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# Network visualization based on JSON and D3.js

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## Abstract

This is a half day (3 hours) workshop.

D3.js (<http://d3js.org/>) is a powerful Javascript visualization library that enables users to produce professionally looking (interactive) data visualizations that can be viewed in web browsers. The produced pictures can also be exported into SVG (Scalable Vector Graphics) format and afterwards imported into a vector graphics editor (such as Inkscape or Illustrator) and manually enhanced and saved in a selected format for inclusion in other publications.

We developed netD3 – a set of additional network visualization procedures over D3.js that provides network analysts with different ways to display their networks.

To prepare network data for netD3 visualizations we defined a special netJSON format for describing networks and their layouts in JSON.

In the workshop we will first learn how to describe networks in netJSON and afterwards explore different ways to visualize them using netD3 options.

The developed framework can be used by network analysts to produce visualizations of their networks that can be put on the WWW or used in other publications (reports, slides, papers, books, etc.). The authors of network analysis programs can export their results in netJson format and use netD3 for their visualization.

The netD3 library will be available at <http://vladowiki.fmf.uni-lj.si/doku.php?id=vis> .

**Keywords:** network visualization, layout, javascript, JSON, SVG

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