During past thirty years, several models for non-linear undo models have been presented, but almost none solves undoing and redoing actions in environments, where multiple history buffers are involved and when there are causal dependencies among separate actions.

This thesis focuses on developing a new model, which allows a user to select any action from any history buffer. The key part of the model is a smart command design and undo manager, which searches for dependencies and offers possible solutions to the user. The results are presented in the context of the DaemonX framework.