

## ReleaseWorks™ Overview

ReleaseWorks™ is a release management and regression automation tool. As the front-end to ReleaseWorks™, GVP Gathers, Validates, and Publishes (GVP) snapshots of your entire project repository database. These three steps are essential to a successful hardware design and verification project. The ability to consistently and cleanly create releases of databases for team oriented development projects is a key determinant in project success. RRT (Regression Results Tool) posts regression results and statistics to an internal project website for easy viewing by the entire project team.

A hardware project is particularly challenging from a release management point of view. Several engineering disciplines are involved. On projects of significant size, those disciplines are often exercised by different specialists. Designers produce RTL code, verification environment engineers develop testbench code, others test the RTL, and software engineers may use the RTL model, verification testbench, and other models to validate their software. If one set of those specialists cannot rely upon a stable code base delivered by another, the project breaks down. Certainty of design correctness, time to market, and reliability of the product are lost.

Adherence to a simple three step process for managing releases and controlling source code is the secret to success at many of the most advanced companies in the electronics industry. The process implemented by ReleaseWorks™ is the fruit of decades of process design and refinement in the software development field. It has been applied to the challenges of hardware development by experienced hardware design and verification engineers. ReleaseWorks™ has propelled multiple SoC, ASIC and FPGA projects from concept to tapeout in some of the largest and most sophisticated chip development companies in our industry. It is a production-proven tool implementing a time tested methodology.

## Key Features

- 3-step process – Gather, Validate, Publish – automatically maintains integrity of repository releases
- Support for multiple version control tools (ClearCase and CVS)
- Easy to use – most users will only ever need a few commands
- Automates the release flow
- Automates regression testing
- Changed files are submitted in logical groups (called gather groups) helping to manage dependencies
- Validate step automates testing of gather groups
- Supports multiple projects simultaneously
- Easy project configuration
- Individuals can submit changes to the release flow at any time when ready
- Development continues transparently after submission
- Testing is easily tailored to a specific file's location in the design hierarchy
- Automated project-wide email notification upon each proven repository database release
- Only gather groups that pass the acceptance test will be included in the next release
- RRT – Integrated Regression Report Tool posts regression results to a web page
- Multiple, flexible release labeling schemes
- Cross platform support (Windows desktop, Linux servers, etc.)

## ReleaseWorks<sup>™</sup> in Action

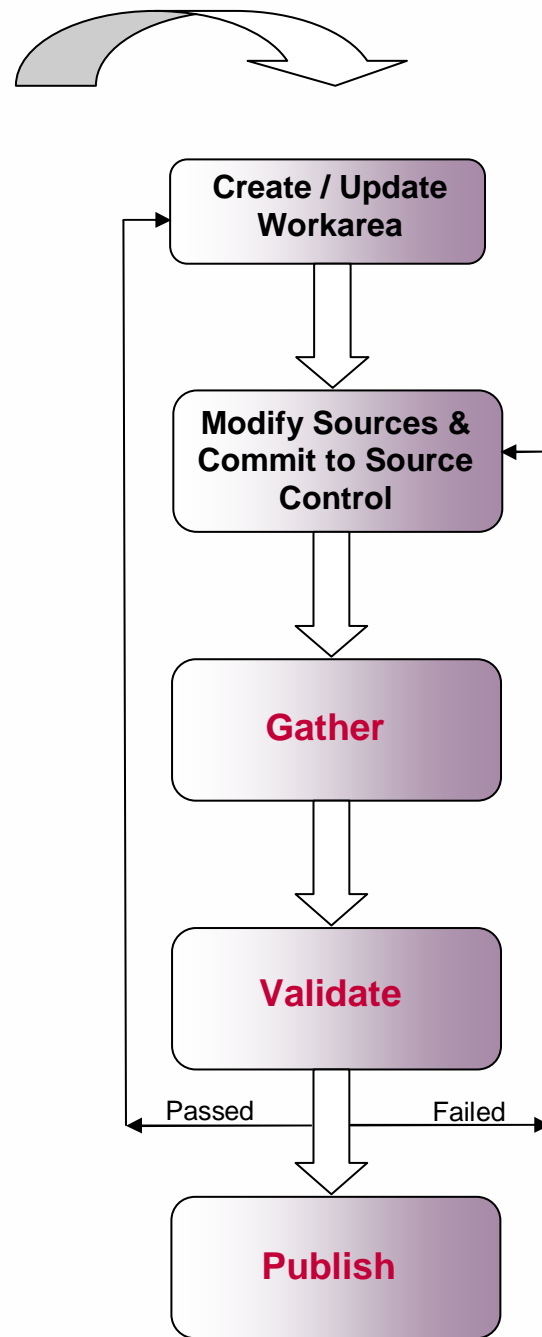
ReleaseWorks<sup>™</sup> automates the best engineering practices that formerly were executed by hand and relied upon the discipline and vigilance of your team. It will relieve engineers from the laborious and error prone testing, labeling and notification tasks associated with coordinating distribution of changes within and among teams. The integration of RRT (Regression Report Tool) with GVP makes it convenient to automate regression tests and place the results on a web page viewable by all team members. Your design verification team will also benefit from a number of ReleaseWorks<sup>™</sup> plugins that automate other processes, such as the creation of documentation and generation of tests for reconfigurable hardware designs.

## Company Background

Paradigm Works is a leading chip design and verification services company. The company is recognized for engineering excellence, integrity in business, and overall productivity and cost effectiveness.

We provide expert consultants and contractors both on site and offshore to assist in complex chip developments. We offer world class domain expertise (PCI Express, USB, Ethernet), application knowledge (Networking, Computing, Storage, and Wireless), and leverage Paradigm Works' software (FrameWorks<sup>™</sup>, ReleaseWorks<sup>™</sup>) and productivity accelerators (DesignWorks<sup>™</sup>, VerificationWorks<sup>™</sup>, TemplateWorks<sup>™</sup>) to help clients bring their innovations to market as quickly as possible.

For more information on Paradigm Works products and services call 978-824-1400 or see our web site at [www.paradigm-works.com](http://www.paradigm-works.com).



**Results Posted to Internal  
Project Website**