

## **Rationale for Proposed DAG License Modification**

This is a statement of our reasons for proposing a change to the DAG license. Although in 1990 IPD approved commercial licensing of DAG in both source and executable form, no industrial licenses have been issued. Under a separate academic release program, certain universities hold very restrictive licenses that permit limited use of DAG in binary executable form. DAG has been well received by these users. Unfortunately the terms of their licenses technically do not even permit the universities to disclose that the graph drawing software comes from AT&T, and have discouraged use of DAG as a component in further work in software exploration and visualization. Our goal now is to encourage widespread use of DAG, leading to increased recognition for AT&T as a technology leader, and advancing DAG as a standard, thus providing a basis for possible commercial revenue.

To make progress toward this goal, we are proposing a research license for DAG source code. Because IPD previously approved commercial source licensing this is not a fundamental change in our position. The new arrangement would permit researchers to obtain the source code for free or for a minor charge for copying the media.

Our reasons are:

- (1) Lack of source code has been a significant barrier to acceptance of DAG as a component within experimental designs for software visualization and exploration. Researchers are concerned that they cannot share their prototypes with other researchers, and do not have access to source code for minor modifications and porting. It is worth noting that a major factor in the initial academic popularity of the Unix operating system itself was source code availability.
- (2) Since we hold a U.S. patent on DAG, our intellectual property is protected from commercial use by other parties. On the other hand, the patent application as well as various publications have already disclosed our theoretical results and some of our programming techniques. Therefore source code release will not significantly compromise our rights.
- (2) There are no indications that any business unit of AT&T is interested in DAG as a product. However, research licensing of DAG would be a logical step toward developing a market.
- (4) In the event that commercial applications do not result, AT&T still benefits in many ways from being regarded as a technology leader and interacting with the research community. We will have gained good will and increased visibility by making this software more widely available. This encourages future collaborations in the area of software visualization, where AT&T benefits from outside research. The graph drawing work is already well regarded, so research licensing helps us by leveraging our strength.

## **Conclusions**

The research license that we have proposed is a logical step for DAG. It will have practical benefits for AT&T and the research community.

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