# Overview

This overview describes the features of JDElite flowchart editor. This free demo version has all of the built-in features, the only difference from the full version is the access to the file system. You can create your own flowcharts but in order to save them you need the additional server module. There are four built-in sample flowcharts. They can be opened and edited but cannot be saved.

# Learn by Example

You can build a flowchart by simply drag-and-drop nodes from the palette and by dragging connection links between them using the mouse over the pop-up handles. The flow direction can be either top to bottom or left to right and can be switched back and forth at any time during the design process:

<demo1.mp4>

Nodes are assigned names at node creation time that have to be unique across the flowchart. The names are either automatically generated or you can choose to enter the node name. Duplicate names are rejected. Later you can change the nodes background/foreground colors, either by groups of nodes from the global *Settings* dialog or individually for any particular node from its *Properties* dialog:

<demo2.mp4>

From the node’s *Properties* dialog, you can manipulate the selected node: show/hide or change the node name, select a node icon, show/hide the icon, edit the background/foreground colors and enter text inside, or outside above and/or below the node. This dialog is invoked from the right-click context menu or double clicking on the node:

<demo3.mp4>

The nodes are positioned on a rectangular grid that consists of layers across the flow direction and lanes along the flow direction, and are allocated in the cells at the intersections. The areas between the layers are called *layer pipes*, and the areas between the lanes are called *lane pipes*. The connection links are traced along these pipes. The nodes can be moved to different grid cells, as well as copied and pasted. The links ports, in order to reconnect them, can be moved to different nodes using the mouse dragging the connection ports:

<demo4.mp4>

You can use the side swim lanes – left/top and right/bottom – on your choice. You can choose to enable the association links to show relations between nodes. You can also select different color styles for the node icons. From the right-click context menus outside of nodes and links you can add or remove layers and/or lanes:

<demo5.mp4>

You can attach labels to the connection ports of the nodes in the node’s *Properties* dialog under the *Connectivity* tab. You can also attach labels to the links or change their colors from the link’s *Properties* dialog that can be invoked from the right-click context menu or double clicking on the link:

<demo6.mp4>

The sizes of the nodes can be changed either by groups from the *Settings* dialog, tab *Node Size*, or individually in the flowchart by dragging the node outline with the mouse. For flowcharts that are larger than the browser window there is a convenient *Thumbnail View* dialog invokable from a button in the top right block above the palette. You can also change the flow direction by double clicking the arrow button in that block, as well as you can select a different scale of the flowchart:

<demo7.mp4>

Container blocks with two levels of nesting allow the user to create functional groups of nodes. After the initial drop, as well as at any time later, a block can be expanded or collapsed by clicking on the expand/collapse icon. The block can be sized to the desired dimension by extending or shrinking it in any direction using the resize menu that pops up at the upper left corner of the outline in expanded state. If there is not enough free space around the block to extend it, additional layers and/or lanes are to be inserted.

<demo8.mp4>

The *Thumbnail View* described above may help to navigate large flowcharts that do not fit in the viewable area. Additionally, there is a Search tool that allows to find a single or multiple nodes by full/partial name, or by matching text/pattern in the node content text:

<demo9.mp4>

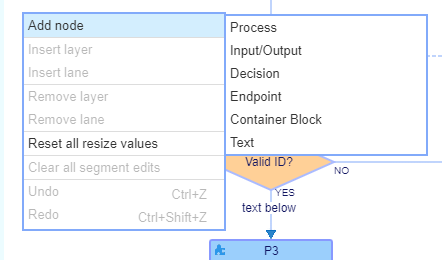
JDElite allows to edit complex large flowcharts by manually modifying the layout.

<demo10.mp4>

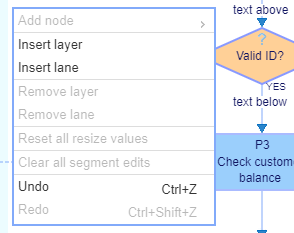
# Brief List of Features

Following is a brief list of the wide range of features, accessible from the toolbar, from the context menus, or by using the mouse.

* Most of the actions on the toolbar buttons are also available from the drop-down menu in the upper left corner.
* A new node is created either by dragging an item from the palette on the right to an accepting cell on the canvas, or by selecting a node type from the context menu on an empty cell. The menu shows only nodes that are accepted at this location:



* The start and end layers, as well as the left and right swim lanes, are optional. They all accept their specific node types from the palette or from the mouse context menus.
* The Endpoint node can be used for references between different parts of large flowcharts or between pages.
* For general notes or comments throughout a flowchart there is a special Text node.
* The flowchart frame size can be modified at any time by inserting new layers or lanes, and/or removing the unused ones.



* Container blocks with two levels of nesting allow the user to create functional groups of nodes. The block can be expanded or collapsed at any time by clicking on the expand/collapse icon. The block can be sized to the desired dimension by extending or shrinking it in any direction using the resize menu at the upper left corner of the outline in expanded state. If there is not enough free space around the block to expand or extend it, additional layers and/or lanes are to be inserted.
* The decision node has two outputs: ‘YES’ and ‘NO’, and accepts multiple inputs. The configuration of the decision outputs can be edited from the *Configure Decision Layout* dialog, which is accessed from the context menu on the decision nodes.
* As mentioned above, the connections between the nodes are created by dragging the mouse between the connection handles that pop up on the outlines of the accepting nodes under the mouse pointer. The connection is routed after the mouse pointer is dropped over an accepting handle when the handle is selected. Later on, a connection can be reassigned by dragging any of the ends of the link to another accepting handle – input or output – on a different node. The tooltips under the mouse pointer suggest the appropriate action in a particular context.
* In addition to the standard link connections, there is an additional category of association links. They can be traced sidewise between the nodes, and are represented by dashed lines.
* The data flow direction can be initially selected to be either top to bottom or left to right, and can be changed or switched back and forth at any time by double-clicking the ‘Data Flow’ button above the palette, or from the Settings dialog. The flowchart is rotated and flipped without otherwise affecting its content. Rather than using a simple rotation, the flipping preserves the correlation between the flowchart internal directions and the canvas coordinate system.
* The nodes and the links can be selected by mouse click. Multiple selections are carried out by either pressing Ctrl + click or by pressing Shift + drag. Selections can be deleted using the toolbar, the context menus, or the keyboard.
* Nodes can be moved at any time during the design process by simply dragging them with the mouse to new locations. The dragged node can be dropped over an empty cell, or over a layer pipe or lane pipe. In the latter case a new layer and/or a new lane are created, and the node is positioned in the new cell under the mouse pointer. The connected links are re-routed accordingly.
* From the node *Properties* dialog, a reasonably sized text content can be added inside the node, as well as above or below it.
* Navigation through large flowcharts is made easy by the *Thumbnail View* or by the node search tool.
* All described editor actions are undoable with unlimited number of **undo/redo** steps (except node resizing and node color selections).
* The editor has a proprietary **file system browser** that is invokable when a server connection is available. It has full access to the file system for easy navigation. The created flowcharts, in JSON format, can be saved in existing folders or new folders can be created. Files and folders can be renamed or removed as well. The default server connection uses *node.js*.