

Redress project

System Integration Test Approach

**Version 2.0**

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| Project Reference Documentation | | |
| **VERSION** | **DOCUMENT** | **LOCATION** |
| 1 | Requirements Documentation | [Redress Requirements](https://providentfinancialgroup.sharepoint.com/Tech&Change/Change%20Portal/CentralProjectRepositoy/Fix%20and%20Redress/Forms/AllItems.aspx?viewid=e0b54786%2D2600%2D4b0f%2D8257%2D274362b916cd&id=%2FTech%26Change%2FChange%20Portal%2FCentralProjectRepositoy%2FFix%20and%20Redress%2FRedress%20Ph1%2FPh1%20Design%2FRequirements%20Documents) |
| 2 | Test Cases | [Test Plan](https://providentfinancialgroup.visualstudio.com/BI%20Delivery/_testPlans/execute?planId=96512&suiteId=96513) |
| 3 | Defects Location | To be logged in VSTS. Location to be confirmed |
| 4 | Test Case Review | <https://providentfinancialgroup.visualstudio.com/BI%20Delivery/_testPlans/execute?planId=96512&suiteId=96513> |
| 5 | Test Evidence Review | To be uploaded in PFG SharePoint. Location to be confirmed |

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| Glossary | |
| **Abbreviation** | **Description** |
| **TCR** | Test Completion Report |
| **UAT** | User Acceptance Testing |
| **VSTS** | Visual Studios Team System |
| **PBI** | Product Backlog Item |
| **SIT** | System Integration Testing |

# Introduction

## Sprint Background

This Test Approach covers the System Integration Testing (SIT) activities that are to be undertaken for the Redress project. System Testing will be covered by the individual teams as part of the normal Sprint activities and the approach documented within their own Test Approaches.

It was identified that due to technical issues and other incidents there were occasions where regulatory letters were not triggered correctly or details with the regulatory letters were incorrect. As a result, these issues need resolution.

This project aims to address the impact of the regulatory issues with UK HC agreements detailed as ‘In Scope’, to administer any applicable corrective documentation for all affected agreements and to make any arrears adjustment and/or cheque payment necessary.

## Document Purpose

This document sets out the testing approach and high-level plan including the recommended testing approach that will act as a framework for execution, defect management, user roles, responsibilities and the role of testing within the framework of the Redress System Integration Test phase. This document will also define the test phase schedule, deliverables, assumptions, decisions made as a result of these assumptions, risks and issues plus any associated mitigating actions.

## Audience

The intended audience is Project Management, Business Analysts, Testers, Developers, Application Support, Primary business stakeholders and any associated third parties (where applicable). Some sections of this document may on occasion be shared with other stakeholders whose input/approval into the testing process is needed.

## SIT Timelines

***Please Note:*** *The dates are correct at the time of publication of this version*

| **Phase** | **Start Date** | **End Date** | **Duration** |
| --- | --- | --- | --- |
| Redress SIT Phase | 26th February 2020 | 8th April 2020 | 31 Working Days |

## 1.5 SIT Team

| **Resource Name** | **Role** |
| --- | --- |
| Lakshmi Nair | Tester (UST) – Offshore |
| Aiswarya Raja | Tester (UST) – Offshore |

# Test Approach

## Overview – General

The objective of testing is to demonstrate that the requirements, as defined in the associated supporting documentation ***(see Project Reference Documentation)*** have been satisfied and ultimately to give confidence that the solution is fit for purpose. Test Cases will be created to reflect the scope of requirements and will be stored in VSTS, as will the associated results. Any subsequent defects will be logged in VSTS and linked to the associated test cases for traceability. In order to achieve the required timescales testing may be risk-based, i.e. scenarios and functionality will be included in testing based on the likelihood and impact of failure. Test scenarios will be prioritised based on their associated risk from a regulatory, customer and business point of view.

The overall activities in test period will be as below:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| * PBI/Requirement Analysis * Clarifications * Estimation | Analysis | * Test Approach * Test Cases design and review * Test Environment Preparation * Test case Coverage | Design & Review | * Test Execution (Integration testing) * Identify Defects * Defect Re-test * Test Evidence Review | Execution | * Deployment Logs * Test Completion Report | Closure |

Upon completion of the SIT Testing, a Test Completion Report will be created that documents the resultant scope of testing that was executed with associated reasons for any difference from the originally planned scope. Project defect metrics, a summary of risks and issues and details of any known defects carried into the next phase or production environment will also be documented at the time of test closure.

