|  |  |
| --- | --- |
| Scope Of Project | Section |
| 3 |

FileONE offers SystemWORKS as the business services industry’s most comprehensive and scalable Commercial off-the-Shelf (COTS) application. It leverages FileONE's years of experience and successful track record of building software systems specifically designed to meet the complex requirements of Secretary of State offices. This collective knowledge and experience is the driving force behind the design of SystemWORKS which incorporates the latest .Net 3.5, web-based technologies to deliver a robust, long-term solution for Secretary of State Business Service needs.

FileONE is proposing a phased, modular implementation approach to minimize the project’s impact to your day-to day operations, presenting the smoothest migration path to the new SIMS system. Our phased approach differs from the two phase approach highlighted in the RFP. As SystemWORKS™ is specifically designed to meet the Accounting and Business Process needs for Secretaries of State, our COTS implementation meets the State’s needs defined in the RFP. To best promote a positive atmosphere of change and to interject the project with low-risk momentum, FileONE proposes to implement the SystemWORKS™ UCC module first, followed by Business Entity, Notaries and Trademarks. Interfaces development and data conversion will be performed during each appropriate module area. We will work with the State to determine the order and timing of each module implementation or to determine another approach, if the State so desires. As FileONE and Front Desk Software implement each subsequent module, we are confident that our collaborative efforts with the MT SOS team will yield a system that meets project goals while addressing unique functional requirements well into the future.

The following section includes our detailed SystemWORKS™ COTS implementation methodology which was developed based upon 9 years of experience implementing systems for eleven (11) Secretaries of State.

## 3.1 Project Management

### 3.1.1 Methodology

SystemWORKS is a highly configurable and flexible system that dramatically reduces the amount of customized coding required to deliver the SIMS solution. Configuring a solution, versus building a solution, has significant advantages in time to production and cost. Configuration parameters specific to Montana are discovered, analyzed, and delivered via ServiceWORKS™, FileONE’s implementation methodology.

This methodology has been developed combining industry best practices from the Rational Unified Process, Agile Scrum, PMI, and general implementation experience.

ServiceWORKS™ is tailored for projects that must adapt quickly in the dynamic marketplace, where time is a critical commodity and windows of opportunity close quickly. It emphasizes rapid production of working versions of the system and an aggressive incorporation of rich, real-time feedback. Several point-by-point benefits of ServiceWORKS are:

* The MT SOS will always be positioned to respond to the factors - funding changes, shifts in user expectations, business objectives, and jurisdictional changes
* There are frequent opportunities to adapt to new business priorities and incorporate new features; the MT SOS project will not encounter the risk of producing something outdated
* Project sponsors and constituents have constant visibility into working systems, not documents
* The MT SOS team will have confidence in the project as a result of applying a set of proven industry standard implementation best practices

FileONE recommends that the SIMS project be delivered in an approach where a General Project module will be initially delivered and followed by single Line of Business modules delivered from start to finish. FileONE has used this methodology in 11 successful SOS implementations. By breaking the implementation into smaller phases the MT SOS will:

* Realize a quicker time to market – you see the functionality evolve
* Have more flexibility to change – you do not have to wait until the entire system is implemented and then discover changes are needed
* Realize optimal quality – iterative deliveries reduce risk for complex regression breaks

FileONE recommends that the SIMS project be delivered as follows:

1. The initial project will deliver the General Project module
2. The second project will deliver the Uniform Commercial Code (UCC) and UCC Online module
3. The third project will deliver the Corporate (Business Entity) and Business Entity Online module
4. The fourth project will deliver the Trademark and Notary module

The SIMS project will commence with a General Project module. This module will be primarily administrative, but will also include technical configurations and Backup and Recovery Planning. The General Project module will utilize the following two phases:

1. Definition
2. Analysis

Following The General Project module, The Montana Secretary of State ServiceWORKS Project will deliver the remaining module utilizing the following four phases:

1. Definition
2. Analysis
3. Configuration and Test
4. Deploy

The details regarding each of these phases follow.

