

# Design and Implementation of the JDownloader Plug-in System

This Diplomarbeit describes the design and implementation of the JDownloader plug-in system. JDownloader is a file downloading software with more than 20 million users world-wide. JDownloader has a plug-in system, where each plug-in adapts the core software to the specifics of a file hosting service. The plug-in system evolved from a simple first version to a more elaborate current version. This thesis describes the non-functional requirements for the current version and how the design and implementation of the current version fulfills these requirements. It then compares the current JDownloader plug-in system with other comparable (simple) plug-in systems and shows how and where it is superior or inferior.

## Work Results

- Review of literature on plug-in systems
  - Focus on simple plug-in systems comparable to JD system
- Requirements for current JD plug-in system
  - Short time-line, maybe with major decisions
  - Linear list of non-functional requirements (memory, speed, security, dynamicity, etc.)
- Design and implementation of current JD plug-in system
  - Contains sufficient technical details
  - Lists problems that had to be overcome
  - Shows how this improves over first version
  - Shows how this satisfies the requirements
  - If possible, with numbers, calculations, for comparability
- Comparison with other plug-in systems
  - A tabular comparison with JSPF etc. along non-functional requirements
  - Involves JD requirements from above
  - Also involves new requirements by other frameworks

## Thesis Advisor

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