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Space Administration

**NASA Shared Services Center**  
Stennis Space Center, MS  
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## **NASA Shared Services Center Work Instruction**

**NSPWI-2800-0022      Basic Version 1.0**

**Effective Date:                  June 9, 2014**  
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# **Developmental Test Lab (DTL) and End User Testing Procedures**

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**Responsible Office: NSSC Office of the Chief Information Officer**

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**Approved by**



James A. Walker  
NSSC Chief Information Officer (Acting)

9 JUNE 14

Date

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## 1 INTRODUCTION

### 1.1 Purpose

The purpose of this work instruction is to provide standardize procedures and guidance to NASA Shared Services Center (NSSC) personnel for:

- Using the Developmental Test Lab (DTL),
- End user testing information system configuration changes, and
- Managing IT waiver requests.

### 1.2 Objectives

The primary objectives of this work instruction are to:

- Relieve operations disruptions caused by undetected problems with system upgrades and replacements,
- Streamline the NSSC IT waiver process,
- Provide defensible justification for changing the standard computer configuration (NASA-STD-2804 and 2805) and/or functional software applications, and
- Document system testing lessons-learned for future reference.

### 1.3 Applicability

This work instruction is relevant to all employees assigned to the NSSC, including both NASA employees and NSSC contractors. The term "information system" refers to all applications used by NSSC personnel including, but not limited to, functional applications and supporting infrastructure, interfaces and web services, and desktop, laptop, and mobile device applications.

### 1.4 Applicable Documents

All references are assumed to be the latest version unless otherwise specified.

- NITR-2800-1, *NASA Information Technology Waiver Requirements and Procedures*
- NSWI-2810-0001, *NSSC IT Security Policies*
- NASA-STD-2804, *Minimum Interoperability Software Suite*
- NASA-STD-2805, *Minimum Hardware Configurations*

### 1.5 Duration

This work instruction will be in effect one year; it will be reviewed annually and updated as necessary to ensure changes to process and/or function are implemented or until the requirements establishing its need are cancelled or amended.

### 1.6 Testing Records

This work instruction and testing records shall be maintained in accordance with NPR 1441.1 "NASA Records Retention Schedules", NSSCPR 1440.1 "Records Management Program", and this work instruction, as amended. These work instruction requirements are relevant to the following types of documentation to be captured, housed and

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maintained in the NSSC Technical Documentation Systems, hereinafter referred to as the NSSC Electronic Library (NEL):

- Source document regarding system change
- Test plans
- Test environment configuration
- Test results
- Test analyses

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## 2 INFORMATION SYSTEM CHANGE NOTIFICATIONS

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To prevent operations disruptions caused by information system hardware and software configuration changes, the following actions will prompt information system change notifications to be sent to the appropriate stakeholders. The system stakeholders will determine if testing is necessary and will consider recommendations made by the notification sender. The respective IT and functional leads will work together to prepare, execute and document end user testing.

Reference Figure 2-1 Testing Process Part 1 and Figure 2-2 Testing Process Part 2 the process steps correlate to the sections in this work instruction.

### 2.1 Enterprise IT Projects and Network Architecture Changes

The CS project manager and/or NICS representative will send change notifications to the NSSC-DL-IT-Division (<mailto:nssc-dl-it-division@mail.nasa.gov?subject=IT System Change Notification>) for all actual or pending enterprise level IT projects or network architecture changes. Notifications shall include as a minimum: change description, anticipated or scheduled date, possible impacts to operations, and point of contact information. All IT Leads will monitor the distribution list, read the change notifications and evaluate the impacts to his/her represented functional department.

Examples of this category are ESD Enhancements, Database Consolidation, Network Diversity, domain and enterprise level Group Policy Objects (GPO) changes.

### 2.2 Desktop Application Upgrades and Patches

The ACES and/or NSSC Desktop Support representative will send change notifications to the NSSC-DL-IT-Division (<mailto:nssc-dl-it-division@mail.nasa.gov?subject=IT System Change Notification>) for all actual or pending desktop level changes. Notifications shall include as a minimum: change description, anticipated or scheduled date, possible impacts to operations, and point of contact information. All IT Leads will monitor the distribution list, read the change notifications and evaluate the impacts to his/her represented functional department.

This category includes desktop application enhancements and security patches (especially Java), operating system upgrades (i.e., Windows 7 to Windows 8), Internet Explorer or other browsers, "gold disk" changes, hardware refreshes, and desktop and user level GPO changes.

### 2.3 Functional Application Upgrades and Replacements

The respective SP IT development leads, functional department users and leads (FM, HR, B&A, PR) and IT Leads are responsible for communicating pending functional application upgrades and replacements to one another as applicable. SP IT



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development leads may not be involved if the functional application was not developed or supported with internal IT developers. Once informed of pending changes, the IT Lead and functional lead will evaluate the impacts to his/her represented functional department.

Examples of this category are NAAS, TPRT, TechDoc, and NBID.

## **2.4 Re-Tests**

Previous test results should be readily available for participants involved in re-testing to reference. Use case steps that failed in previous tests should be thoroughly re-tested. Append the re-test results to the original test results to build a history of testing efforts.

