



# TECHNOLOGY OVERVIEW VERISAE DEVELOPMENT PROCESS

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## ■ VERISAE DEVELOPMENT PROCESS

Verisae's development processes are based on a Rapid Prototyping Agile methodology.

There are many specific agile development methods. Most promote development iterations, teamwork, collaboration, and process adaptability throughout the life-cycle of the project.

Verisae's approach is to use agile methods to break tasks into small iterative increments. Iterations are short time frames that typically last from one to four weeks. Each iteration involves a team working through a full software development cycle including planning, requirements analysis, design, coding, unit testing, and acceptance testing. Multiple iterations may be required to release a product or new feature. This helps minimize overall risk, and lets the project adapt to changes quickly. Stakeholders produce documentation as required.

Verisae documentation is maintained on-line using Confluence to facilitate the rapid agile development process.

In a nutshell, Verisae's development process is an iterative focused process geared to rapid development and application deployment and is based on the following steps.

- Identify business requirements and potential costs
- Create a Business Requirements Document (BRD)
  - Create GUI layout using Sketching and Visio tools
  - Identify Reporting requirements
- Create a Functional Specification for development
  - Additional analysis steps as needed
  - Finalize GUI layout as needed
  - Database model and ERD diagrams
  - Document Application Use Cases
  - Business objects needed to support requirements
  - Unit test during development
- Create a Test Plan based on the BRD and Functional specification
- Create End User Documentation
  - End User documentation can be created early during the development process and is based on the BRD and Functional specification.
  - End User documentation is developed and maintained in Confluence, an on-line web based Wiki.
- Application Maintenance
  - Application maintenance and bug fixes are managed using Jira, an on-line web based software maintenance tool

## ■ VERISAE DEVELOPMENT CONCEPTS

Verisae utilizes an agile process, which effectively supports all major components of software development. Our focus is on the key objective of translating business requirements into a quality, supportable production application in a reliable and predictable time-frame.



Verisae does not use sophisticated UML or Modeling diagramming tools but instead prefers to define user interfaces using Visio or simple sketching tools to rapidly develop and demonstrate the look and feel of the application pictorially. This aids in quickly showing the stakeholders what is being developed, how it will work and what the final implementation will provide in functionality and scope.

BRD's, Functional Specifications, Testing and End user documents are often developed in parallel to aid in an iterative rapid development cycle.

During the process of writing a complete **BRD**, the first analytical phase of the project begins. The primary objective of the BRD is to research and document the business requirements, objectives and technical aspects of the new application component. The BRD is critical to the project team having complete knowledge of the requirements, objectives and constraints of the software deliverables.

The **Functional Specification expands**, refines and identifies additional requirements for the development, coding and implementation phase. Database requirements, Business Objects and specific Use Cases are defined to enable the construction of the software deliverables.

Often during coding and Unit testing project requirements can change. Since our development process is web based and always on-line, all project documentation can quickly be updated to reflect new requirements.

The **Quality Assurance** phase is part of the Software Development lifecycle process. Testing is performed early and often. During this phase, User Documentation is finalized and bug fixes are applied to the new application.

The QA process is open to Verisae Customers. Verisae encourages our Customers to participate in the testing process to give them early access to new features under development.

## ■ VERISAE DEVELOPMENT DOCUMENTATION STANDARDS

Repository	Description
Development Confluence	Functional Specifications, ERD's
Customer Confluence	BSD's, End user documentation
JIRA	Documents anything that requires someone to do work, with URL links to other document repositories
SVN:vdocs	Master Visio documents
Basecamp	Document sharing with internal and external users by Project. PDF documents are created from Confluence and Visio when needed for multiple viewers

Confluence and Jira are used to maintain and manage our documentation and development process.

