

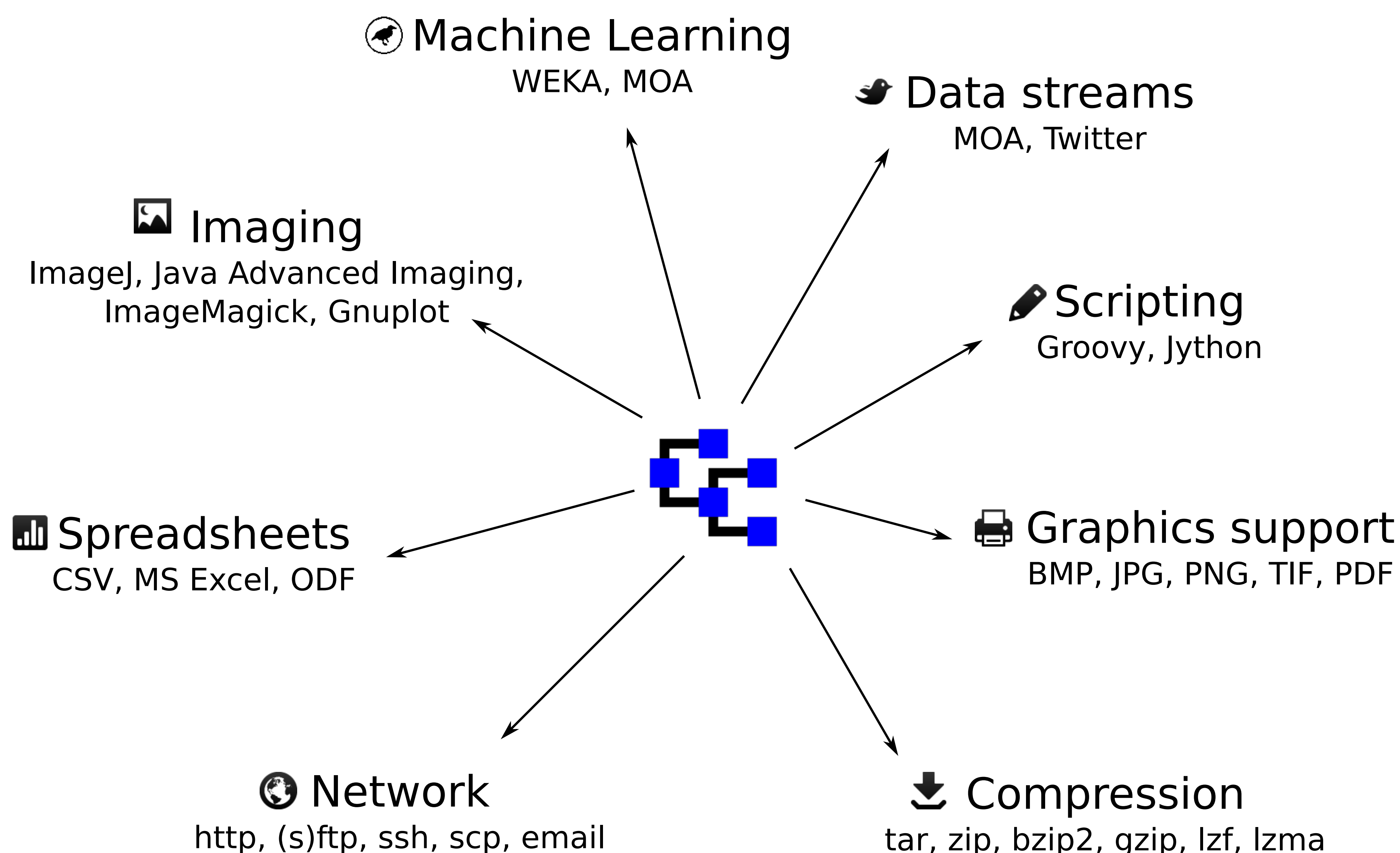
# Scientific workflow management with ADAMS