Each Lines of Business component will be considered to be a distinct project. Each project will commence with the Definition Phase. This phase incorporates activities in the Initiating and Planning phases as outlined in the Project Management Institutes’ (PMI) Project Book Of Knowledge (PMBOK) including:

* Authorize the Project
* Set the Overall Direction
* Define Top-Level Project Objectives
* Secure Necessary Approvals and Resources
* Validate Alignment with Overall Business Objectives
* Assign Project Manager
* Issue and Risk Management Plan
* Define Project Scope
* Define Project Cost
* Define Required Deliverables
* Create Framework for Project Schedule

This phase includes project start up activities necessary for success by identifying the right team and scope, as well as determining the relationship between the project and its alignment with the organization’s overall charter.

A summary of the key activities and deliverables is summarized in the table below.

|  |  |  |
| --- | --- | --- |
| **PMBOK Knowledge Area** | **ServiceWORKS Activity** | **Deliverable** |
| Integration | Project Setup | Project Charter |
| Integration | Project Setup | Scope Statement |
| Integration/Time | Project administration | Time, Invoicing/billing process, establishment of governance committee, Project Calendar, Project Wiki or Portal |
| Human Resources | Setting up meeting location resources, session attendees | Resource Plan |
| Human Resources, Communication | Governance Committees | Establish Data Governance Board, Change Control Board, Steering Committee |
| Communication | Development and distribution of the communication plan | Communication Plan |
| Scope | Finalizing documentation templates | Interview forms, configuration forms or use case template, infrastructure analysis template |
| Integration | Planning and executing the project kickoff. | Kickoff Presentation |
| Cost | Budget Planning/Cost | Cost Management Plan |
| Risks | Risk and Issue Management Planning | Establish Risk Log, Issue Management Process |
| Integration | Change Management Planning | Change Management Process |
| Integration, Time | Project Planning | Work Breakdown Structure |

The Analysis Phase will follow the Definition Phase. This phase incorporates activities in the Planning and Execute phases as outlined in the PMI Project Book of Knowledge (PMBOK) including:

* Coordinate the Resources
* Team Development
* Quality Assurance Activities
* Distribute Information
* Work the Plan
* Communication
* Scope Definition

In this phase, an iterative approach will be leveraged working with Montana Secretary of State subject matter resources to understand the Montana SOS business model. For each Montana SOS subject matter resource (e.g., Liens, Business Entity, Trademark, Notary), FileONE will conduct face-to-face interview sessions and utilize the FileONE product suite to document current and future business process/technical states as well as identify gaps, business process and technical improvements. For example, in the UCC area of focus, a series of interviews and questionnaires will be utilized to capture the current state regarding High-Speed Data Collection, Payment Processing, Filing Types, Indexing, Verification, Validation, and Correspondence (e.g. invoicing, orders, receipts). These same areas will also be analyzed using FileONE products for the future state alignment.

In addition, this phase also includes a technical assessment. FileONE will investigate the Montana SOS’ applications, which will include an inventory of data interfaces, integrations, and legacy data conversions. FileONE will also perform an infrastructure assessment.

The key activities and deliverables for the iterative sessions are summarized in the table below.

|  |  |  |
| --- | --- | --- |
| **PMBOK Knowledge Area** | **ServiceWORKS Activity** | **Deliverable** |
| Procurement | Technical State Analysis | Procure and setup Hardware and necessary infrastructure |
| Procurement | Setting up the FileONE application suite | A complete set of environment(s) to be utilized in the to be process analysis, training, and configuration and testing |
| Scope, Risks | Review Business Scenarios | Business Process Maps |
| Scope, Risks | Review Functional Requirements | Functional Requirement Use Cases |
| Scope, Risks | Define Business Units, Users, Security Roles, Privileges & Access Levels | User Access Configurations |
| Scope, Risks | Define Reporting Requirements | Report Specifications |
| Scope, Risks | Integration and Interface Requirements | Integration and Interface Inventory Integration and Interface Design |
| Scope, Risks | Define Data Conversion Requirements | Data Conversion Plan |
| Quality | QA and testing planning | Master QA and Test Plan – includes System, Performance and User Acceptance |
| Scope | Training planning | Training Plan/Outline |

