

The purpose of the Presentation is to introduce the Verification Validation Reporting and Tracking System (VVRTS) with a sample video demonstration.

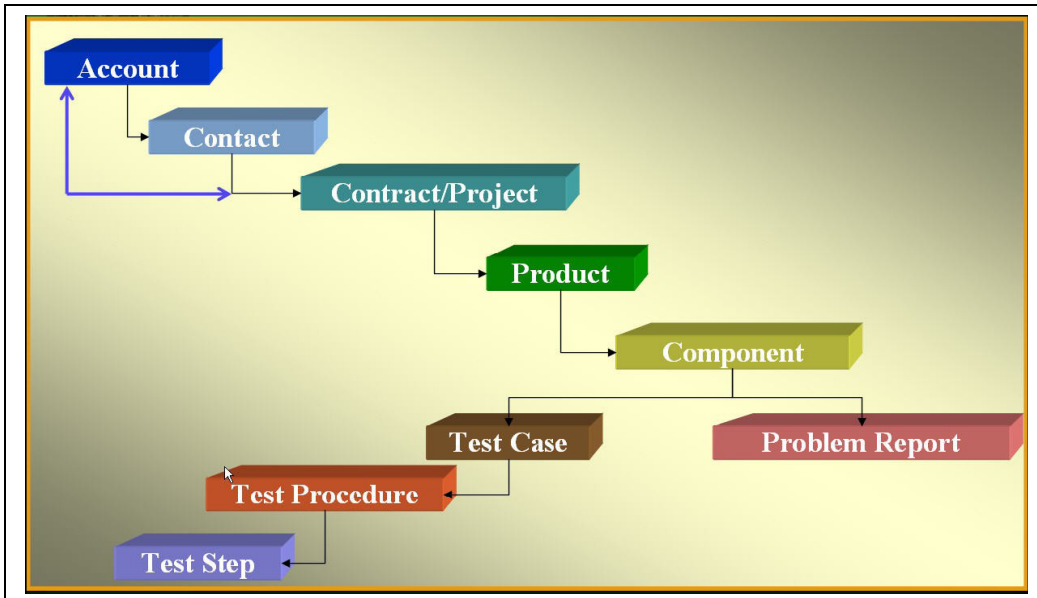
1.1 System Overview

The purpose of the Verification and Validation Reporting and Tracking System Application is to provide system development professionals with tools to assist in testing (hardware, software and documentation), problem reporting and tracking to aid in the management of these crucial product life cycle stages.

VVRTS is a powerful and simple to use Web-based tool that assists performance and management of the following functions in:

- Easily creating Test Cases, Test Procedures and detailed Test Steps that are directly associated with Project/Product requirements and individual product components or features.
- Tracking Product Defects and Test Case execution/completion status.
- Simultaneous access by “approved” users such as Customers, Engineers, Project Managers, Marketing, Senior Management, etc.
- Quick view of the status of test and defect workflow for each life cycle stage.
- Integrating requirements with test and problem reporting activities for easy traceability, update, status accounting and general project management functions.
- Easy and efficient communication, Change Management, Risk Assessment & Management, and determination of product/project defects levels
- Status accounting among all project participants without relying on numerous emails and other forms of communications.
- Ensuring compliance to ISO 9001:2000 Standard requirements in all aspects of system development life cycles.
- Supporting multiple Projects/Products, Customers or Accounts, Project Participants, etc.
- VVRTS allows companies to become compliant to ISO 9001:2000 quicker and easily prepare for Quality Management Reviews and Independent External Audits.

The VVRTS Application is a Web-based solution employing J2EE* and Java* technology and is designed on a modular basis as shown below.



Based on experiences, best practices and international standards, VVRTS has been designed to integrate all the business objects and accommodate testing, problem reporting and tracking activities through any stage of the system development life cycle.

SOME OF THE FEATURES:ARE:

The features of the VVRTS application include but are not limited to:

- **Platform Independence**
- **Simple User Interface Screens**
- **Short Learning Curve**
- **Specific Fields for ISO 9001:2000 Compliance**
- **Compliance with IEEE Standard 1012 Verification and Validation**
- **Support for Multiple Accounts, Users, Roles, Contracts and Projects with built in security**
- **Multiple Product and Multiple Component (feature) Recording,**
- **Reporting and Tracking**
- **Test Case Creation with Entry Criteria**
- **Test Procedure Creation with Entry/Exit Criteria**
- **Test Step Creation with Entry/Exit Criteria**
- **Linking Test Procedure to a requirement or an existing (previously reported) Defect**
- **Creating a new Defect linked to a Test Procedure**
- **Self Contained Log System, and Test Case and Defect History recording**
- **Simple customization of User Administration, Workflow, Field**
- **Selections and Field Definitions, etc.**
- **Pre-Built Reports for Defect and Test Status conforming to ISO**
- **requirements for every Product and Product Component in CSV (comma separated value) and PDF formats**
- **No third party licenses to manage.**
- **Automatic Email & CC Management System**
- **HTTP Cookie Management System for easy navigation between Web pages**

(*) J2EE and Java are registered of Sun Microsystems Inc. trademarks

The VVRTS application aids in performing Validation and Verification functions and it can be used in all project phases for overall project and product management.

Functions - By Typical Project Life Cycle:

- **Requirements Phase:**
 - Verify that system and software requirements are correct, complete, traceable and testable
 - Verify test plans and Acceptance Entry and Exit Criteria are sufficient to validate system requirements and operational needs
 - Ensure testing methods are sufficient to verify and validate software requirements
 - Verify that correct software development, management, and support processes are in place
- **Design Phase:**
 - Verify that the design will satisfy all requirements
 - Ensure test plans and test environments are sufficient to verify and validate system requirements
- **Coding Phase:**
 - Verify that test cases trace to and cover system requirements
 - Verify that test cases, expected results, and evaluation criteria fully meet testing objectives
 - Analyze selected unit test plans and results to verify full coverage of logic paths, range of input conditions, error handling, etc.
- **Test Phase:**
 - Verify correct disposition of test anomalies
 - Validate test results versus acceptance criteria

VVRTS allows companies to become compliant to ISO 9001:2000 quicker and more easily prepare for Quality Management Reviews and Independent External Audits