**ASSETRUST Quality Management Plan**

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**ASSETRUST Software**

**Revision A**

**Project ID: #000-0001**

**APRIL 2022**

### **Revisions**

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| **REVISION** | **DESCRIPTION OF CHANGE** | **REVISION DATE** | **AUTHRORIZED BY** |
| A | Initial Document | 04/02/2022 | Parsa Afrai  Marcos Vallejos  Mercy Jalango  Ian Davies  Luis Ruiz |
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# **Quality Management Scope**

The Quality Management Plan will define the activities and processes to ensure that the ASSETRUST software meets the conformance to requirements and maintains fitness for use. The Quality Management Plan will provide: the quality standards ASSETrust, LLC and ASSETRUST Software will adhere to, supplementary reference materials and documents to Quality Assurance, Audits, and Control, define the roles and responsibilities of stakeholders and the quality objectives and planning for ASSETRUST software.

# **Quality Standards**

ASSETrust LLC will follow the guidelines and be certified to ISO quality standards to maintain quality control. The applicable standards are as follows:

ISO 9001: Quality Management Systems

ISO 27001: Information Security

ISO 12207: Software Life Cycle Processes

ISO 29119: Software Testing

# **Reference Material**

* FORM-001 Software Audits
* PLAN-007 Quality Assurance Plan
* PROC-004 Internal Auditing
* PROC-010 CAPA Reporting Procedure
* POLY-001 Quality Policy Statement
* CHCK-001 Quality Control Checklist

# **Quality Objectives**

The ASSETRUST Quality Management Plan will establish specific, measurable, achievable, realistic, and time-based quality control methods according to ISO 9001 standards. Quality objectives will be reviewed during the quarterly management review meetings for ASSETRUST Software where the goal will be to reduce non-conformance and defects observed in the Quality Audits. The Quality Objectives will then be communicated to the development team, project manager (or product owner) and the quality lead (or scrum master). The quality targets will include the detailed metrics, how they are measured and the acceptable level to still be considered satisfactory. Non-conformance of quality targets are documented in a Corrective and Prevention Action form to identify and eliminate the cause of problems and prevent recurrence of root causes.

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| Metric | Measurement | Acceptable Level |
| Defect Reports | Density of defects identified during software testing. | One defect per 1000 lines of code |
| Mean time to repair | The average time software engineers spend finding the cause of and solving the problem. | The mean time to repair must be under 5 hours. |
| Net Promotor Scores | Survey to identify customer satisfaction by surveying whether customers are satisfied with the software, will fuel growth, and refer others. If customer needs are being met, then customers should respond with a score of at least 7. | The Net Promotor Score should be maintained at over 50 to ensure there are more customers that are promotors. |
| Load Testing | The availability and performance of the system under projected user loads. | If 2,500 users are logged into the software application, then pages should load within 3-6 seconds. |
| Mean Time to Patch | The average time it takes to apply patches to critical vulnerabilities. | Software vulnerabilities patches should be pushed out within 90 days. |

# **Quality Roles and Responsibilities**

All team members of the ASSETRUST Software understand their roles and responsibilities and play an essential role in quality management. All work will be completed at an acceptable level to meet POL-001 Quality Policy Standard:

“ ASSETrust, LLC is committed to providing a continual improvement of the quality management system and best practices by conforming with an effective application of international standard (ISO 9001) and all applicable local and regulatory requirements. . A high standard of quality will be applied to all products and services to meet customer requirements and expectations. “

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**Project Manager (PM):** The Project Manager is responsible for the implementation of Quality Management Plan and ensuring that all work items that meet the definition of done are conforming with this plan. Maintain a healthy product backlog to ensure that high priority items are targeted and feedback by the development team and other stakeholders is being incorporated. Participate in management review meetings and conduct CAPA effectiveness checks.

**Business Lead (BL):** The Business Lead is responsible for the effective implementation of in-house trainings as applicable to the ASSETRUST Software. The BL will also maintain and oversee the quality objectives being met at the acceptable level. Additionally, they will recommend tools and methodologies to best meet the acceptable level of quality objectives.

**Solutions Lead (SL):** The Solutions Lead will oversee the technical quality of code developed. They shall also request for feedback throughout the development process and communicate with the QAL to resolve quality issues with the code.

**Architecture Lead (AL):** The Architecture Lead is responsible for ensuring that the design and releases of ASSETRUST Software are conducted to meet the expectations of ISO Standards and the Quality Management Plan.

**Quality Assurance Lead (QAL):** The Quality Assurance Lead will maintain the successful implementation of PLAN-007 Quality Assurance Plan to the ASSETRUST Software. The QAL will also oversee the successful implementation of the quality control approach of metrics that do not meet acceptable levels. They shall also follow up with corrective and preventive actions and ensure they are closed within the assigned timeframe. Any issues discovered by the QAL with the CAPAs, or areas of non-compliance will be escalated to the Project Manager.