Following the Analysis Phase, the Configuration and Test Phase will be executed. This phase incorporates activities in the Execute and Controlling and Monitoringphases as outlined in the PMI Project Book of Knowledge (PMBOK) including:

* Coordinate the Resources
* Team Development
* Quality Assurance Activities
* Distribute Information
* Work the Plan
* Communication
* Manage Team, Stakeholders
* Measuring Progress and Monitoring Performance (Overall, Scope, Schedule)
* Take Corrective Actions If and Where Needed. Issue Resolution and Escalation.
* Change Request Management
* Risk Management (Technical, Quality, Performance, Project Management)
* Performance Reports
* Communication

In this phase, information gathered and synthesized in the previous phases will be applied to perform Initial Data Conversion, System Configuration, System Integration, System Interfaces, Training Preparations, Pilot Classes, and QA (including User Acceptance) activities. A summary of the key activities and deliverables is summarized in the table below.

|  |  |  |
| --- | --- | --- |
| **PMBOK Knowledge Area** | **ServiceWORKS Activity** | **Deliverable** |
| Integration, Scope, Risks | System Configuration | Fully Configured test environments and training environment |
| Integration, Scope, Risks | System Interface Configuration | Fully interfaced test environments and training environment |
| Integration, Scope, Risks | Develop Reports | Required reports |
| Integration, Scope, Risks | Initial Data Conversion | First run of data conversion from legacy systems |
| Communication, Quality, Human Resources | Training and Pilot Planning | Trained users for UAT |
| Quality, Integration | Functional Test | Functionally tested system |
| Quality, Integration | System Test | Integrated system |
| Quality, Risks, Human Resources | User Acceptance Test | User Accepted System |
| Quality, integration | Update Documentation | Training and end user documentation |

Following the Configuration and Test Phase, the Deployment Phase will be executed. This phase incorporates activities in the Execute, Controlling and Monitoring, and Close phases as outlined in the PMI Project book of Knowledge (PMBOK) including:

* Coordinate the Resources
* Team Development
* Quality Assurance
* Work the Plan
* Monitoring and Controlling. Main Elements:
* Manage Team, Stakeholders
* Measuring Progress and Monitoring Performance (Overall, Scope, Schedule, Cost, Quality)
* Take Corrective Actions If and Where Needed. Issue Resolution and Escalation.
* Risk Management (Technical, Quality, Performance, Project Management, Organizational, External)
* Communications
* Administrative Close Out (Gather, Distribute, Archive Information
* Post Implementation Support
* Contract Close Out (Completion of the Project Contract Including Resolution of Open Items and Final Formal Acceptance

This phase will consist of Training Users, Technical Training, Final Documentation, Migration to Production Systems, Final Data Conversion, Interface and Integration Deployments, System Monitoring and Post Go Live Support. A summary of the key activities and deliverables is summarized in the table below.

|  |  |  |
| --- | --- | --- |
| **PMBOK Knowledge Area(s)** | **ServiceWORKS Activity** | **Deliverable** |
| Integration, Scope, Risks | System Configuration | Fully Configured Production System |
| Integration, Scope, Risks | System Interface Configuration | Fully Interfaced Production System |
| Integration, Scope, Risks | Develop Reports | Tested Production Reports |
| Integration, Scope, Risks | Data Conversion | Final Data Conversion |
| Communication, Quality, Human Resources | Training | Trained End and Technical Users |
| Quality, Integration | System Monitoring | Functionally tested system |
| Quality, integration | Update Documentation | Training and end user documentation |
| Procurement | Post Deployment Support | Supported System |
| Procurement | Contract Closeout | Project Completion |