### **2.4.1 Functional Application Test Failures and Incomplete Tests**

When test failure or incompleteness drives the need for a re-test, the IT and functional leads should monitor when the necessary changes (application, test environment configuration, test plan, etc.) are complete. The IT Lead and Functional Lead will schedule the application re-test, update the test plans, and notify participants accordingly.

### **2.4.2 Expiring Waivers**

When an expiring waiver drives a re-test, the IT Security Manager will notify the functional user and his/her functional lead via e-mail. The IT Lead and Functional Lead will determine if it is feasible to re-test the application or request an extension to the waiver expiration date.

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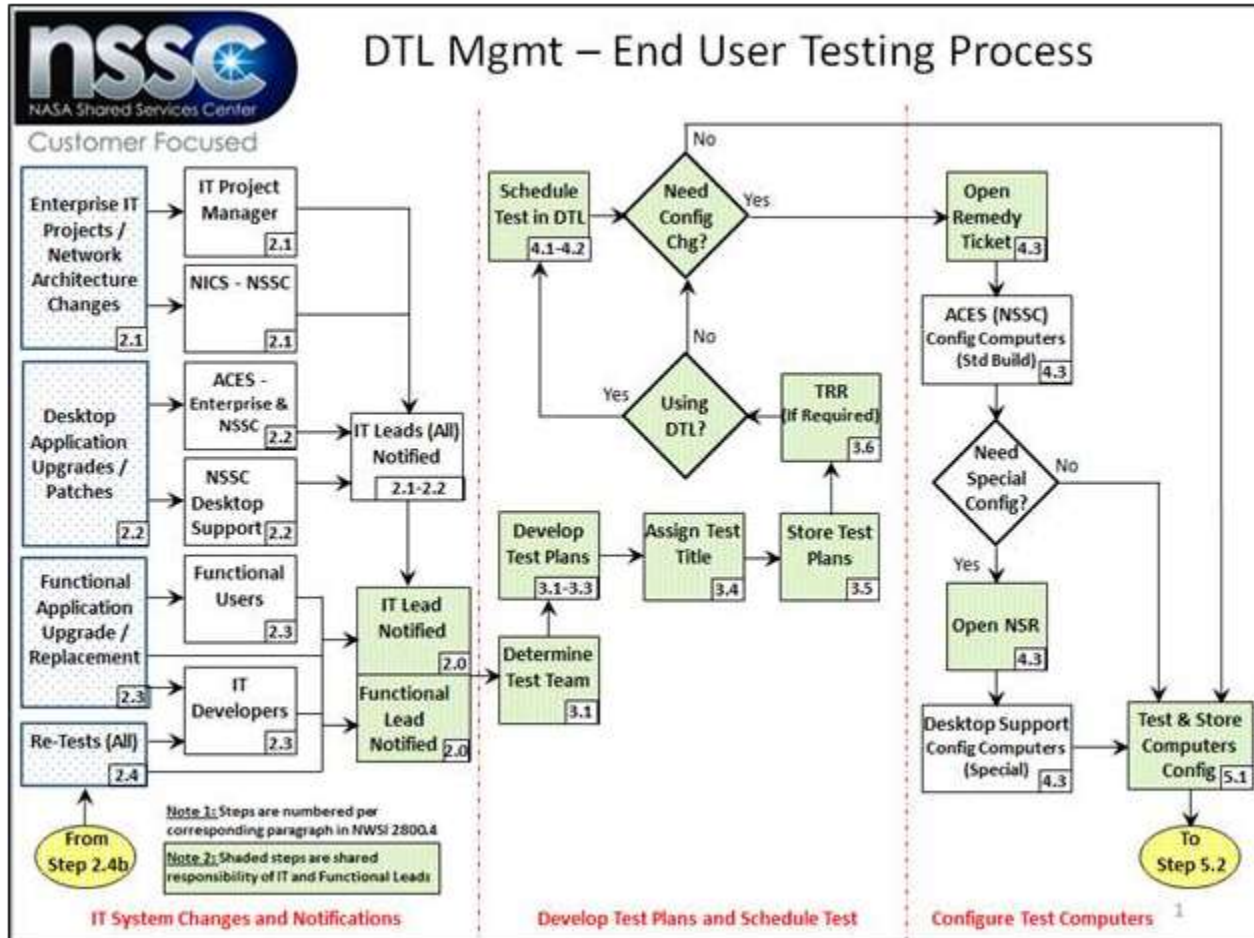


