**SIGMA-INVPLUS**

**Automation Test Strategy**

Systems Plus Solutions

## 

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## Document Control

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| Author: | Vinayak B Jadhav |
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**Change Control**

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| 30th Nov 2017 | 1.00 | Automation Test Strategy document | Vinayak |
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## Scope and Objective

The Automation Test Strategy document describes approach towards Business Process testing SIGMA INVPLUS Web Application on URL http://172.31.0.33/invPlusQET/, Develop BPT Automation scripts for approved scenarios and perform Automation execution

**Scope of Project**

* Automation test script development for approved BPT (Smoke) cases with Regression suite
* Execution of BPT cases, Regression suite through Automation testing.

**Out of Scope**

* Stocking IOF screen and its functionality
* GUI testing & Unit level of testing (field level requirement)
* Manual Testing
* Compatibility Testing using Automation test script of Selenium web driver
* Responsive Testing & Mobile application testing is not in Scope
* Authentication with Active directory is not in scope
* Verifying SSRS reports through automation scripts (not feasible)

**Agreed Test type**

* Module level Testing
* Integration Testing
* Business Process Testing
* Smoke testing Automation test script of Selenium web driver : On Code freeze environment

QET will develop and execute Automation scenarios for BPT testing on selenium framework & submit/deliver Inventory plus Automation suit to Dev team. This suite can be execute after any change, release on current build to ensure smoke, regression and BPT Cases

## Test Environment

* OS: System plus Environment
* Base Web Browser: IE 8

## Automation Test Scenarios

|  |  |
| --- | --- |
| **STAGE** | **Automation Test Scenarios** |
| 1 | Create Customer |
| 2 | Create supplier |
| 3 | Create Item Type Master |
| 4 | Create Item Master (service and Material) |
| 5 | Create Item Group Master |
| 6 | Add Branch A & Branch B with stores |
| 7 | Open Stock Transfer > Stock Adjustment for adding item |
| 8 | Screen level validation of Internal Order |
| 9 | Screen level validation of Replacement (IOF) |
| 10 | Screen level validation of Sales Order |
| 11 | Screen level validation of Purchase Order |
| 12 | Screen level validation of Payment entry |
| 13 | Screen level validation of Closing Screen |
| 14 | Screen level validation of Credit Note |
| 15 | Screen level validation of Debit Note |
| 16 | Screen level validation of Stand By Given (IOF) |
| 17 | Screen level validation of Stand By Taken (IOF) |
| 18 | Screen level validation of Stock Dealloctaion |
| 19 | Screen level validation of Stock Adjustment |
| 20 | Screen level validation of InterBranch Stock Transfer |
| 21 | Screen level validation of Dispatch Note |
| 22 | Screen level validation of Delivery Challan |
| 23 | Screen level validation of Invoice Entry |
| 24 | Screen level validation of Non-Chargeable Invoice Entry |
| 25 | Screen level validation of InterBranch Invoice Entry |
| 26 | Screen level validation of GRN Against PO |
| 27 | Screen level validation of GRN Against Verbal |
| 28 | Screen level validation of GRN Against Goods Return |
| 29 | Screen level validation of GRN Against InterBranch Transfer |
| 30 | Screen level validation of GRN Against Stand By Received |
| 31 | Screen level validation of GRN Against Stand By Return |
| 32 | Screen level validation of GRN Against Goods Replacement |
|  |  |
|  | **InterBranch Stock Transfer : (Material and Service) , Chargeable and Non Chargeable** |
| 33 | Perform IBT : IOF Interbranch - > DN Interbranch - > DC Interbranch - > GRN Interbranch |
|  |  |
|  | **Regular Flow : IOF/SOF (Material and Service) Item 20 (chargeable and Non chargeable) > Replacement 2 > Return 2 > Reject 2** |
| 34 | A > Perform Regular flow : IOF -> SOF -> PO - > GRN (PO) -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > Credit Note -> IOF -> SOF -> DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 35 | A> Perform Regular flow : IOF -> PO - > GRN (PO) -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > Credit Note -> IOF -> PO - > GRN (PO) -> DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 36 | A > Perform Regular flow : IOF -> GRN (Verbal) -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > Credit Note -> IOF -> GRN (Verbal) -> DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 37 | A > Perform Regular flow : IOF -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > Credit Note -> IOF -> DN - > DC -> Invoice -> Payment -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 38 | A > Perform Regular flow : SOF ->DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > Credit Note -> SOF ->DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 39 | A > Perform Regular flow : SOF -> PO - > GRN (PO) -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > SOF -> PO - > GRN (PO) -> DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
| 40 | A> Perform Regular flow : SOF -> GRN (Verbal) -> DN - > DC -> Invoice -> Payment |
| B > Perform Replacement flow : IOF Replacement -> DN Replacement - > GRN Against Goods Replacement (reg DN + Rep DN) |
| C > Perform Regular Return flow : After DC of Flow A -> GRN Goods Return (against DC of "A" flow) [Credit Note Yes] |
| D > Perform Regular Credit Note flow : After GRN of Flow C - > SOF -> GRN (Verbal) -> DN - > DC -> Invoice -> Payment against Credit Note |
| E > Perform Regular Reject flow : After GRN of Flow A - > DN Reject (against GRN[verbal, PO, Return] of Flow A ) > DC (reject) |
|  |  |
|  | **Stand By Given ( Material, Service, Chargeable and Non chargeable)** |
| 41 | Perform Stand By Given : IOF (Stand By Given) - > DN (Stand By Given) - > DC (Stand By Given) -> GRN against Stand By return |
|  | **Stand By Received ( Material, Service, Chargeable and Non chargeable)** |
| 42 | Perform Stand By Received : PO (stand By taken) - > GRN (Stand By received) - > DN (Stand By return to) - > DC (Stand By return to) |
|  | **Closing Screen** |
| 43 | Perform Closing Screen functionality |
|  | **Stock Deallocation and Free Stock** |
| 44 | Perform Stock Deallocation functionality |
|  | **Copy IOF, Rep IOF, SOF** |
| 45 | Perform Stock Deallocation functionality |
|  | **Cancel Scenarios** |
| 46 | Perform Cancel for all transaction and validate its impact |