The following table provides the high level deliver by module and phase.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **General Project Module** |  |
|  | **Project Phase** |  |  |
|  | Define | October 1, 2008 - October 20, 2008 |  |
|  | Analysis | October 21, 2008 - December 10, 2008 |  |
|  | **UCC Module** | |  |
|  |  |
|  | **Project Phase** |  |  |
|  | Define | December 11, 2008 - January 20, 2009 |  |
|  | Analysis | January 21, 2009 - May 7, 2009 |  |
|  | Configuration and Test | May 5, 2009 - July 23, 2009 |  |
|  | Deploy | July 24, 2009 - September 29, 2009 |  |
|  |  |  |  |
|  |  |  |  |
|  | **Corporate (Business Entity) Module** | |  |
|  | **Project Phase** |  |  |
|  | Define | June 19, 2009 - July 13, 2009 |  |
|  | Analysis | July 14, 2009 - October 21, 2009 |  |
|  | Configuration and Test | October 22, 2009 - January 25, 2010 |  |
|  | Deploy | January 25, 2010 - March 9, 2010 |  |
|  |  |  |  |
|  | **Trademark and Notary Module** | |  |
|  | **Project Phase** |  |  |
|  | Define | February 25, 2010 - March 4, 2010 |  |
|  | Analysis | March 5, 2010 - April 1, 2010 |  |
|  | Configuration and Test | April 2, 2010 - May 3, 2010 |  |
|  | Deploy | May 4, 2010 - May 19, 2010 |  |
|  |  |  |  |
|  | **Post Deploy Warranty** | |  |
|  | **Project Phase** |  |  |
|  | Warranty/Post Deploy | May 20, 2010 - December 31, 2011 |  |
|  |  |  |  |

**Estimating Methodology**

FileONE estimating principles leverages ‘bottom up’ techniques. These techniques describe how to make a list of sub-tasks to be estimated and provide a checklist of tasks often forgotten. For estimating each task it is determined whether the tasks are technical, functional or overhead such as familiarity with the domain, specifications, project and team management and testing. The FileONE estimation methodology utilizes several estimation techniques including: 

(a) estimation by 'feel';  
(b) extrapolation from a baseline task;  
(c) relative comparison of effort

The estimation methodology defines what is implied in the technical tasks and any assumptions. This information is gathered and risks are analyzed and determined how they can be managed by identifying suitable contingency and mitigation strategies. The contingency allowance is then built into the overall project plan.

Next, the methodology addresses costing. The first step describes all the possible staff roles that are needed for each phase. A staff chart is created identifying the resources and an estimation for the duration of their role is required for a project. Typical capital costs for the project are hardware, software licences, and infrastructure.

The final steps in the FileONE estimating methodology involve reviewing the estimation. This is done using several different types of reviewing methods including:

(a) parallel estimates;  
(b) peer review;  
(c) team estimate;  
(d) combined walkthrough and estimate.

After each project concludes, FileONE performs a retrospective and adjusts its models for future use. All relevant project stakeholders are interviewed and the collection of project metrics and lists the items that were recorded reviewed. Based on this review, relevant methodology modifications are made to be used for future projects.

Project Metrics

Key to any project are the metrics used for monitoring throughout the project lifecycle, as well as measuring the overall success of the project. The FileONE methodology monitors a number of areas for each phase of a project using metrics to track:

* Cost Estimates
* Schedule
* Responsibility Assignments for Deliverables
* Measurement Baselines for Scope
* Major Milestones and Target Dates
* Issues
* Risk
* Resourcing
* Change Management
* Defect Density

As part of the General Project Module, the criteria including tolerance levels and contingency and mitigation of each area will be identified and documented. FileONE is prepared to recommend and in some cases supply the tools to manage each of these areas of measure.

For general acceptance metrics, please refer to sections 3.1.6, System Acceptance, 3.1.7, Final Acceptance, and 3.1.8, Enhancements.

