**United States Department of Agriculture**

Food and Nutrition Service



**FNS Office of Information Technology**

**Portfolio Management Division (PMD)**

**FNS Application Guide Template**

**for**

**[Project or System Name]**

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| 1.3 |  |  |  |

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# Glossary

| **Acronym** | **Description** |
| --- | --- |
|  |  |
|  |  |
|  |  |
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|  |  |
|  |  |
|  |  |
|  |  |

# Introduction

This document contains detailed functional description and system specification of an application code named Mercury, a custom solution designed and developed for the Food Nutrition Service (FNS) agency within United States Department of Agriculture (USDA).

Using a phased approach, Mercury has been initially implemented and deployed for SNP within FNS. It also served as the foundation of the second phase implementation of Mercury for SNAP. Although most of Mercury’s functionality remains the same, there has been some design changes made to improve flexibility and configurability of the solution. Therefore, the original System Guide document created for SNP and this document share many overlapping contents. All aspects of the Mercury system for SNAP are documented here and this document replaces the original system guide.

This document was created to help application architects and developers understand Mercury’s internal design and implementation details.

System administrators and support engineers will also find this document helpful in obtaining an under-the-hood knowledge of the inner workings of the system. This knowledge can be crucial when performing various system configuration and end-user support tasks.

# Application Information



## Overview

Mercury is a customized SharePoint workflow solution built to automate internal request correspondence processes within FNS. It is designed initially for the SNP office within FNS. However, due to process similarities within FNS, the solution is further extended to cover the SNAP office within FNS.

## Design Goals

The request correspondence process within SNAP is defined based on SNAP’s organizational structure and has many Ad-Hoc elements in terms of workflow routing and work load balancing among process participants. Mercury is designed to leverage built-in SharePoint functionality and to provide a flexible framework that supports state machine workflow functionality. In addition, the framework operates on a set of metadata that can be configured and altered based on business rules.

## Functionality

From a business perspective, SNAP’s correspondence process can be broken down into a series of workflow states as shown in the following diagram. When a request comes in, the Unit initiates the workflow and a review chain for the response is then defined by reviewers as they make assignments down the organizational hierarchy (Division Director->Branch Chief->Assistant Branch Chief-> Writer). An optional Associate Administrator Office review may also be required. Next, a writer produces a draft response and sends it back up the review chain. After it has been approved by all reviewers, the Unit obtains signatory approval and prepares a response package for delivery. The review chain is dynamically defined and ad-hoc changes can be made at any time during the entire process.

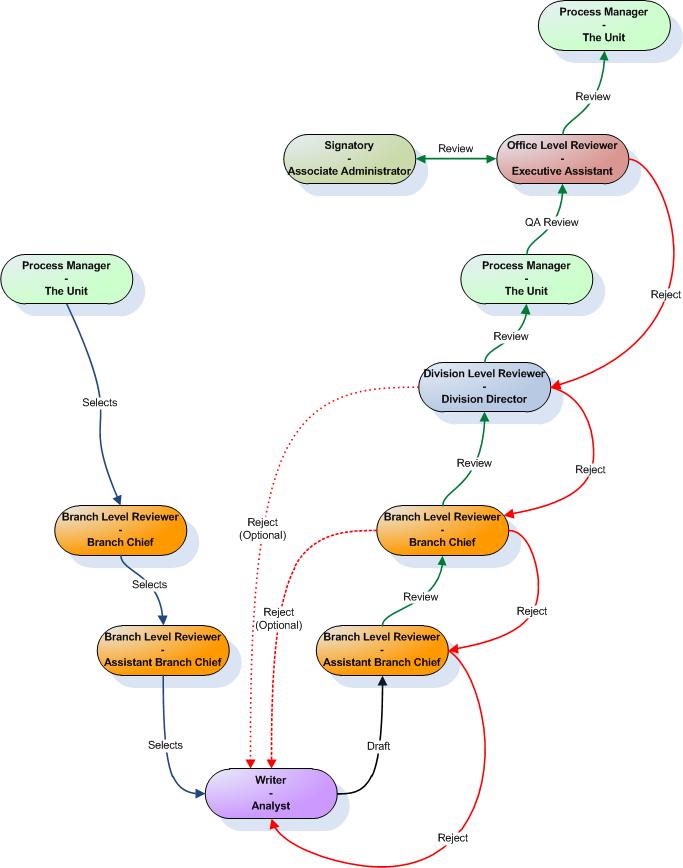


Figure 1: Functionality Diagram

Mercury provides the following key functionalities:

