<Date>

**Version <X.x>**

**NOTES TO THE AUTHOR/TEMPLATE INSTRUCTIONS**

This template includes instructions and boilerplate text for the Sustainment Manual. The author should note that:

* Each section provides instructions or describes the intent, assumptions, and context for content included in that section. Instructional text appears in *italicized blue text* throughout this template.
* Replace instructional text in each section with project specific information.
* Use or modify boilerplate examples of wording and formats for text and tables, as appropriate.
* Search and replace all text enclosed in angle brackets - < > - with project specific information (e.g., <Project Name> or <Project Acronym>.

Follow these steps when using this template:

1. All documents must be compliant with Section 508 requirements. Refer to [FNS 504-508 Compliance Reference Library](https://fncspro.usda.net/offices/oit/Documents/Forms/AllItems.aspx?RootFolder=%2Foffices%2Foit%2FDocuments%2F504%2D508%20Compliance%20%2D%20Accessibility&View=%7BB47848DF%2D6059%2D4D43%2DAB0C%2D8ECEDC92AD4C%7D) or [Section508.gov](https://section508.gov/) for more information.
2. Modify any boilerplate text, as appropriate, to your specific project.
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**SDLC TEMPLATE REVISION HISTORY**

| **VERSION** | **DATE** | **CHANGE DESCRIPTION** |
| --- | --- | --- |
| 1.0 | 03/13/2013 | Created the document. |
| 1.1 | 09/09/2013 | Reformatted the document. |
| 1.2 | 04/05/2017 | Updated the document to reflect changes |
| 2.0 | 11/02/2020 | Combined Transition Plan and O&M Manual; 508 compliant |

**SDLC TEMPLATE CONTACT INFORMATION**

| **RESPONSIBILILTY** | **CONTACT PERSON** | **EMAIL ADDRESS** |
| --- | --- | --- |
| Portfolio Management Division Director, Chief Portfolio Officer | Joe Shaw | [Joseph.Shaw@usda.gov](mailto:Joseph.Shaw@usda.gov) |
| IT Governance Manager | Kevin Russ | [Kevin.Russ@usda.gov](mailto:Kevin.Russ@usda.gov) |
| SDLC Lead | Max Mounger | [Max.Mounger@usda.gov](mailto:Max.Mounger@usda.gov) |

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| **VERSION** | **DATE** | **AUTHOR** | **CHANGE DESCRIPTION** |
| --- | --- | --- | --- |
| x.x |  |  |  |
| x.x |  |  |  |
| x.x |  |  |  |

*List the relevant area of responsibility, contact person and email address for this document.*

**CONTACT INFORMATION**

| **RESPONSIBILILTY** | **CONTACT PERSON** | **EMAIL ADDRESS** |
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*List the acronym reference and definition or description for each acronym contained in this document.*

**ACRONYM LIST**

| **REFERENCE** | **DEFINITION** |
| --- | --- |
| Add acronym | Add definition of acronym |
| Add acronym | Add definition of acronym |
| Add acronym | Add definition of acronym |
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# Introduction

This section provides information regarding purpose, system overview, background, authorized use permission, points of contact, and document references for the Sustainment Manual.

## Purpose

*Describe the purpose of the Sustainment Manual, the name of the system to which it applies, and any other pertinent information relative to planned sustainment activities.*

## System Overview

*Describe the purpose of the new or modified system, the functions it performs, and the business processes that the system supports. Reference the System Security Plan sections, if appropriate.*

## Background

*Include any background or historical information that is relevant to understanding the system development project. Identify FNS policies that affect the operations and maintenance of the new or modified system.*

## Authorized Use Permission

*Provide a warning regarding unauthorized usage of the system and making unauthorized copies of data, software, reports, and documents, if applicable. Describe the process if waiver use or copy permissions are required.*

All persons requesting access to <Project Acronym> must first obtain a USDA eAuthentication account and then complete and submit form FNS-674. Non-FNS staff must also complete a Confidentiality Statement to gain access to <Project Acronym>.

## Points of Contact

*Identify the points of contact involved in the system development project, including project sponsors, user organizations, development organizations, support organizations, and certifying organizations. For each individual, provide the name, title, organization, email, and telephone number, as shown in the below table. Add roles as necessary to provide clarity.*

The following table identifies the points of contact for the <Project Name> application.

| Name/Title | Organization | Contact Information |
| --- | --- | --- |
| Government PM | FNS/OIT | e-mail telephone number |
| OIT System Owner | Column 2 | e-mail telephone number |
| Program System Owner | Column 2 | e-mail telephone number |
| Product/Business Owner | Column 2 | e-mail telephone number |
| Vendor Project Manager | Column 2 | e-mail telephone number |

Table 1 - Points of Contact

## Document References

*List the documents that are sources or references for this Sustainment Manual. Ensure links work properly.*

| Document Name | Version | Location |
| --- | --- | --- |
| Document Reference 1 |  |  |
| Document Reference 2 |  |  |
| Document Reference 3 |  |  |
| Document Reference 4 |  |  |

# System Operations Overview

*In this section provide detailed information to include a system description, software inventory, information inventory, operational inventory, storage requirements, processing overview, system architecture, and security.*

This section provides detailed information to include a system description, software inventory, information inventory, operational inventory, storage requirements, processing overview, system architecture, and security.