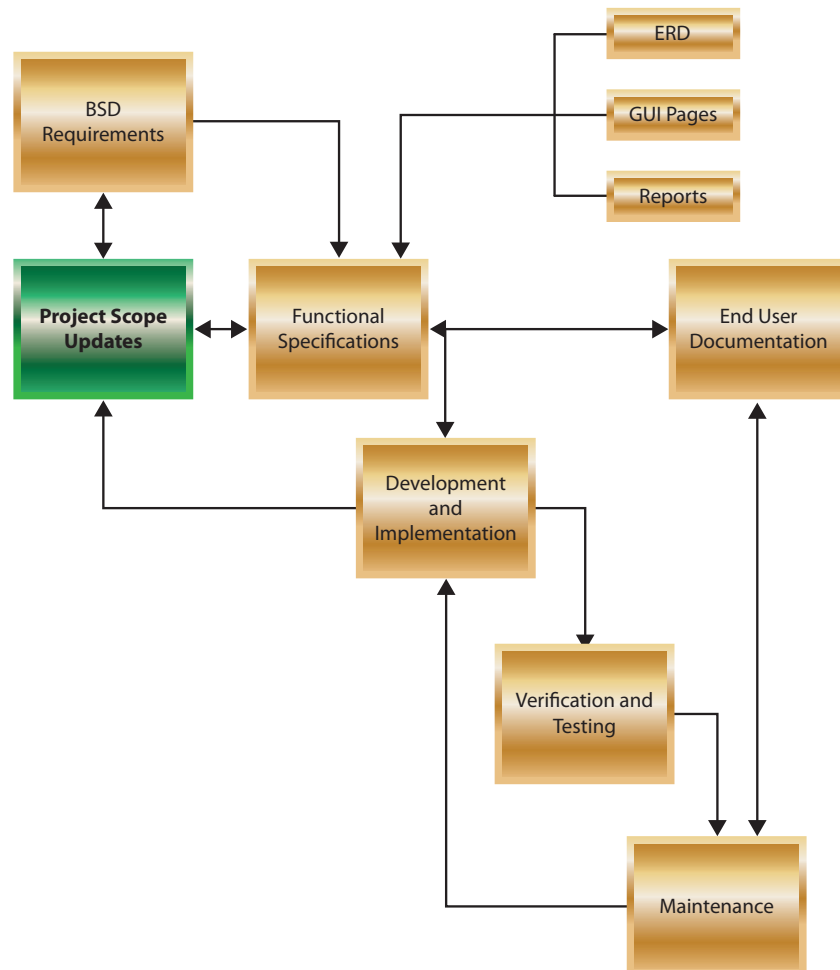


Documents that directly affect the development process are centralized in Confluence as text documents.

- Visio documents are usually available in Basecamp as PDF's for end user consumption

Development Document types include Visio's, BSD's, Functional Specifications, Database ERD's and End User Documentation.

- The documents are directly editable in Confluence in order to keep them updated to match the development and implementation cycle.
- Confluence is used to generate a PDF's as needed for distribution to others using Basecamp.
- Development documents are searchable in Confluence to make it easier to find context in related documents.
- The development cycle often requires changes in the BSD's and Functional Specifications during development because of unforeseen changes in scope etc.
- When development and implementation have been completed, the associated development documents will match what was actually implemented.
- BRD's and Functional Specifications are used to create End User Documentation as needed.



## ABOUT VERISAE

Verisae ([www.Verisae.com](http://www.Verisae.com)) develops, markets, and licenses **Sustainability Resource Planning (SRP)™**, an enterprise solution that empowers organizations to make “sustainability actionable”. Verisae helps measure, manage and monetize energy costs and carbon emissions. SRP covers the core functions of sustainability needs by combining multiple business processes and systems into one database to use across the enterprise. Our platform improve operational efficiency, make sustainability initiatives actionable, and reduce energy costs carbon emissions for distributed enterprises and energy companies.

### ENVIRONMENTAL MANAGEMENT

Carbon Emissions Manager

- Scope 1 & 2 Emissions
- Scope 3 Emissions

Sustainability Project Manager

Water Manager

Waste Manager

### ENERGY MANAGEMENT

Energy Supply Manager

- Utility Bill Processing
- Active Energy Response
- Utility Contracts Management
- Energy Spend Manager

Energy Demand Manager

- Real-Time Energy Management
- Active EE Dispatch
- Energy Efficiency Projects

### ASSET MANAGEMENT

Service Manager

- Service Provider Management
- Financial Management

Asset Manager

- Facilities Management
- Equipment Management
- Asset Monitoring & Alarming
- Parts & Inventory Management

Procurement Manager

- Rebates & Incentives Management
- Total Capital Planning
- Equipment Procurement

Given the heightened priority of corporate sustainability, Verisae is positioned right now to enable organizations to establish a carbon footprint baseline, outline energy management options, and provide a comprehensive corporate sustainability action plans in a manner of months. All of which can be implemented with metrics in place to highlight bottom-line cost savings and return on investment timelines.

Today, Verisae delivers a broad range of sustainability solutions to over **40 global clients** with a service network of **7,500 third party service providers** consisting of **60,000 application users**. Our integrated sustainability platform actively tracks over **2,100,000 million assets** across **20,000 sites**. We help measure, manage and monetize energy costs and carbon emissions. We are uniquely position to help organizations prove return on investment (ROI) for sustainability initiatives.

## VERISAE WORLDWIDE HEADQUARTERS

100 North First Street, Suite 701A  
Minneapolis, MN 55403 USA

MAIN  
612 455 2300

WEB  
[www.verisae.com](http://www.verisae.com)

EMAIL  
[sales@verisae.com](mailto:sales@verisae.com)