* Correspondence documents management. Capture and manage incoming requests, outgoing responses and any byproducts generated during the process.
* Workflow definition and management. Workflow metadata are stored in site columns and custom lists and therefore can be customized by system administrators. A specialized workflow engine is implemented and evoked by SharePoint event receivers. The workflow engine queries and manipulates the workflow metadata to perform workflow state transitions.
* A collection of XSLT data view web parts and custom web parts are used to present documents and workflow information and to assist end users to perform various workflow actions at various stages of the business process.
* Action request and notification emails are generated to keep end users informed as workflow progresses and workflow tasks are assigned.
* A custom search component is built to support both simple key word searches and advance metadata searches. The main purpose of this functionality is to help end users locate duplicate requests received from different channels and thus reduce duplicate efforts.
* Security management of user permissions and access control to site contents

## Components

Mercury is a web-based application designed to reside on FNS’s internal SharePoint infrastructure. Whenever possible, SharePoint’s out of the box functionality is leveraged during the implementation of Mercury. Custom coding is used to implement the workflow engine and provide workflow-aware user interfaces. Figure 1, Mercury Components, provides a high-level overview of different components within Mercury. These components can be categorized based on their functionalities as follows:

* Data Storage (Brown area in the diagram)
* User Interface (Blue area in the diagram)
* Workflow Engine (Red area in the diagram)
* Security Management (Green area in the diagram)

The following sections will cover design and implementation details of these components.



Figure 2: Components

## User Community and Administrator Support

Who are the user community? Systems Administrator (who), and Tier 1, 2, 3 etc., provided by whom?

## Points of Contact

Project/Program Managers & System Owner

## System Status

The system is:

[ ] Operational – the system is currently operating.

[X ] Under development – the system is being designed, developed or implemented.

[ ] Undergoing a major modification – the system is undergoing a major conversion or transition.

[ ] Other – please explain.

Where do the servers reside; how do users access the application; what is the software environment; who are the administrators for the application and database servers?

# Data Components



## Site Columns and Content Type

Mercury stores all data in a SharePoint site collection. Custom defined site columns and content types are used throughout the site collection to help facilitate and manage this data. Mercury defines 64 custom site columns and 8 custom content types, as shown in Figure 2 and Table 1 below. Custom lists are created based on these custom site columns, and custom content types are associated with various custom lists and document libraries within the site. Details of how these custom site columns and content types are used can be found in the sections that follow.



Table 1: Columns

| **Content Type** | **Columns** |
| --- | --- |
| *Mercury Folder*  (Inherits from *Folder*) |  |
| *History Item*  (Inherits from Mercury *Folder*) |  |
| *Mercury Document*  (Inherits from *Document*) |  |
| *Organization Folder*  (Inherits from Mercury *Folder*) |  |
| *Work Item Request*  (Inherits from  *item*) |  |
| *Workflow Folder*  (Inherits from Mercury Folder) |  |
| *Work Package*  (Inherits from *Workflow* *Folder*) |  |
| *Work Package Request*  (Inherits from *Work item* *Request*) |  |

Table 2: Content Type

## Custom Lists and Other Document Libraries

Mercury uses a collection of custom lists and document libraries to store its metadata. The table below contains a detailed description of these custom lists and document libraries.