## Test Type Matrix

The following table outlines the “types” of testing that are applicable to this project.

| **Test Phase** | **Description** | **Covered (Y/N)** | **If No, Why?** |
| --- | --- | --- | --- |
| System Integration Testing | System Integration Testing associated with Redress | Y | N/A |

## SIT Test Approach

* + 1. **Test Items in scope**
* Exclusions Process
  + The scope of the exclusions process as part of this activity is that the exclusions (Fraud Exclusion Process and Insolvency Exclusion Process) are identified and removed in order that the agreements are not redressed.
* Redress Database
  + The scope of this test is that the redress calculation runs without errors and produces the outputs into the next stage of the process. A set of sample agreements will be chosen, and the process is done to ensure that the agreement is in the correct pot and should be “redressed”. The actual calculation will **not** be covered as this should be covered by unit testing. The validity of the calculation has previously been assessed and approved by Mike Dagnall.
* Focus Bulk Upload Process
  + The scope is to validate the Balance Adjustment and Cheque value produced in the output file and the Focus DB for sample agreements covering possible outcomes based on the Decision tree
* Tallyman Transaction Update
  + An interface file would be placed on the file share point. Peter Ganley would import it to the Griffin server and manage the upload to the Tallyman application.

This would be necessary, as not all the accounts would be available in the Tallyman test database. -EXPLAIN?

* + SIT Testing scope will be limited to validating the outcomes for some sample agreements with Redress Value matching the data in Tallyman table in DW DB.
* Activity API & Clip App
  + SIT Testing scope will be limited with Validating the Balance Adjustment or Cheque messages for the sample agreements taken for FOCUS Bulk Upload Validation
* Marshalling System – output to Printers
* SIT Testing scope will be limited to validating the Output file values for the sample agreements identified based on possible outcomes in the Decision tree.
* Marshalling Output file functional Validation will not be done as part of the SIT testing. As part of SIT Testing will verify whether file is getting generated, whether records are being written to the file and Record Type – DO WE REALLY WANT TO HAVE SUCH LIMITED TESTING? WHO CHECKS THAT THE CONTENT OF FILE IS CORRECT?. WILL FINANCE EFFECTIVELY DO THIS AS PART OF NEXT STEP?
* Marshalling System – output to Finance -Finance to verify the results for the sample agreements
* Verification of the proofs from the printers -(Paragon) Sarah Turner to gain approval outputs from Paragon
* Verification of the files from Paragon (cheque reconciliation) - Finance

## SIT Entry Criteria

* A Test environment must be made available and correctly configured including appropriate access for testers (UAT11 (FOCUS))
* All necessary software applications have been deployed and are in an operable state.
* LLD for SIT testing to be updated with the newly identified servers and the connectivity between them.
* Identified servers for Redress testing need to be ready with the SSIS packages/tables deployed. The connectivity between servers to be ensured for the Redress Process to be run.
* Focus SSIS package changes to be completed
* Test approach, Test Scenarios and test cases have been reviewed and signed-off by the appropriate stakeholders
* Test data is available and where applicable loaded into the test environment
  + We plan to use agreements in Test & Learn Area -WHAT IS THIS, A TEST ENVIRONMENT?. Focus Cut down for ‘Test and Learn’ need to be taken and updated in LNFS DB.
* Test scripts have been reviewed and any identified corrections made
* Internal resource requirements are met.
* All connectivity and access required for running the redress process is met and connectivity is ensured across servers.
* All Updated signed off Requirement documents should be available for the testing team

## SIT Exit Criteria

* All planned test cases have been executed
* Test evidence has been reviewed and approved
* All Severity 1 and Severity 2 defects arising from the planned testing have been resolved and retested satisfactorily
* Any Severity 3 and 4 defects outstanding have been reviewed, accepted and signed-off by the relevant stakeholders (including the project accountable exec)
* An appropriate resolution plan for closing out the remaining defects has been agreed

## In Scope – System Integration Testing

The scope of the System Integration Testing will include the following: -

Redress items in Scope

* Redress Engine
* Focus (Bulk upload)
* Tallyman (Bulk upload)
* Extract file for tallyman
* Marshalling Output Files and Finance output File
* Paragon (Checking letters PDFs)
* Exclusions (Fraud Exclusion Process and Insolvency Exclusion Process)
* Cheque Reconciliation

Based on Scope mentioned above a test scenario document will be created and will be shared to stake holders for a review and signoff on the coverage.

## Out of Scope – System Integration Testing

These following test types are out of scope for System Integration Testing:

* User Acceptance Testing
* System Testing
* MI track reporting, including requirements:
* Volume/Load/Stress/Performance testing
* Tracking Testing
* Accessibility Testing
* Security Testing

## Regression Test Approach

* There is no Regression Testing in scope due to the focus changes already in production and the marshalling code being standalone no impact downstream.

## UAT Test Approach

* UAT out of scope. UAT is covered in the Test & Learn phase.

# Test Environments

## System Test Environment

* UAT11 (UK) will be used for the testing of SIT for Redress
* A partially depersonalised data cut from live will be taken to use for the testing.
* Other servers need to be mentioned here once we finalize with test servers list.

SIT will be executed using the associated software/application versions as received from development team further to development of the PBIs. The final versions used for testing will be notified in test completion report.

# Project Roles and Responsibilities Matrix

The following matrix describes who is responsible for project activities and the resultant deliverables.