Figure 2-1 Testing Process Part 1

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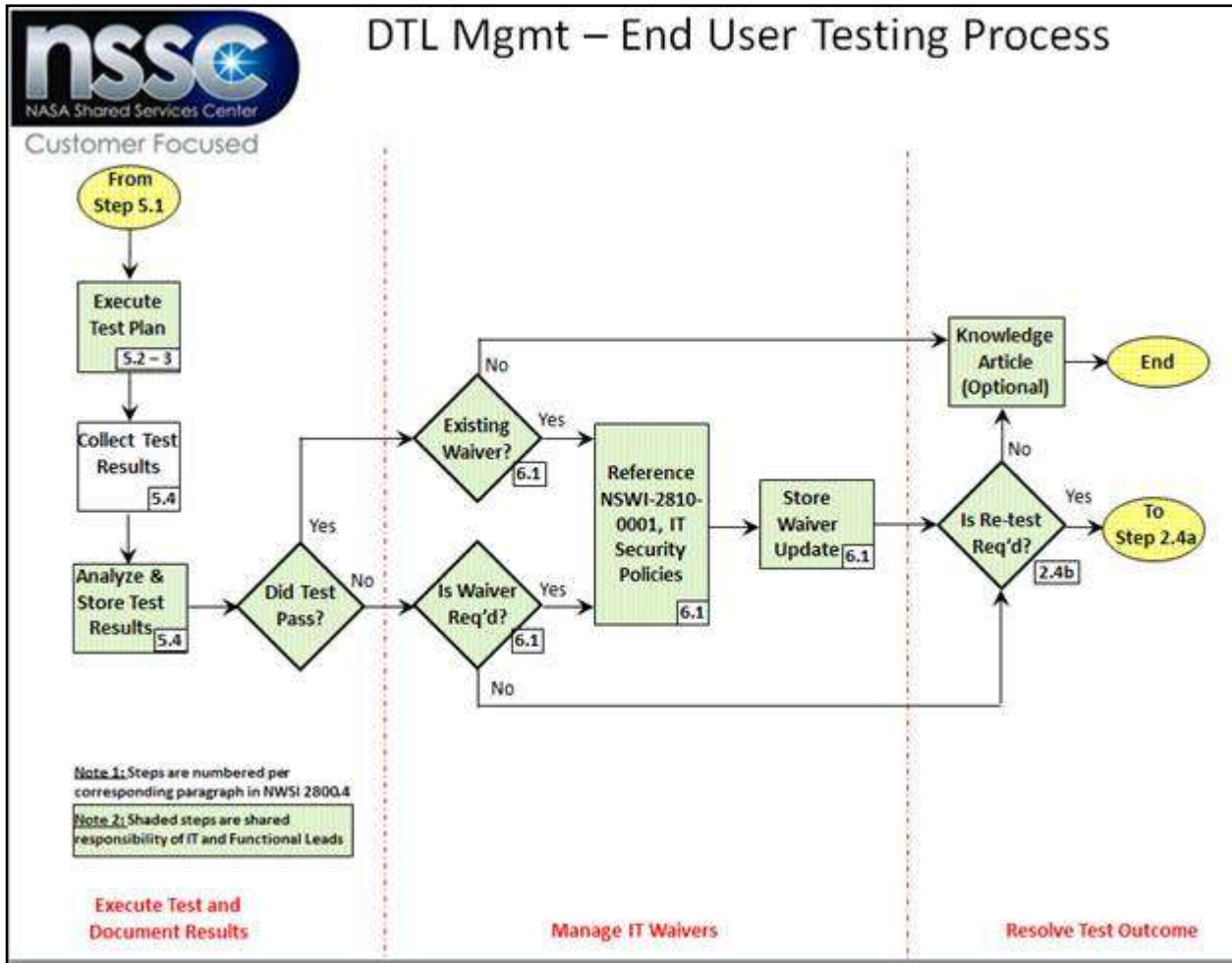


Figure 2-2 Testing Process Part 2

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### 3 DEVELOPING TEST PLANS

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Once it is determined that end user testing needs to occur, the IT and Functional Leads will build a comprehensive test plan designed for the particular information system. Test plans will have standardized titles and be stored in a NEL folder shared at the Agency level. To outline your test plan, a worksheet is available in Appendix A - End User Test Worksheet. An example test plan is available in Appendix B - Test Plan Example.

Test planning roles and responsibilities may be shared as needed, however, Functional Leads are primarily responsible for determining the appropriate test team and building uses cases and IT Leads are primarily responsible for specifying the testing environment, assigning a test title and creating the NEL folder.

#### 3.1 Identify Functional Testers and Roles

The Functional Lead will identify the application's functional users needed for testing in the test plan. Functional testers should be:

- current, experienced users of the application being tested,
- aware of the events or changes driving the need for testing,
- partners in building use cases,
- available to test during the projected test schedule.

If the application being tested has multiple user roles (e.g., Requestor, Sponsor, Approver), identify and describe each role in the test plan.

#### 3.2 Build Testing Use Cases

Use cases describe how the information system is supposed to react when the specified user role(s) performs an action, or "uses" the application. For new or modernized functional applications, the documented system requirements should form the foundation of use cases developed for the final test cases. For NSSC applications that do not have documented requirements available, use cases should be developed to cover all necessary uses of the application.

##### 3.2.1 Use Case Matrix

A Use Case Matrix is designed to show the relationship between an application's requirements, use cases, functional testers and user roles. For new or modernized functional applications, each documented requirement should map to one or more use cases; the use case should reflect the requirement number. For NSSC applications that do not have documented requirements available, number the use cases for traceability during and after the test.

Functional testers should be assigned a user role (if applicable) and test one or more use cases. Develop a matrix, as shown in Figure 3-1 Use Case Matrix, and include the matrix in the test plans.