## System Architecture Overview

*In this section provide an overview of the physical system.*

*Give an estimate of the size and complexity of the system in terms of number of users, number of user types, number of locations, interfaces, number of major processes, data capability in business terms, numbers of major processes, data capacity in business terms, etc.*

*Summarize the conditions that created the need for the new system (or capability).*

*Include any relevant background.*

*Insert Architecture Overview Diagram below.*



Figure 1 - Architecture Overview Diagram

## Software Inventory

*List the software units, to include name, identification, and security considerations. Identify software necessary to resume operations of the system in case of emergency.*

The table below outlines the software required to support the <Project Acronym> system.

Table 2 - Software Inventory

| **Software / Component** | **Description** | **Version** |
| --- | --- | --- |
| Insert software/component |  |  |
| Insert software/component |  |  |
| Insert software/component |  |  |
| Insert software/component |  |  |
| Insert software/component |  |  |

## Information Inventory

*Provide information about data files and input and output databases produced or referenced by the system.*

This section provides information regarding resource inventory and report inventory.

### Resource Inventory

*List all permanent files and databases referenced, created, or updated by the system. Break out in sub-sections as appropriate.*

The table below provides links to information beneficial to providing successful sustainment support.

Table 3 - Resource Inventory

| Link | Description |
| --- | --- |
| Input file/database |  |
| Input file/database |  |
| Input file/database |  |

### Report Inventory

*List all reports produced by the system. Include report name, report description, and the software that generates it. Break out in subsections as appropriate.*

## System Inventory

*Describe the System Server Inventory. Break out into subsections for each environment.*

This section provides information on the servers used in each environment.

Table 4 - Server Inventory - <environment>

| Server Name | IP Address | Purpose | Location | Operating System | RAM (Gb) | Storage (Gb) |
| --- | --- | --- | --- | --- | --- | --- |
| Input server info |  |  |  |  |  |  |
| Input server info |  |  |  |  |  |  |
| Input server info |  |  |  |  |  |  |
| Input server info |  |  |  |  |  |  |
| Input server info |  |  |  |  |  |  |
| Input server info |  |  |  |  |  |  |

## Processing Overview

*Provide information that is applicable to the processing of the system. Include system restrictions, waivers of operational standards, and interfaces with other systems.*

This section provides information that is applicable to the processing of the system. Included are system restrictions, waivers of operational standards, and interfaces with other system.

### System Restrictions

*Describe any system restrictions. Reference or document constraints which impacted the design of the <Project Name> application.*

### Operational Standards Waivers

*Describe any operational standards system waivers. If not applicable, state Not Applicable.*

### Interfaces with Other Systems

*Describe the system interfaces with other systems. Reference other documentation if applicable, such as the system security plan. Insert appropriate diagrams showing interfaces.*



Figure 2 - Interfaces

## System Architecture Diagrams

*Provide a description of the system, subsystems, communications, etc., in terms of their overall relationships. Accompany the description with a graphic representation that depicts the interrelationships of the major components of the system. Show the communications network for networked systems or that support distributed processing.*

*Reference appropriate sections of the System Security Plan to reduce duplicity. Insert System Architecture Diagram below.*



Figure 2 - System Architecture Diagram 1

## Communications Overview

*Provide a description of the communication boundaries for the system and include a diagram as appropriate.*



Figure 3 - Communications Overview Diagram

## Security

*Describe the security considerations associated with the system, such as eAuth single sign on, role-based access control, data communication, and data encryption/decryption. Insert diagrams as appropriate.*



Figure 4 - <Project Acronym> Security Overview

# Description of Operational Jobs

This section provides an overview of the software and background / batch jobs used to ensure successful operations of the application. The information provided in this section includes the description of jobs necessary to keep the system operational. It includes subsections for job inventory, diagnostic procedures, error messages, restart/recovery procedures, and backup procedures.

## Job Inventory

*List the runs showing the software components, the job control batch files names, run jobs, and purpose of each run if any portion of the system is run in batch mode. For online, transaction-based processing, provide an inventory of all software components that must be loaded for the software system to be operational.*

Table 5 - Job Inventory

| **Job Name** | **Description** | **Job Type** | **Job Location** | **Schedule** |
| --- | --- | --- | --- | --- |
| Insert job name |  |  |  |  |
| Insert job name |  |  |  |  |
| Insert job name |  |  |  |  |
| Insert job name |  |  |  |  |
| Insert job name |  |  |  |  |

## Diagnostic Procedures

*Describe the diagnostic or error-detection features of the system, the purpose of the diagnostic features and the setup and execution procedures for any software diagnostic procedures.*

## Error Conditions

*List all expected error codes and messages with operator responses, as appropriate based on known error conditions.*

Table 6 - Error Messages

| **Error Code** | **Message** | **Response** |
| --- | --- | --- |
| Insert error code |  |  |
| Insert error code |  |  |
| Insert error code |  |  |
| Insert error code |  |  |
| Insert error code |  |  |

## Processes and Procedures

*Provide instructions for any processes and procedures needed to maintain the operational health of the application. Add subsections as necessary to cover your application.*

The following subsections provide guidance and procedures for restart/recovery, system monitoring, server backup and retention, and end-user access.