### 3.1.2 Project Start-Up

The project startup is a significant event in the life of a project. The project team must be formed, resources must be brought together, internal champions identified, coached, and scripted, and the plan must be finalized. Project startup is the transition between project planning and execution. Several important events occur, including:

* Baselining of the project plan with MT SOS and FileONE management sign-off
* Commitment of resources by agency management
* Creation of a project database

FileONE has performed eleven (11) implementations - all of similar or greater size and scope and has over 100 years of collective staff experience in implementing Secretary of State Systems. Because of the knowledge and experience of FileONE resources, MT SOS business processes, system requirements, technology standards, and project governance will be understood, with little risk for misinterpretation of objectives from the start and through the duration of the project. This level of experience reduces the amount of time that MT SOS will need to spend on the project start up.

The first step of the project start-up stage is to finalize the project plan and establish a baseline. A final tuning of the project plan will occur during the project Definition Phase. This fine tuning consists of incorporating changes that result from management review or, in the case of a project that involves procurement, changes that result from contract negotiations. Only minor changes can be made to the plan at this time—major changes that occur after the Definition Phase require a return to the Definition phase.

Minor changes are defined as a refinement of activities, the addition of oversight and quality activities, and alterations to the schedule. Any change that results in more than a 5% increase in cost or schedule should be viewed as a major change.

During the start-up process, the plan is finalized by a project governance board e.g. a Steering Committee. In order to ensure that all start-up tasks are completed prior to actually starting the project, FileONE uses a Project Start-up Check List. The check list ensures that the tasks necessary to start the project are completed.

The Start-Up Check List is a multi-purposed action list and a tool to verify that necessary steps have been completed. This list addresses the following activities:

* Tracking and Monitoring Processes
* Defining Data to Be Tracked and Monitored, as well as the Recording Format for the Same
* Reviewing the Schedules and Formats
* Reviewing the Configuration Management System and Ensuring the Assignment of Responsibility
* Reviewing the Change Control Process and Ensuring That It Is Institutionalized
* Determining How Issues Will Be Raised In the Project and Who Will Track their Resolution
* Defining the Risk Management Process
* Defining the Change Management Process
* Defining the Project Environment
* Completing the Project Baseline
* Identifying Project Standards and Tools
* Identifying and Refining the Roles and Responsibilities of the Project Team Members
* Setting Expectations for the Project Team
* Defining All the Project Control Processes
* Obtaining and Allocating Resources
* Initiating Project Kick-Off Meeting

The project manager owns the Start-up Check List, although in most projects, the full team provides input.

The design of new forms will occur for each Line of Business starting at or near the beginning of the Analysis Phase and continuing over an elapsed duration of 60 to 90 days. FileONE’s experience and process regarding forms development and re-design is detailed in Section 3.2.3.

### 3.1.3 Training

Adequate implementation project related training is essential to change management, and ensuring production objectives continue to be met during the period of transitioning from one key system to another. FileONE has delivered training to clients using a variety of formats and venues, including in conjunction with 10 production go-lives of complete filing solutions replacing what was previously their system of record for corporations filings, UCC filings, orders and requests, trademarks and other lines of business. FileONE has and will continue to work closely with each of its clients to provide the level of training necessary to make the transition from legacy to FileONE systems as seamless as possible. We are experienced in delivering training to all stakeholders groups within the client organization, via a variety of customized curriculum as required, such as executive training, train-the-trainer, system administrator training, and end-user training. FileONE also emphasizes related business processes as a vital context for system training to maximize knowledge transfer.

FILEONE employs the ADDIE training development methodology (Analyze, Design, Develop, Deliver, Evaluate) due to its proven effectiveness as demonstrated through its usage by many private and government agencies. ADDIE training development methodology is described in detail here.