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Requirement Number	Use Case Title	Functional Testers								
		Tester 1 Name (Role)	Tester 2 Name (Role)	Tester 3 Name (Role)	Tester 4 Name (Role)	Tester 5 Name (Role)	Tester 6 Name (Role)	Tester 7 Name (Role)	Tester 8 Name (Role)	Tester 9 Name (Role)
CDR2_001	Customer calls the ESD to report an error condition in a NASA leased multi-function device	X			X					X
CDR2_003	Allow user to obtain self-help via Tier Zero		X	X						X
CDR2_004	Allow users to status their incidents at Tier Zero		X	X						X
CDR2_006	Find current availability of an ISP System					X	X	X		
CDR2_014	Access Tier Zero to show where to place order and order status		X	X						X
	Apply for access via NAMS					X	X	X		
	Provide for dissemination of informational notifications to ISP customer community					X	X	X		
CDR2_018	Seek first call resolution for application error from the ESD	X			X					X
CDR2_019	Seek first call resolution with domain password reset	X			X					X
	Customer Calls ESD to create Incident Ticket	X			X					X
CDR2_023	Seek first call resolution with recover of you user ID	X			X					X
CDR2_028	Customer Emails ESD with an Incident, ESD Resolves and Closes Incident	X			X					X
	Consult Tier zero self-help for answers to FAQ's about ISP services. (1.2.3.9.1)		X	X						X
CDR2_032	User Calls with Hardware Printer Error - Assign Incident to Proper ISP - CI	X			X					X
	ESRS (SDR) - Publish a New Service					X	X	X		
	Use Case ESRS (SDR) - Modify a Service					X	X	X		
	ESRS (SDR) - Deactivate a Service					X	X	X		
	Provide Self-Service via Tier Zero for ESRS Customer		X	X						X
CDR2_037	Provide Assist via Tier One for ESRS Customer					X	X	X		

**Figure 3-1 Use Case Matrix**

### 3.2.2 Identify Test Case Steps and Success Criteria

Each use case should be broken down into detailed steps that specify the tester(s) actions for his/her assigned role. Each step should be uniquely numbered using a scheme that reflects the use case number. Each step should have “success criteria” identified to communicate expected results; during the test, the success criteria will be used to determine if the step passed or failed. Refer to Figure 3-2 Test Case Steps and Success Criteria.

The test plan should contain all the uses cases, including steps / actions and success criteria, identified in the use case matrix.

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Test Number and Title: XXXXXXXX - ESD Testing				
Test Performed By:	Tester 1 Name, Tester 4 Name, Tester 8 Name	Requirements References: 1.2.1.2, 1.2.3.5.3, 2.2.1.1.4		Test Date:
Use Case CDR2_001		Use Case: Customer calls the ESD to report an error condition in a NASA leased multi-function device (MFD)		
Step Number	Action	Success Criteria	Pass / Fail (Severity)	Comments
CDR2_001A	Call the ESD at 1-877-NSSC123 (1-877-677-2123)	Receive ESD greeting and voice menu		
CDR2_001B	Select option 2: IT Services	Hear IT Services Menu		
CDR2_001C	Select option 2: ACES Desktop Issues	Hear ACES Desktop Menu		
CDR2_001D	NSSC ESD IT Support Agent answers phone and verifies contact information / entitlement	Contact info is available for support agent to validate and correct or updated as needed		
CDR2_001E	NSSC ESD IT Support Agent opens trouble ticket and requests incident details	Report error condition exists on NASA leased MFD		
CDR2_001F	NSSC ESD IT Support Agent refers you the Xerox 800 number	Receive ticket number and terminate the call.		
<b>Test Failure Levels</b>				
<b>Severity 1 - (Very High)</b> A problem which cannot be circumvented, i.e. there is no work-around available. Testing cannot continue until the defect has been resolved.				
<b>Severity 2 - (High)</b> A problem requiring a change to be made by a specific date. Change must be made by the specific date; otherwise the problem would materially affect testing causing an immediate and substantial impact.				
<b>Severity 3 - (Medium)</b> A problem requiring a change to be made change by a requested date. If the change is not implemented by the requested date, the problems caused would not be materially damaging but would cause a serious impact.				
<b>Severity 4 - (Low)</b> A problem which may require that a change be made but a work-around is available or the fix is a nice to have. It is not critical to the operation of the application and a date for correction will be negotiated.				

Figure 3-2 Test Case Steps and Success Criteria

### 3.3 Specify the End User Testing Environment

The IT Lead and Functional Lead should consider enterprise, domain, desktop, mobile, and cloud computing levels when specifying the test environment configuration. Most tests will not need special configurations for all computing levels, but each aspect should be addressed in the test plan. Refer to

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## Appendix C - Test Environment Configuration Checklist

### 3.4 Test Title and NEL Folder

The IT Lead will assign a test title and create the testing documents the NEL folder per the following naming convention:

YYYY-MM-DD-System\_Acronym-V-Version\_Number-EndUserTest

where,

**YYYY** is the current year in 4 digits (2013, 2014)

**MM** is the current month in 2 digits (01, 02,...12)

**DD** is the current day in 2 digits (01, 02,...31)

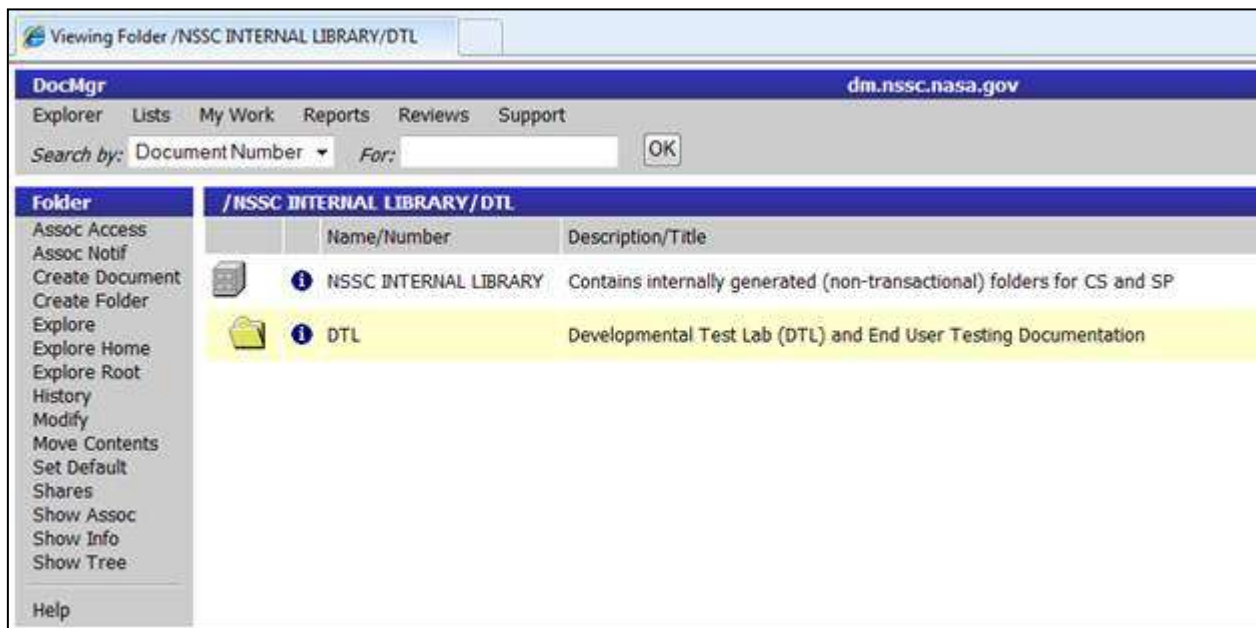
**System\_Acronym** is the characters normally used for the system (HRMES, IE, etc)

**V** is the static letter 'V'; **Version\_Number** is the version number of the tested system

**EndUserTest** is the static words 'EndUserTest'

For example, a test plans folder created on June 15, 2014 for Windows version 8 would be named: 2014-06-15-Windows-V-8.0-EndUserTest

The IT Lead will create a new sub-folder reflecting the assigned test title in the NEL under folder: /NSSC Internal Library/DTL. Reference Figure 3-3 Storing Testing Documentation in the NEL Figure 3-3 Storing Testing Documentation in .



**Figure 3-3 Storing Testing Documentation in the NEL**

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### 3.5 Storing Testing Documents

The IT and/or Functional Lead will store all related testing records (reference section 1.6 Testing Records) and supporting documentation in the applicable NEL folder and include the minimum metadata specified in Appendix E - Test Records MetaData.

Once the test plans are complete and stored in the NEL folder, the test may be scheduled unless the system change is a project requiring a test readiness review.

### 3.6 Test Readiness Review (TRR)

When required, the Functional and/or IT Lead for the test project should schedule the TRR per NSWI 2800.8, *IT Project Management*. Once the test plans are approved, the test may be scheduled on the shared DTL calendar.

### 3.7 NSSC Application Development Exemption

Tests performed in conjunction with applications being developed or enhanced by NSSC IT developers are exempt from the test title and NEL folder naming conventions, and storage location specifications in this work instruction. Application development testing documents will be stored in the NEL with the related NSSC application's project documentation.