# **Quality Planning**

ASSETrust, LLC. is committed to conforming with the requirements set forth though the International Standards: ISO 9001, ISO 27001, ISO 12207, and ISO 29119. The processes and products of ASSETRUST Software will be verified and validated according to quality standards and to comply with the Quality Control Approach and Quality Assurance sections of the Quality Management Plan.

The Quality Control section records that all team members must be given CHCK-001 Quality Control Checklist to which will provide the requirements for all processes, products, and deliverables for ASSETRUST Software. The Quality Control Checklist will also provide the outline to ensure conformance with ISO 9001, ISO 27001, ISO 12207, and ISO 29119.

Non-conformance with the quality standards will be identified by the processes in the Quality Audit section of the Quality Management Plan. Corrective Action and Prevention Reports will be generated by an internal auditor and the findings will be reported during the quarterly management review meetings to the Project Manager and Quality Assurance Lead. The Project Manager and Quality Assurance Lead are responsible for overseeing and communicating with team members to close the CAPA reports in the given time frame.

# **Quality Control Approach**

ASSETrust, LLC. is committed to providing quality control of all ASSETRUST software deliverables by verifying that metrics are within the acceptable level as stated in the quality objectives. In addition, quality control will also be maintained by quarterly quality audits by the internal auditor which will generate CAPAs and turn their audit findings to the Project Manager and Quality Assurance Lead. The team will be given CHCK-001 Quality Control Checklist to provide the guidelines that all processes, products and deliverables must meet according to quality standards. The tools and techniques that ASSETrust, LLC. will utilize to the control the quality of ASSETRUST Software is:

* Cause and Effect Diagrams to identity the root cause issues and resolve the root problem.
* Histograms to detect the frequency of density defect occurrences and ensure that the total acceptable level of defects is equal to or less than one defect per thousand lines of code.
* Pareto Charts to show the largest number of customer complaints which can be prioritized to maximize customer satisfaction and create promoters and brand ambassadors.

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| Metric | Acceptable Level | Quality Control Approach |
| Defect Reports | One defect per 1000 lines of code | Create a histogram for density defect reports to compile information at the end of the quarter. |
| Mean time to repair | The mean time to repair must be under 5 hours. | Create an incident escalation ticket to prioritize software repair. |
| Net Promotor Scores | The Net Promotor Score should be maintained at over 50 to ensure there are more customers that are promotors. | Reach out to all unsatisfied customers and create a pareto chart to identify problem areas to prioritize and improve quality. |
| Load Testing | If 2,500 users are logged into the software application, then pages should load within 3-6 seconds. | Create incident tickets whenever either real-time or test loads exceed 3-6 seconds. |
| Mean Time to Patch | Software vulnerabilities patches should be pushed out within 90 days. | When vulnerability patches are not patched, identify the severity of the vulnerability, and reprioritize all unpatched high severity vulnerabilities. |

# **Quality Assurance**

Quality Assurance will follow the company-wide PLAN-007 Quality Assurance Plan which identifies the controls set forth by ASSETrust, LLC. to ensure products and services conform to the quality requirements set forth by the quality standards and the software quality objectives.

All ASSETRUST Stakeholders will be involved in identifying, assessing, responding, monitoring, and controlling project quality. Quality is a continuously improving process as such, the development team will ask the Project Manager for feedback during the development process and the project manager shall collaborate with the development team and quality engineers to test the product backlog items. The Quality Assurance Lead, Project Manager and Solutions Lead will be mandatory participants of spring planning meetings to ensure that all tasks are testable, identify gaps and that all tasks in the sprint scope are achievable. The Project Manger shall also take into the account the input of the development team based on facts and opinions before deciding when ASSETRUST will go-live.

# **Quality Audits**

ASSETrust, LLC. maintains rigid measures to adhere to software compliance and will conduct annual company audits and quarterly audits for the ASSETRUST Software. The annual audit shall be conducted by an internal auditor which has completed the Lead Auditor training courses for the listed as listed in PROC-004 Internal Auditing. The company shall also undergo an annual third-party audit to ensure that the company is meeting the standard and legal criteria to maintain its business certifications.

The ASSETRUST Software shall be periodically audited by the IT Staff to ensure that the software is properly functioning, receives regular maintenance and shall communicate with clients to maintain proper software management. ASSETrust is the flagship software for the company and shall also undergo quarterly internal audits by the internal auditors in conjunction with the IT Team. The quarterly audits shall also include licensing audits to observe that clients are purchasing the product in accordance with the license agreement.

Audit findings must be relevant to the software and to FORM-001 Software Audits, if there are issues within the findings there will be a corrective or preventive action report according to PROC-010 CAPA Reporting Procedure. The software audit findings and results will be reviewed at the end of each quarter during the quarterly management review meetings.

# **Document Retention**

The Quality Management Plan and each revised version will be maintained for a minimum of three (3) years. All Corrective Action and Prevention Reports and audit findings will also be maintained for a minimum of three (3) years unless otherwise specified.

**Sponsor Acceptance**

Approved by the Project Sponsor:

Date:

<Project Sponsor>

<Project Sponsor Title>