## Testing measurements and metrics

|  |  |  |
| --- | --- | --- |
| **Measurement** | **Required**  **Yes/No** | **Remarks** |
| Number of test iterations planned | Yes | * Round 1 : Automation script development & execution of BPT cases * If issue found: Round 2: Retest, Regression Testing. |
| Number of scenarios per system process/modules | Yes | Defined by the QET team |
| Number of other application systems in the systems integration test | No |  |
| Required online response time for critical modules | No |  |
| Number of end users required for the stress test | No |  |
| Batch nightly window response time | No |  |

## Test Team

|  |  |
| --- | --- |
| Name | Role |
| Vinayak Jadhav | QET : Verification & validation Tester |
| Prasad Kadam | QET : Verification & validation Tester |
| Narendra Nikam | QET : Verification & validation Tester |

## Test Deliverables

|  |  |  |
| --- | --- | --- |
| **Deliverables type** | **Required**  **Yes/No** | **Remarks** |
| Testing Strategy | Yes | QET |
| System Process Test Model | No |  |
| System Test Plan | Yes | Test strategy |
| System Test Environment | No |  |
| System Test Results | Yes | HTML Reports of Automation execution |
| Systems Integration Test Cases | Yes | Automation Excel file |
| Systems Integration Test Results | Yes | Automation reports |
| Service Desk Set up | No | Already had |
| Excel File Reference | No |  |

## Risks and mitigation

* Identified testing risks and their associated contingency plans include the following:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ID | Risk Statement | Probability | Impact | Mitigation |
| 1 | Availability of Additional machine for automation execution | High | Critical |  |
|  |  |  |  |  |

## Communication and status reporting

|  |  |  |
| --- | --- | --- |
|  | **Required**  **Yes/No** | **Remarks** |
| Service Desk | No |  |
| Weekly (WRF) Update | Yes |  |
| Monthly Update | No |  |
| Email | Yes |  |
| QA Approval email | Yes |  |

## Constraints: NA