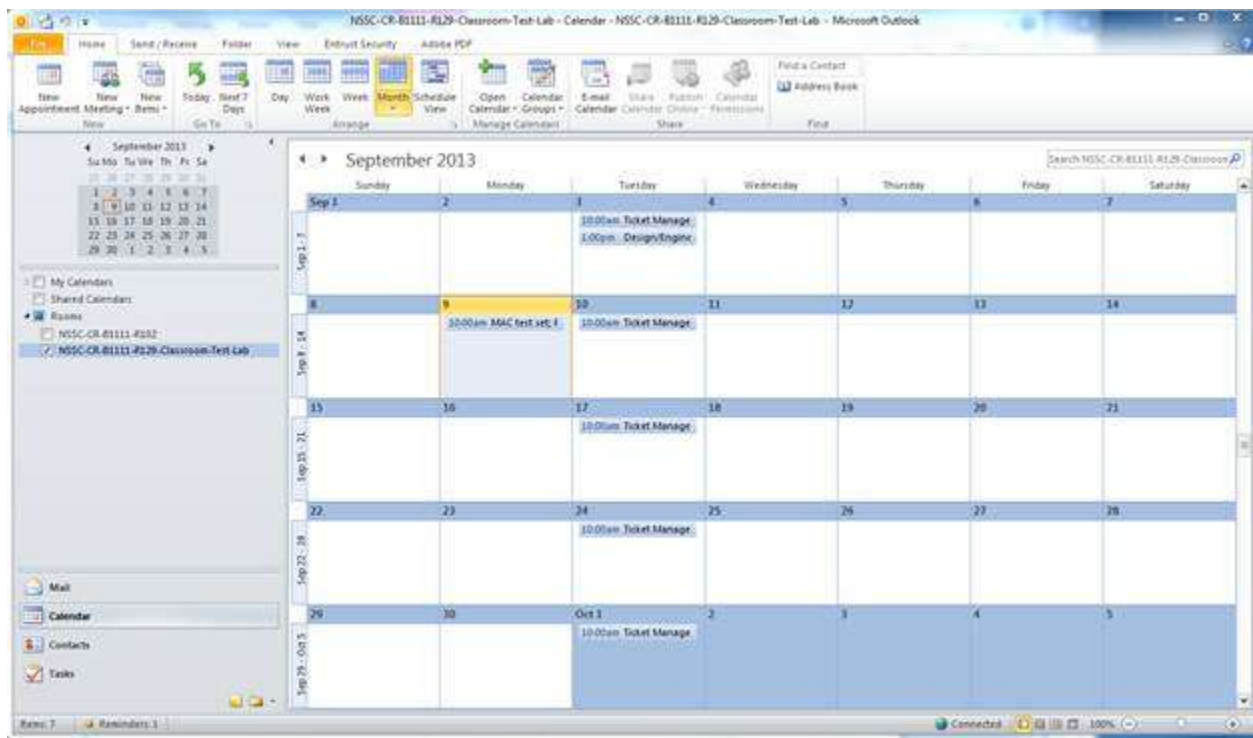
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## 4 TEST SCHEDULING AND CONFIGURATION

Once the test plans are built and approved, the test will need to be scheduled and the testing environment configured. In conjunction with the Functional Lead and testers, the IT Lead will schedule the test and submit a request for configuring the test environment.

### 4.1 NSSC Shared DTL Calendar

If testing is to be performed in the DTL, the shared calendar 'NSSC-CR-B1111-R129-Classroom-Test-Lab' will be used to schedule the test dates and send notifications to test participants. See Figure 4-1 DTL Shared Calendar.



**Figure 4-1 DTL Shared Calendar**

### 4.2 Test Scheduling

The IT Lead will use the DTL shared calendar to create a 'New Meeting' on the desired test date and time period, invite the functional lead and testers and other stakeholders as appropriate, and include a link to the test plans. Reference Figure 4-2 Test Participation Invitation. If the DTL is already scheduled for other testing or training during the desired timeframe, the IT Leads will coordinate with each other to share DTL resources.

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If testing is not being performed in the DTL, the IT Lead or the Functional Lead will schedule the test on his/her calendar. A link to the test plans in The NEL should be included in all test participation invitations.



**Figure 4-2 Test Participation Invitation**

### 4.3 Requesting Test Environment Configuration

Once the test is scheduled, the IT Lead will submit an ESRS request for ACES to configure the test environment (whether the testing lab is used or not) per the configuration checklist, NASA-STD-2804, *Minimum Interoperability Software Suite* and NASA-STD-2805, *Minimum Hardware Configurations*. The most current version of these standards should be downloaded from the NASA Emerging Technology and Desktop Standards (ETADS) web site (<https://etads.nasa.gov/current/2804.pdf> and <https://etads.nasa.gov/current/2805.pdf>) and used to fill out the Test Environment Configuration Checklist. Reference

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Appendix C - Test Environment Configuration Checklist.

If a special or non-standard test environment is required, the IT Lead will submit a NSR requesting NSSC Desktop Support for loading and/or configuring software not listed in NASA-STD-2804.

The test environment specifications will be attached to the configuration requests for ACES and NSSC Desktop Support. The requests will also include a link to the NEL folder containing the test plans, scheduled test dates and list of local and remote testers.

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## 5 TESTING AND COLLECTING RESULTS

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Prior to starting the tests, review Appendix D - Testing Checklist to ensure all the appropriate test readiness actions are taken.

### 5.1 Test Environment Configuration Testing

Confirm the test environment configuration is complete prior to starting the tests. Check that the enterprise, domain, desktop, mobile, and/or cloud computing configurations are as specified per the testing environment configuration checklist. Document and store the actual test environment configuration(s) in the NEL folder with the test plans.

### 5.2 Executing the Test Plan

Review the test uses cases and roles with the designated testing team. Reference Section 3.2 Build Testing Use Cases. Ensure that each member understands which use cases to test and how to document successes and rate test failure levels.

### 5.3 Test Failure Levels

The following failure levels should be used to standardize and quantify test results.

#### 5.3.1 Severity 1 – (Very High)

A problem which cannot be circumvented, i.e. there is no work-around available. Testing cannot continue until the defect has been resolved.

#### 5.3.2 Severity 2 – (High)

A problem requiring a change to be made by a specific date. Change must be made by the specific date or the problem would materially affect testing causing an immediate and substantial impact.