| **List Name** | **Description** |
| --- | --- |
| *Associate Administrator Office* | Some correspondence requires participation of the Associate Administrator Office, which includes an associate administrator and an executive assistant. |
| *Division*  *Branch* | There are four organizational levels within SNAP: Agency, Office, Division and Branch and Section. For the purpose of Mercury SNAP, only Division and Branch custom lists are created for their corresponding organizational levels. To best represent this hierarchy, cascading dropdown fields are used to help users drill down from a parent organizational unit to its child unit. *Division* and *branch* lists all contain a *reviewer member* and a *writer member* field. These fields are used to manage user permissions. See security section in this document for details. In addition, the Branch list also contains a field for Assistant Branch Chief. |
| *Delegate* | A user can designate a delegate or the system admin can assign one for them. . A delegate obtains the same user permissions of the original user and receives all emails addressed to the original user. |
| *Correspondence*  *Type* | A lockup list for all correspondence types within SNAP. It identifies a correspondence template category. |
| *Document Status* | Document status is used to tag documents in *Work Library* and *Template Documents* library. Mercury defines three document statuses:   * **Draft:** This tag is used for drafts created by Mercury writers * **QA Pending:** This tag is used for drafts undergoing a review process * **QA Complete:** This tag is used for finalized response documents |
| *Document Type* | Document type is used to tag documents in *Work Library* and *Template Documents* library. Mercury defines four document types:   * **Inbound:**  This tag is used for incoming documents. Normally, they are documents received in the correspondence package or reference documents. * **Response:** This tag is used for documents produced by Mercury writers * **Response Template:** This tag is used for document templates created to assist Mercury writers when creating response documents. * **Reference:** This tag is used for documents included as reference |
| *OES Code* | An internal lockup list used to generate correspondence control number. |
| *Template Documents* | Mercury maintains a document library to store all response templates. In general, a response template is a Word template used by Mercury writers for a certain type of correspondence. One can assign one or many correspondence types to a given template using the Template type metadata. During Work Package creation, a user can specify the “Template type” setting. If there are template documents tagged by the specified value, these templates will be automatically copied into the Work Package folder. |
| *Template Type* | A lockup list for all template types within SNAP and is used to categorize template documents. |
| *WF Config* | Stores prefixes used in naming *Work Package* and *History Item* folders and their corresponding sequence numbers. When certain correspondence types are created, Mercury generates Unit Tracking Numbers and Waiver Numbers, which consist of a prefix and a sequence. This list also stores email footers for all outgoing emails generated by Mercury. |
| *Workflow Type* | Stores workflow types. Currently, SNP defines only one type of workflow processes: *SNAP Work Package Process*. More types can be added to extend the system. |
| *Workflow State* | A workflow process consists of multiple workflow states:   * *SNAP Work Package Process*: This workflow defines a work package process within Mercury. There are fifteen states within the process: *Work Package Created , Pending Branch Assignment, Pending Assistant Branch Assignment, Pending Writer Assignment, Pending Writer Acknowledgement, Draft in Progress, Rewrite in Progress, Pending Assistant Branch Review, Pending Branch Review, Pending Division Review, Pending Unit QA, Pending AAO review, Pending Signatory Review, Pending Package Delivery* and *Work Package Delivered.* |
| *Workflow State Transition* | This list stores workflow metadata that defines, for a given workflow state, who can be the primary actor, what actions a user can take based on his or her role in Mercury and what is the next state after the user performs a certain action. More details can be found in Workflow Engine section later |

Table 3: Custom Lists

# User Interface



## List Forms

List forms are used to manage all custom lists in Mercury. Most of these lists forms are self explanatory with the exception of the *Work Item Request* list. It is used as data collection point when a user creates a Work Package. Once a list item is created and saved in the list, an event receiver is triggered to perform all necessary actions in setting up a Work Package as described below:

* *Work Package Request*: Creates a *Work Package* folder under the division folder specified in the request item; stores package-specific data and initiates the Work Package workflow; copies template files based on *Template Type* and creates history items; generates emails to notify appropriate user(s).

## Custom Data Views

Since all package and workflow data are stored as attributes in folders, customized data views are implemented to present data in a user friendly fashion. The SharePoint out-of-the-box interface for the Work Library is purposely hidden from end users to avoid any confusion. However, Site Administrators can access it by clicking the *View All Site Content* link.

Mercury displays a collection of data views that show different summary overviews of Work Packages within the site. These data views are:

* Default home page: displays all active Work Packages as shown in Figure X below.
* *My Work Packages* data view: displays all Work Packages assigned to the current logged-on user
* *Overdue Work Package* data view: displays work packages that are overdue
* *Person Utilization* data view: displays work load information for a specific user, as shown in Figure X



Figure 3: Sample 1



Figure 4: Sample 2

*Work Package* data views are implemented as the user drills down into a Work Package as shown in Figures 6 below. This data view allows users to obtain information about a Work Package and their corresponding workflow statuses. A list of actions is presented based on the current workflow state and the current user’s permissions. The user can use the data view to upload, check-in and check-out documents, and to inspect system generated log entries and comments made by users at various workflow stages.



Figure 5: Sample 3

## Web Parts

At different states of a Work Package workflow, users can perform various actions such as: editing work package data; assigning a reviewer or writer; and adding comments or approve or reject a draft. These actions are handled using custom web parts, with exceptions for edit package, which is handled by customized list forms. The following table contains a list of possible actions based on a given workflow state and the web part used to perform the action. It’s important to note that same actions may appear in different workflow states and same web parts may be used to handle similar actions.

The following section describes how each web part is implemented.