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## Operators

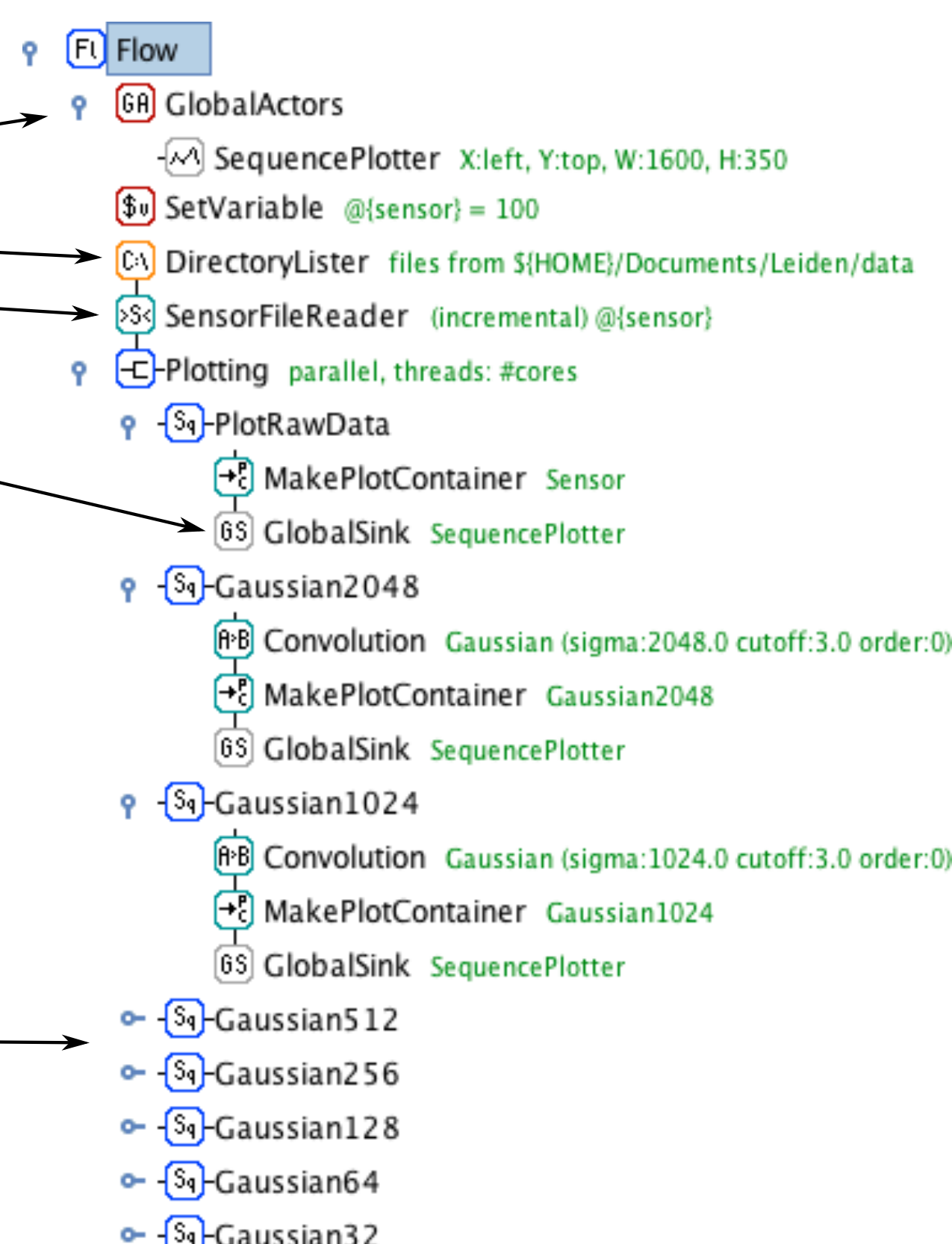
- **Standalone** (no input or output)
- **Source** (only output)
- **Transformer** (input and output)
- **Sink** (only input)

## Tokens

Data is passed using tokens, wrapping single Java Object and Provenance information

## Control actors

Determine how data flows, e.g., Sequence, Branch, Tee, Trigger, WhileLoop, If-Then-Else, Switch, ...



## Tree structure

- very compact layout
- can view very large flows (by expanding only required sub-tree)
- no manual connecting of operators

## N-to-M semantics

Tree cannot represent N-to-M, but can be mitigated by:

- variables
- key-value pairs
- global actors

## Interactivity

Certain actors can interact with user, e.g., selecting file, prompting for making a selection