### Restart/Recovery Procedures

*Provide instructions by which an operator can initiate restart or recovery procedures for the system.*

### System Monitoring Procedures

*Provide instructions for any system monitoring procedures.*

### Server Backup and Retention Procedures

*Provide instructions by which the operator can initiate backup procedures. Cross-reference applicable instructions with procedures in the Contingency Plan.*

### End-User Access Procedures

*Provide instructions for any end-user access procedures applicable for your application.*

# System Maintenance Procedures

*Provide information necessary to maintain the performance of the system and outline maintenance procedures.*

This section provides an overview of the responsibilities and processes used to maintain the various components of the application within its various environments. Maintenance procedures include but are not limited to monitoring and pro-actively remediating system vulnerabilities, ensuring timely upgrades to components to mitigate End-of-Life maintenance concerns, etc.

## Responsibilities

*Identify the respective teams responsible for maintaining the application software and associated support environments. Provide a brief description of each team identified in the table.*

The Sustainment Team is responsible for maintaining the application software above the operating system level in all application environments, including, but not limited to:

* Proactively requesting and reviewing system vulnerability reports on a weekly or bi-weekly basis
* Providing remediation recommendations for system vulnerabilities
* Providing recommendations for third-party software upgrades to remain on supported versions
* Applying approved updates and patches for all software above the operating system level (excluding <xxx>)
* Assisting USDA Client Experience Center (CEC) and/or Digital Infrastructure Services Center (DISC) with monthly patching (or as needed)
* Validating that the application and reports are online before the start of the next business day (<x> EST) after patching

The <Support Team 1> is responsible for maintaining <xxxx>.

USDA CEC is responsible for maintaining the operating system, hardware, and network operations for the following environments: Digital Infrastructure Services Center (DISC) Colocation, <xxx>.

The Digital Infrastructure Services Center (DISC) is responsible for maintaining the operating system, hardware, and network operations for the following environments: <xxx>.

The table below summarizes the responsibilities within each operating environment.

Table 7 - Maintenance Team Responsible Area

Insert the name of the team that is responsible for each environment in the appropriate location.

| **Responsible for** | **Production** | **Pre-Production** | **UAT** | **INTEG** | **TRAINING** |
| --- | --- | --- | --- | --- | --- |
| Application Software |  |  |  |  |  |
| Application Server Software |  |  |  |  |  |
| Web Server Software |  |  |  |  |  |
| Database Server Software |  |  |  |  |  |
| eAuth Single Sign On |  |  |  |  |  |
| Operating System (OS) |  |  |  |  |  |
| Hardware / Virtual Machines |  |  |  |  |  |
| Storage |  |  |  |  |  |
| Network |  |  |  |  |  |
| Disaster Recovery |  |  |  |  |  |
| Licenses |  |  |  |  |  |

## Conventions

*This section describes all rules, schemes, and conventions used within the system. Examples of this type of information include the following:*

* *System-wide labeling, tagging, and naming conventions for programs, units, modules, procedures, routings, records, files and data element fields*
* *Procedures and standards for charts and listings*
* *Standards for including comments in programs to annotate maintenance modifications and changes*
* *Abbreviations and symbols used in charts, listings, and comments sections of programs.*

*If the conventions follow standard programming practices and a standards document, reference that document and make available to the Sustainment Team or include it as an appendix to this document.*

## Verification Procedures

*This section includes requirements and procedures necessary to check the performance of the system following modification or maintenance of the system’s software components. Address the verification of the system-wide correctness and performance.*

*Present, in detail, the system-wide testing procedures. Refer to the original development test plan if the testing replicates development testing and the test plan is available. Describe the types and source(s) of test data in detail.*

## Error Conditions

*Describe all system-wide error conditions that may be encountered within the system, including an explanation of the source(s) for each error and recommended methods to correct each error.*

This section describes all system-wide error conditions that may be encountered within the system, including an explanation of the source(s) for each error and recommended methods to correct each error.

## Maintenance Procedures

*Describe the step-by-step, system-wide maintenance procedures, such as procedures for setting up and sequencing inputs for testing. In addition, present standards for documenting modifications to the system.*

This section describes step-by-step, system-wide maintenance procedures.

# Database Maintenance Procedures

*This section provides the information necessary to maintain the databases of the system. Each database maintenance procedure should be under a separate section header, 5.1 – 5.x.*

This section provides the information necessary to maintain the system databases. Each database maintenance procedure is contained under a separate sub-section.

## <Database Procedure 1 Name>

## <Database Procedure 2 Name>

Attachment A – Additional reference / information

<Insert Link to Object if applicable>