* **Action List Web Part**: This web part, as shown in Figure 7, renders a collection of action link buttons on the work package data view page. Each action button links to an action page, implemented as a regular SharePoint site page that contains web parts used to handle the corresponding action. The rendering of the action list is dynamic as it is based on the current workflow state and what actions the current user is permitted to perform. In other words, the rendering of action buttons is both workflow state and user specific.



Figure 6: Sample 4

* **Assignment Web Part:** This web part, as shown in Figure 8, is used for all assignment related actions. From top to bottom, it allows an end user to select one or many organizational units and their corresponding reviewers and due dates. Division, branch and assistant branch fields are implemented as cascading dropdown lists so that selection of organizational unit at a higher level determines what choices are available at lower levels. Since Reviewers and writers are organizational unit specific as defined in the *Reviewer Members* and *Writer Members* fields in *Division* and *Branch* custom lists, reviewer and writer dropdown lists are populated based on selections made at the organizational unit level. Data fields in this web part are stored as folder attributes in work package folders. This web part is shared by reviewers at all levels and it is used to perform the initial assignments as well as reassignments. Reviewers at lower levels cannot make assignment modifications for reviewers at higher levels. In these cases, fields related to higher level assignment settings will be disabled. When a writer is required to acknowledge a writing assignment, the reviewer who makes the assignment needs to check the *Writer Acknowledgement* check box.



Figure 7: Sample 5

* **Comments Web Part**: This web part, as shown in Figure 9, allows end users to add comments or notes to a Work package or Work assignment at any workflow state. It is also used when a user action requires additional information or instruction. For example, when requesting a writer re-assignment, a writer needs to specify the reason for the request. Comments are stored as *History Item* folders.



Figure 8: Sample 6

## Workflows

At different states of a Work Package workflow, users can perform various actions such as: editing work package data; assigning a reviewer or writer; and adding comments or approve or reject a draft. These actions are handled using custom web parts, with exceptions for edit package, which is handled by customized list forms. The following table contains a list of possible actions based on a given workflow state and the web part used to perform the action. It’s important to note that same actions may appear in different workflow states and same web parts may be used to handle similar actions.

| **Workflow Name** | **Detail Workflow Description and Purpose** |
| --- | --- |
| *Primary Actor* | Current actor defined in an expression with Mercury specific syntax. Using the expression can avoid hard coded references to Mercury users |
| *Primary Actor CC* | The action request email can be CC’d to another person if needed. Defined using custom expressions. |
| *Action Request Subject* | Subject line of the action request email |
| *Action Request Body* | Verbiage to include in the static portion of the action request email. |
| *Status Notification Recipient* | Person who needs to receive notification email. Defined using custom expressions. |
| *Status Notification Subject* | Subject line of the notification email |
| *Status Notification Body* | Verbiage to include in the static portion of the notification email. |

Table 4: Workflow Description & Purpose Table

## Search

SharePoint’s standard search function has been customized to provide metadata level search capability and present items returned from searches in the context of their corresponding work packages or work assignments.

Twelve new managed properties are defined within the SharePoint Application that hosts the application site collection. They are listed in the following table:

| **Managed Property Name** | **Data Type** | **Note** |
| --- | --- | --- |
| *AddresseeName* | Text | Maps to *Addressee Name* field on *Work Package* folder |
| *ControlNumber* | Text | Maps to *Control Number* field on *Work Package* folder |
| *CorrespondenceType* | Text | Maps to *Correspondence Type* field on *Work Package* folder |
| *PID* | Integer | Item ID. Used when rendering search results |
| *PackageDescription* | Text | Maps to *Package Description* field on *Work Package* folder |
| *PackageName* | Text | Maps to *Package Name* field on *Work Package* folder |
| *ParentContentType* | Text | Parent’s content type. Used when rendering search results |
| *ParentID* | Integer | Parent’s item ID. Used when rendering search results |
| *Signatory* | Text | Maps to *Signatory* field on *Work Package* folder |
| *Task1Unit* | Text | Maps to *Task1 Unit* field on *Work Package* folder |
| *Task2Unit* | Text | Maps to *Task2 Unit* field on *Work Package* folder |
| *WaiverNumber* | Text | Maps to *Waiver Number* field on *Work Package* folder |

Table 5: Search Managed Properties

A search scope is defined to include all items within the work library, and excludes items underneath the Form directory within the library. A custom search web part is implemented to allow users to perform searches based on the newly defined managed properties, using the *Search Scope Name*.

The search result page is customized to include contextual information. This is done so that users can get to each individual item within a search result set and easily navigate to its corresponding item or folder that contains the item.

