. Those icons are located in the Tool Box.



A- Kinked - This connector allows the Smart Lines slope in straight line.

B- Smooth Kinked - This connector allows the slope in smooth curve line.

C- Basic - Only connect one point to another in only straight Smart Line

D- Dogleg Connector - This tool creates a straight line with a dogleg portion whose angle can be controlled.

E- Connection Point - This tool is used to move the anchor points of a vector object. You can also add and remove anchor points.

To use a Smart Line tool

- 1) Select a Smart Line tool.
- 2) Drag from one object to another object. When you release the mouse button, Canvas creates the Smart Line.

To change Smart Line type

- 1) Select the Smart Line with the Selection tool. The Type menu appears in the Properties bar.
- 2) Choose another Smart Line type from the menu. You can select Basic, Kinked, Smooth Kinked, or Dogleg. The line changes immediately.

To change the position of start and end points

- 1) Select the Smart Line with the Selection tool. The Properties bar displays the X/Y values coordinates for the start and end points.
- 2) Enter new values in these fields and press Enter. The Smart Line shifts accordingly.