With the continuous expansion of the scale of software version and the increase and replacement of software development team personnel, the software version

This demand is also changing, coupled with the urgency of development time and the adoption of multi platform development environment

Component development faces more and more problems. These problems include the development, maintenance and guarantee of a variety of current products

Precise construction of product versions, reconstruction of previously released products, strengthening the unification of development policies and special versions

Demand processing, etc. Now, a project with millions of lines of code needs a complete set of simple version construction

In days or even a whole week, the rapid development and timely verification of the version are impossible; The result can be imagined

Objective the development cycle becomes too long, the product reliability is poor, the software quality is poor, and the maintenance is difficult

Inevitably, complaints are heard everywhere, and the project risk is greatly increased. How to build a set of standardized and efficient software development foundation

Architecture and corresponding automation tools, supporting the rapid construction and continuous integration of versions, have become software

Urgent problems in project development management.

Firstly, this paper makes an in-depth analysis of the development and key technologies of version construction automation technology. For the current industry

Introduce the popular version construction automation tools in the world, and analyze their respective advantages and disadvantages; Reference current flow

The configuration library management architecture of the software version of the line focuses on the analysis of full-scale automatic compilation, accurate refresh and compilation of the version

Compile the specified version separately, and put forward the corresponding feasible solutions. Finally, put forward the version automation

The implementation architecture and scheme of the tool, combined with the management architecture of the configuration library, realize the version automation tool.