# Security Management

Security management for most applications will be broke down between the following items using SharePoint Security Groups:

* Site Access
* Navigation
* List & Library Permissions



## Security Groups

Application uses SharePoint groups:

| **GROUP NAME** | **DESCRIPTION** | **PERMISSION** | **GROUP OWNER** |
| --- | --- | --- | --- |
|  |  |  |  |
| FNSPartners Developer | Developers Group for FNS Partnership Database application. | Full Control | FNSPartners Developer |
| FNSPartners Readers | Users in this group have read permissions to the FNS Partnership Database application. | Read | FNSPartners Developer |
| FNSPartners Administrator | Users in this group have contribute permissions to all FNS Partnership Database lists and is the administrator group for application. | Read | FNSPartners Developer |
| NO FNSPartners Contributor | Users in this group have contribute permissions to NO FNS Partnership Database list. | Read | FNSPartners Developer |
| MARO FNSPartners Contributor | Users in this group have contribute permissions to MARO FNS Partnership Database list. | Read | FNSPartners Developer |
| MPRO FNSPartners Contributor | Users in this group have contribute permissions to MPRO FNS Partnership Database list. | Read | FNSPartners Developer |
| MWRO FNSPartners Contributor | Users in this group have contribute permissions to MWRO FNS Partnership Database list. | Read | FNSPartners Developer |
| NERO FNSPartners Contributor | Users in this group have contribute permissions to NERO FNS Partnership Database list. | Read | FNSPartners Developer |
| SERO FNSPartners Contributor | Users in this group have contribute permissions to SERO FNS Partnership Database list. | Read | FNSPartners Developer |
| SWRO FNSPartners Contributor | Users in this group have contribute permissions to SWRO FNS Partnership Database list. | Read | FNSPartners Developer |
| WRO FNSPartners Contributor | Users in this group have contribute permissions to WRO FNS Partnership Database list. | Read | FNSPartners Developer |

Table 6: Security Groups

## Navigation Permissions

Application navigation permissions use SharePoint Security Groups as Audiences to trim access:

| **NAME** | **AUDIENCES** |
| --- | --- |
|  |  |
| TOP NAV | |
| Manage Partners | FNSPartners Developer; FNSPartners Administrator; NO FNSPartners Contributor; MARO FNSPartners Contributor; MPRO FNSPartners Contributor; MWRO FNSPartners Contributor; NERO FNSPartners Contributor; SERO FNSPartners Contributor; SWRO FNSPartners Contributor; WRO FNSPartners Contributor |
| NO Partners | NO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| MARO Partners | MARO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator |
| MPRO Partners | MPRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator |
| MWRO Partners | MWRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| NERO Partners | NERO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| SERO Partners | SERO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| SWRO Partners | SWRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| WRO Partners | WRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| Manage Help | FNSPartners Developer; FNSPartners Administrator; NO FNSPartners Contributor; MARO FNSPartners Contributor; MPRO FNSPartners Contributor; MWRO FNSPartners Contributor; NERO FNSPartners Contributor; SERO FNSPartners Contributor; SWRO FNSPartners Contributor; WRO FNSPartners Contributor |
| TOP NAV | |
| Email Partners | FNSPartners Developer; FNSPartners Administrator; NO FNSPartners Contributor; MARO FNSPartners Contributor; MPRO FNSPartners Contributor; MWRO FNSPartners Contributor; NERO FNSPartners Contributor; SERO FNSPartners Contributor; SWRO FNSPartners Contributor; WRO FNSPartners Contributor |
| NO Partners | NO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| MARO Partners | MARO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| MPRO Partners | MPRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| MWRO Partners | MWRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| NERO Partners | NERO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| SERO Partners | SERO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| SWRO Partners | SWRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| WRO Partners | WRO FNSPartners Contributor; FNSPartners Developer; FNSPartners Administrator; |
| TOP NAV | |
| Administrative | FNSPartners Developer; FNSPartners Administrator |
| Add Partnership Manager Contact | No Audience/Inherits |
| Email Partnership Managers | No Audience/Inherits |
| Add New User(s) | No Audience/Inherits |
| Remove User(s) | No Audience/Inherits |
| LEFT NAV | |
| Partner Search | No Audience |
| Partner Data Views | No Audience |
| All Partners | No Audience |
| Recent Submissions | No Audience |
| Partners Contact Information | No Audience |
| Partner Email Address | No Audience |
| Target Issues | No Audience |
| Programs Supported | No Audience |
| Level of Partnership | No Audience |
| Partnership Goals/Events | No Audience |
| Type of Partner | No Audience |
| Partner Websites | No Audience |
| Partner Missions | No Audience |
| Export all Partners to Excel | No Audience |
| Developer Admin | FNSPartners Developer |
| View All Site Content | No Audience/Inherits |
| Rollup Admin | No Audience/Inherits |