Phase 1: Analyze

**Description:** All requirements for purposes of training delivery are determined, including:

* Target audience(s) definition
* Time-to-deliver
* Topical requirements
* Supporting materials/documentation
* Administrative functions

**Project Phase:** Analysis

**Activities:** May include: Project requirements review, and internal/external Subject Matter Expert (SME) interviews.

**Phase output / Deliverable(s):** Training Requirements.

Phase 2: Design

**Description:** All aspects of the training curriculum are specified in detail as per the Training Requirements, including:

* Learning Objectives
* Delivery schedule
* Performance assessments
* Training delivery format
* Supporting materials/documentation
* Administrative functions

**Project Phase:** Analysis

**Activities:** Included are: Creating definitions and specifications for above through review of the Project Requirements, Training Requirements and continued interviews with internal/external SME’s.

**Phase output / Deliverable(s):** Training Outline.

Phase 3: Develop

**Description:** All training materials are created, which can include:

[Instructor-Led](http://www.intulogy.com/class-types/instructor-led-training.html)

* Participant and trainer manuals
* Projection slides
* Job aids
* Exercises

WBT or CBT [e-learning](http://www.intulogy.com/class-types/elearning.html) project,

* Distance learning tools such as course web-site or CD-ROM
* Evaluation tools
* Administration guides
* Train-the-trainer program and materials

**Project Phase:** Configuration and Testing

**Activities:** All content for the above is created.

**Phase output / Deliverable(s):** All training materials necessary for training Deliver .

Phase 4: Implement

**Description:** Training is delivered.

**Project Phase:** Implementation.

**Activities:** Can include: Administration of CBT/WBT materials, or scheduled classroom training delivery.

**Phase output / Deliverable(s):** Configuration and Test and Deployment

Phase 5: Evaluate

**Description:** Effectiveness of the training program is measured.

**Project Phase:** Deployment

**Activities:** Can include:

* Administration of evaluation tools
* Analysis of evaluation data, which can include:
  + Training reaction
  + Knowledge transfer
  + On-the-job performance change
  + Business/production metrics/data

**Phase output / Deliverable(s):** Can include: Training effectiveness analysis, project success analysis.

ADDIE will be utilized to design, develop and deliver SystemWorks(tm) training to MT SOS key stakeholders, with specific curricula for each distinct stakeholder audience, and training delivery timed to better enable and facilitate key phases of the project. For each of these trainings, the delivery method is selected to ensure maximum knowledge transfer without incurring unnecessary overhead and cost to MT SOS.

Training Experience

Training has been developed and delivered for each of the following FileONE system of record implementations:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***System Module*** | **AK** | **AR** | **GA** | **MS** | **MO** | **NH** | **NM** | **PA** | **USVI** |
| ***UCC  Backoffice*** |  | X |  | X | X | X | X | X | X |
| ***UCC Online  B2B Filings*** |  | X |  | X | X | X | X | X | X |
| ***Business Entity Backoffice*** | X |  | X | X | X | X | X | X | X |
| ***Online Web  Annual Reports*** | X |  | X | X | X | X |  |  |  |
| ***Online BE  Filing*** | X |  | X |  | X |  |  |  |  |
| ***Service of Process*** | X |  |  |  |  |  | X |  |  |
| ***Notary*** |  |  |  |  | X |  |  |  |  |
| ***Trademarks*** | X |  |  |  |  | X |  | X |  |
| ***Ag Liens/FSA*** |  |  |  | X | X | X | X |  |  |

Training Plan & Schedule

The actual Training Plan and Schedule for the MT SOS SystemWorks(tm) implementation will be developed once the project plan is established and analysis phase is complete. Detailed understanding and documentation of the implementation requirements and schedule are vital for creating an effective training plan and schedule. The MT SOS Training Sample will be similar to the sample provided in Appendix F.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Project Phase or Milestone** | **ADDIE Step** | **ADDIE Deliverable** |
|  | Analysis complete | Analyze | Training Plan |
|  | Quality Test Plans complete | Design and Develop | Training Materials DRAFT   * Training Module Definitions * Pre-requisite / Preparation Materials * Training Guides * Training Handouts * Training Exercises (labs) |
| Quality Test complete | Training Schedule |
|  | User Acceptance Testing (UAT) start | Implement | Pilot Training using DRAFT Training Materials |
|  | Incorporate feedback from UAT Training Delivery and Finalize Training Materials |
| UAT complete | 1. Deliver Training to executives, supervisors and administrators 2. Deliver Training to end-users in preparation for production go-live |
|  | Go-live | Evaluate | Training effectiveness is evaluated, and additional, at-the-desktop training is provided if necessary |
| **Items 3 and 4 repeat for multi-stage implementations.** | | | |