Using standard RACI notation, **R** = Responsible, **A** = Accountable, **C** = Consulted, **I** = Informed. Note that multiple roles can be Responsible, Consulted and Informed, but there must be one person Accountable for each deliverable.

| *Key*  **R**esponsible  **A**ccountable  **C**onsulted  **I**nformed | **Stakeholder** | **Business - PM** | **IT - PM** | **Delivery Manager** | **Business Analyst** | **Lead Developer** | **Development Team** | **Testing Team** | **IT Operations** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Code Deployment (with scripts) - Test* |  | I | A | I |  | R | C | R |  |
| *Code Deployment - Production* | I | C | A | A/R |  | C | C | I | R |
| *Test Forecast and Estimates* | I | A | C | A |  |  |  | R |  |
| *Test Approach* | I | C | A | A | C | C | I | R | C |
| *Test Preparation and Scripting* |  | I | I | C | C | C | C | A |  |
| *Test Execution* |  |  |  | C |  |  |  | A/R |  |
| *Test Status Reports* | I | I | I | A | I | I | I | A/R | I |
| *Test Closure Report* | I | C | A | A | I | I | I | R | I |
| *Test Environment Support* |  | I | C | I |  | R | C | A/R | C |
| *Defect Management* | C | C | A | C | C | R | C | R |  |
| *Defect Triage* | C | C | A | C | C | C | C | R | C |

# Deliverables

Table below itemises the Test Deliverables that will be produced based on this Test Approach

Document:

| **Deliverable** | **To be Completed By** |
| --- | --- |
| Test Approach Document | UST Team |
| Test Cases | UST Team |
| Test Results | UST Team |
| Test Completion Report | UST Team |
| Test Environment Deployment log | UST Team |
| Test Execution Results | UST Team |

# Defect & Status Reporting

## Defect Reporting

Defects will be tracked using VSTS. Please note only members of the IT team will have the necessary permissions to view or edit data contained within.

## Status Reporting

Test progress will be tracked for Redress SIT with daily stand ups being held that will focus on a review of progress of the previous day, and a plan for testing (including any deployments) for the current day.

Project status would be sent on a weekly basis via email and Test execution status would be sent on a daily basis after the start of test execution.

# RAID

## Risks

The following table captures key risks associated with testing activities at the time of preparing the test approach document

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Type** | **Description** | **Impact** | **Likelihood** | **Risk Profile** | **Comment** |
| 1 | Risk | Unavailability of all dependent areas for Redress calculations could impact coverage and schedule | H | H | H | Test schedule could be impacted if all the dependent areas (BI, activity API) related to Redress calculation is not available during System Testing Phase |
| 2 | Risk | Integration of the environments and individual components are being done for the first time | H | H | H | Any issues in this integration may impact testing timescales |
| 3 | Risk | Connectivity issues after starting the execution may extend the timelines | H | L | H | Any connectivity issues in this integration may impact testing timescales |
| 4 | Risk | If feature testing specific defects identified for any of the Redress process may impact the timelines | H | M | H | Greater number of defects if identified may impact testing timescales |
| 5 | Risk | Requirement changes in between the test execution may impact timelines | H | L | H | Requirement changes in between the test execution may impact testing timescales |
| 6 | Risk | Availability of Test data | H | M | H | Unavailability will delay the test execution start date |
| 7 | Risk | Some test data need to be edited manually to get the desired outcome. | M | M | L | If test data cannot be edited those scenarios will be made as not applicable. |
| 8 | Risk | Any deployment configuration specific issues identified during testing may require additional time from the estimate | H | M | H | Any deployment configuration specific issues identified during testing may impact testing timescales |

## Assumptions

The following table captures the assumptions made with the testing activities at the time of preparing the test approach document

| **#** | **Assumptions** |
| --- | --- |
| 1 | Requirement lock down is completed prior to testing phase |
| 2 | Requirement document is published prior to test design phase |
| 3 | LLD for SIT testing to updated with the newly identified servers and the connectivity between them prior to test execution start. |
| 4 | Identified servers for Redress testing need to be ready with the SSIS packages/tables deployed. |

## Issues

The following table captures the issues identified at the time of preparing the test approach document

| **#** | **Issues** |
| --- | --- |
|  |  |

## Dependencies

The following table captures the dependencies at the time of preparing the test approach document

| **#** | **Dependencies** |
| --- | --- |
| 1 | Test Environment to be available with latest cut down and smoke testing completed. |
| 2 | Development of BI changes and activity API changes to be completed prior to system testing phase for redress calculations. |
| 3 | Development of non-focus components (mobile) to be completed prior to system testing phase for Redress calculations. |
| 4 | The connectivity between identified servers to be ensured for the Redress Process to be run. |
| 5 | Focus SSIS package changes to be completed prior to test execution start |
| 6 | Focus Cut down for ‘Test and Learn’ need to be taken and updated in LNFS DB. |
| 7 | Identification of Batches from the business |