# Maximum flow in a network

## Changes

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#### Changes

#### **Document Metric**

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## History of changes

Version	Date	Author	Description
0.1	23.05.2012	Piotr Janaszek	Created document
0.4	23.05.2012	Piotr Janaszek	Created Requirements
0.9	24.05.2012	Piotr Janaszek	Created Postface
1.0	25.05.2012	Piotr Janaszek	Fixed mistakes and changed document formatting

#### REQUIREMENTS

Most of the requirements were fulfilled without any changes, but few small modifications were made.

In business analysis it was stated that the user can drag a vertex/edge from a toolbox into a drawing area. In fact instead of dragging nodes or edges a context menu was developed where the user can select what he/she wants to do.

Another change is in vertex arrangement. Since visualization of the graph is done by an external library, which does not offer to set layout algorithm nor allows to arrange nodes manually this option is not available.

The user cannot add bidirectional edges manually. In fact in the underlying logic such an edge is added but it is not visible for the user. This change was done to prevent from loops and hanging the application through infinite calculation.

The last change is about edge capacity. The business analysis required that each edge can have positive or negative capacity. In the final version of the application the edge capacity was limited only to positive integers including zero.

#### **POSTFACE**

Application fulfills most assumptions of client's needs. The biggest change was made from the technical side. It is not visible to the user, nor limits its usefulness, but makes the program more reliable and easy to be improved and extended in future.