Table 7: Navigation Permissions

## List & Library Permissions

Application List & Library permissions use SharePoint Security Groups to trim access:

| **LISTS/LIBRARYS** | **GROUPS & PERMISSIONS** |
| --- | --- |
|  |  |
| Add User Request | FNSPartners Developer - Full Control FNSPartners Administrator - Contribute (No Delete Option) |
| AdminPages | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| AppImages | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| AppPages | FNSPartners Developer - Full Control FNSPartners Readers - Read All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Bamboo List Rollup Configuration | FNSPartners Developer - Full Control FNSPartners Readers - Read All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Content and Structure Reports | FNSPartners Developer - Full Control FNSPartners Readers - Read All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| DeveloperPages | FNSPartners Developer - Full Control |
| Documents | FNSPartners Developer - Full Control FNSPartners Readers - Read All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Help | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Images | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| ManagePages | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| MARO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor MARO FNSPartners Contributor - Contributor |
| MPRO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor MPRO FNSPartners Contributor - Contributor |
| MWRO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor MWRO FNSPartners Contributor - Contributor |
| NERO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor NERO FNSPartners Contributor - Contributor |
| NO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor NO FNSPartners Contributor - Contributor |
| Pages | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Partnership Database Contacts | FNSPartners Developer - Full Control FNSPartners Administrator - Contribute |
| Remove Users | FNSPartners Developer - Full Control FNSPartners Administrator - Contribute (No Delete Option) |
| Reusable Content | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| SERO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor SERO FNSPartners Contributor - Contributor |
| Site Collection Documents | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| Site Collection Images | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| SWRO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor SWRO FNSPartners Contributor - Contributor |
| Workflow Tasks | FNSPartners Developer - Full Control All FNSPartners Contributor - Read NO FNSPartners Contributor - Read MARO FNSPartners Contributor - Read MPRO FNSPartners Contributor - Read MWRO FNSPartners Contributor - Read NERO FNSPartners Contributor - Read SERO FNSPartners Contributor - Read SWRO FNSPartners Contributor - Read WRO FNSPartners Contributor - Read |
| WRO Partners | FNSPartners Developer - Full Control FNSPartners Readers - Read FNSPartners Administrator - Contributor WRO FNSPartners Contributor - Contributor |
| Email Archive Management | FNSPartners Developer - Full Control FNSPartners Administrator - Read |
| NOEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) NO FNSPartners Contributor - Contributor (No Delete) |
| MAROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) MARO FNSPartners Contributor - Contributor (No Delete) |
| MPROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) MPRO FNSPartners Contributor - Contributor (No Delete) |
| MWROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) MWRO FNSPartners Contributor - Contributor (No Delete) |
| NEROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) NERO FNSPartners Contributor - Contributor (No Delete) |
| SEROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) SERO FNSPartners Contributor - Contributor (No Delete) |
| SWROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) SWRO FNSPartners Contributor - Contributor (No Delete) |
| WROEmail | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) WRO FNSPartners Contributor - Contributor (No Delete) |
| EmailManagers | FNSPartners Developer - Full Control FNSPartners Administrator - Contributor (No Delete) |

Table 8: List & Library Permissions

# Maintenance Responsibilities

Describe the maintenance responsibilities.

# Appendix A: References

Insert the name, version number, description, and physical location of any documents referenced in this document. Add rows to the table as necessary.

The following table summarizes the documents referenced in this document.

|  |  |  |
| --- | --- | --- |
| **Document Name** | **Description** | **Location** |
| Document Name and Version Number | Document description | URL or Network path where document is located |
|  |  |  |
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# Approvals/Signatures

The undersigned acknowledge that they have reviewed the [name of document] document and agree with the information presented within this document. Changes to this document will be coordinated with, and approved by, the undersigned, or their designated representatives.

|  |  |  |  |
| --- | --- | --- | --- |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: | [Project or System Name] Project Manager |  |  |
|  |  |  |  |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: | [Project or System Name] Business Owner |  |  |
|  |  |  |  |
| Signature: |  | Date: |  |
| Print Name: |  |  |  |
| Title: |  |  |  |
| Role: | Organization’s Approving Authority |  |  |