#### 5.3.3 Severity 3 – (Medium)

A problem requiring a change to be made by a requested date. If the change is not implemented by the requested date, the problems caused would not be materially damaging but would cause a serious impact.

#### 5.3.4 Severity 4 – (Low)

A problem which may require that a change be made but a work-around is available or the fix is a nice to have. It is not critical to the operation of the application and a date for correction will be negotiated.

### 5.4 Collecting and Analyzing Test Results

The Functional Lead will collect results from the testers and store the unmodified, original responses in a sub-folder named 'Original Test Results' under the NEL folder containing the test plans. Raw test results should not be removed or changed.

Copies of the test results should be consolidated for analysis and supporting a 'Go/No Go' decision to proceed with the system change being tested. The composite results, analysis summary, and final decision or recommendations should be stored in the NEL folder with the test plans.

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## 6 IT WAIVERS

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### 6.1 Managing Waivers

Waivers to the standard desktop configuration should be avoided where possible due to the added expense of customized desktop support. If an IT waiver is needed or if the system you are testing already has a related waiver and no longer needs it, refer to NSWI-2810-0001, *NSSC IT Security Policies*. New, extended, denied and cancelled waivers and decisions to re-test will be documented in the NEL folder with the related test plans and results.

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**APPENDIX A - END USER TEST WORKSHEET**



*Title of Test*  
**End User Test Worksheet**  
*Test Date and Time: Test Date(s) and Time(s)*

<b>Test Description:</b> <i>High level description of test being performed (Functional or Desktop application upgrade, network architecture mod, security patch, etc)</i>			
<b>List the general test objectives and expected results (add more lines if needed)</b>			
Objective 1:			
Expected Result for Objective 1:			
Objective 2:			
Expected Result for Objective 2:			
Objective 3:			
Expected Result for Objective 3:			
<b>Describe dependent applications and testing environment</b>			
Is special client or server software required? Will the test lab be used?			
Is a special account / permissions / token needed for access to test environment?			
Is a special configuration needed at the enterprise, domain, desktop, mobile, and/or cloud computing levels?			
<b>Describe the general test plan and process</b>			
Are all testers local to NSSC? Will all testers have the same role? Will all testers use the same device?			
Will testers work individually or in teams? Will testers complete all the use case steps or will it be divided up?			
What is the scope of testing (recent changes only, entire product or system, multiple applications, etc)?			
<b>Identify Test Participants – include functional lead &amp; testers, IT lead, others</b>			
<b>Name</b>	<b>Testing Location(s)</b>	<b>Contact Number</b>	<b>Role</b>
<b>Describe expected post-test actions (ie., request / cancel waiver, Go/No Go decision, etc)</b>			



End User Test Worksheet.doc

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**APPENDIX B - TEST PLAN EXAMPLE**

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Sample Test Plan  
(Enterprise).pdf

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## APPENDIX C - TEST ENVIRONMENT CONFIGURATION CHECKLIST



Test Configuration  
Checklist

Device	Required Hardware Configuration	Qty	Asset Number(s)	Location	Comments
<i>Reference NASA-STD-2805 at <a href="https://etads.nasa.gov/current/2805.pdf">https://etads.nasa.gov/current/2805.pdf</a> Add or remove devices from checklist as needed for testing.</i>	<i>State the applicable NASA-STD-2805 standard device configuration. If non-standard configuration is required, specify the exceptions to the most current version of NASA-STD-2805 ( example in blue italics ).</i>				
PC Desktop System (Std / High End)	<i>PC Desktop System (Std), see exceptions</i>	2	00010922, 00013077	DTL - Bldg 1111, Rm 129	
PC All-In-One					
Macintosh Desktop System					
PC Laptop System (Std / Lightweight / Ultra Lightweight)	<i>PC Laptop System (Lightweight), see exceptions</i>	1	40025833	DTL - Bldg 1111, Rm 129	
Macintosh Laptop System (Std / Lightweight / Ultra Lightweight)					
Tablet (PC / Apple / Apple Mini / Netbook)					
Phone (Smart / Cellular )					
Pager					
Network Periperal					
Multi-Functional Device					
Thin Client Seat					
<b>EXCEPTIONS to NASA-STD-2805</b>					
<i>PC Desktop System (Std)</i>					
<i>- Memory (RAM)</i>	<i>16 GB</i>	2	00010922, 00013077		
<i>PC Laprop System (Lightweight)</i>					
<i>- Mouse</i>	<i>Wireless</i>				
<i>- Keyboard</i>	<i>Integrated and Wireless</i>				



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Application	Required Software Configuration	Qty	Asset Number(s)	Location	Comments
<i>Reference NASA-STD-2804 at <a href="https://etads.nasa.gov/current/2804.pdf">https://etads.nasa.gov/current/2804.pdf</a> Add or remove applications from checklist as needed for testing.</i>	<i>State the applicable NASA-STD-2804 standard software configuration. If non-standard configuration is required, specify the exceptions to the most current version of NASA-STD-2804.</i>				
<b>Operating System</b>					
Mac					
Windows					
Linux - Red Hat					
Linux - Ubuntu					
Mobile - Android (AOS)					
Mobile - Blackberry OS 10					
Mobile - iOS					
Mobile - Windows Phone 8					
VM Ware (Thin Client)					
Other					
<b>Web Browser</b>					
Internet Explorer (Windows)					
Safari (Mac)					
Firefox (Windows and Mac)					
Chrome (Windows and Mac)					
Popups					
Cookies					
Adobe Flash					
User Agent					
Internet security settings					
Other					
<b>Desktop / Local</b>					
Microsoft Office					
Exchange					
Libre Office (Ubuntu)					
Adobe Reader					
Adobe Acrobat					
Snippet					
Microsoft Office Communicator					
Cisco Systems VPN Client					
Microsoft Silverlight					
Other					
<b>Non-Std Software</b>					
<b>Electronic Forms</b>					
FileNet eForms					
Adobe LiveCycle					
Adobe Workbench					
<b>Misc</b>					
Data At Rest (DAR)					
Citrix Receiver					
Firewall - Windows					
SmartCard MiddleWare					
Java					
Java Script					
Java VM					
Virus Protection					
Domain					
Spyware					
Connected Backup PC					
Other					

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**APPENDIX D - TESTING CHECKLIST**



*Title of Test*  
**End User Test Worksheet**  
*Test Date and Time: Test Date(s) and Time(s)*

Test Readiness Checklist	
	Test objectives are clearly defined and documented.
	Use case steps and success criteria are clearly defined and documented.
	Test plans and procedures, including use cases, are developed and clearly support the objectives
	Test environment and test system configuration are clearly defined.
	If required, test readiness is approved by CCB and/or ITPMB.
	Test is scheduled on the shared NSSC Testing Calendar.
	Test is titled per NSSC DTL and End User Testing Operating Instructions.
	A shared folder with a test title is created to store test documentation.
	Test documents and schedule have been provided to all test participants for review/feedback.
	Final test documents are stored in the shared folder.
	NSSC Software Request (NSR) has been opened noting test schedule and required test system configuration.
	Test system(s) is configured per NSR requirements.
	Testers have confirmed test systems are configured per NSR requirements.

Post Test Checklist	
	Original test results for each objective are stored in the shared folder.
	Test results have been consolidated and analyzed.
	If applicable waiver already exists and new test passed, existing waiver has been cancelled.
	If test failed due to application problems, a Plan of Action and Milestones (POA&M) has been developed or acquired and stored in shared folder.
	If needed, a new waiver has been requested in NAMS.
	If waiver approved, waiver has been stored in the shared folder.
	If needed, a re-test has been scheduled.
	If needed, an IT solution has been requested.
	Lessons learned and/or Knowledge Articles are developed and shared.



Testing Checklist.doc

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## APPENDIX E - TEST RECORDS METADATA

As a minimum, testing records will contain the metadata listed in Table 1 Test Records Metadata; note the Table 1 metadata values in italics are variables. Loading TechDoc client software and creating metadata templates is the preferred method for efficiently storing testing records with standardized metadata.

<b><u>Document Type</u></b>	<b><u>Metadata: Value</u></b>
All test documents in this list	<b>Cabinet:</b> NSSC Internal Library <b>Folder:</b> <i>DTL/Name_of_folder</i> <b>Document Title:</b> <i>Name_of_doc</i> <b>Document Category:</b> Non-Sensitive <b>Owner:</b> <i>Name_of_document_owner</i> <b>Point of Contact:</b> <i>Name_of_test_leader</i> <b>Organization:</b> <i>Name_of_owner's_dept</i> <b>Web Search:</b> Global <b>Resident Document:</b> Yes <b>Official Record:</b> Yes <b>Vital Record:</b> No
Information system change notifications	<b>Document Type:</b> Information System Change Notification <b>Notification Date:</b> <i>MM/DD/YYYY</i>
Test plans	<b>Document Type:</b> Test Plans
Test environment configuration	<b>Document Type:</b> Test Environment Configuration
Test results	<b>Document Type:</b> Test Results <b>Test Start Date:</b> <i>MM/DD/YYYY</i> <b>Test End Date:</b> <i>MM/DD/YYYY</i> <b>Test Outcome:</b> <i>Pass/Fail</i>
Test analyses	<b>Document Type:</b> Test Analysis
IT Waivers	<b>Document Type:</b> IT Waiver <b>Waiver Issue Date:</b> <i>MM/DD/YYYY</i> <b>Waiver Expiration Date:</b> <i>MM/DD/YYYY</i>

**Table 1 Test Records Metadata**

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## APPENDIX F - ACRONYMS

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Acronym	Definition
ACES	Agency Consolidated End-User Services
B&A	Business and Administration
CS	Civil Servant
DTL	Developmental Test Lab
ESD	Enterprise Service Desk
FM	Financial Management
HR	Human Resources
GPO	Group Policy Object
NAMS	NASA Access Management System
NAAS	NASA Automated Awards System
NBID	NSSC Business Intelligence Data warehouse
NEL	NSSC Electronic Library
NICS	NASA Integrated Communications Services
NPR	NASA Procedural Requirement
NSR	NSSC Service Request
NSSC	NASA Shared Services Center
OCIO	Office of the Chief Information Officer
PR	Procurement
SP	Service Provider
TPRT	Training Purchases Reconciliation Tool
TRR	Test Readiness Review