Training Administration and Delivery

FileONE adheres to industry best practice for training development and delivery. The curricula duration, materials, module definitions and timeframes will support instructor-led training as the method to be used for the MT SOS SystemWorks(tm) implementation, and FileONE recommends class size not exceed 12 training participants (not including the instructor) at any given time. This means that the curricula may have to be repeated several times in some cases, depending on the number of system users in the target audience for that curriculum.

Training Developer Resume

Please see resume for J. Sebastian Dorin, provided in Appendix D.

Technical Training

Development Tools and Technology

* Microsoft SQL Server 2005
  + T-SQL 2.0
  + Store Procedures
  + Views
  + User Defined Functions
  + Database Backup and Restore Procedures
  + Performance Tuning
  + Clustering and Federated Database Design
* Microsoft Visual Studio 2008
  + C# Programming Language
  + .Net 3.5 Framework
  + Enterprise Design Patterns
  + Test Driven Development
  + ASP.NET
  + Ajax
* Microsoft Team Foundation Server
  + Version Control
  + Configuration Management
  + Build Configuration
  + Automated Unit Test Build Procedures
  + MOSS Installation and Configuration
* InstallShield 2009
  + Custom Build Scripts
  + SAAS Installations
  + IIS Configuration
  + Component Deployment Methodology
* Microsoft Windows Server 2003
  + Active Directory Configuration & Deployment
  + IIS Configuration
  + Server Hardening Procedures and Best Practices
* Hardware Configuration
  + Cisco Load balancer
  + Managed Switch Configuration
  + SAN Installation and Configuration
  + General Datacenter Monitoring and Configuration

FileONE SystemWORKS Development Environment

* Solution Framework
  + Imaging Management
  + Data Access ( ORM )
  + Logging Management
  + Messaging Engine
  + Workflow Management
  + Business Rules Management
  + Financial Management
  + Print Management
  + Security Management
  + Unit Testing Development
* 3rd Party Tools
  + RAD Controls
  + Active Reports Engine
  + Atalasoft Imaging Module
* UCC Module
* Website Development
* Installation Development

### System Design Changes

As SystemWORKS is a Commercial-off-the-Shelf (COTS) product, there is little product design work anticipated. MT SOS business requirements will be captured in the Analysis Phase and used to configure the system during the Configuration and Test Phase. SystemWORKS is a rules- based system that leverages a powerful rules engine which obviates the need for the software development customization required in many legacy systems.

FileONE anticipates that there will be design work associated with data conversion, system interfaces, and systems integration. The design activities will occur in the Analysis Phase of the project. Any changes to Requirements, Configuration items, Design Specifications, and Resources are addressed and managed per the Change Management process detailed below.

Key to the change management process is the establishment of a mutually agreed upon Change Control Board (CCB). Generally speaking, the CCB serves as the governance over change. It weighs opportunity costs and approves major changes associated with the project. The CCB is created with key decision makers from both the MT SOS and FileONE, and established during the Definition Phase.

The Change Management process starts with an impact analysis. This analysis determines a decision is taken by the CCB as to whether to accept/reject/defer the change request. Change opportunity costs associated with schedule and/or resources. After review of the impact analysis, requests are logged and tracked in the Change Management Log.

The Change Control Process will be implemented at project initiation and will continue throughout the project’s duration. A Change Order serves as the vehicle for communicating and approving any desired changes to the services, deliverables and/or project. A proposed Change Order will describe the proposed change, the reason for the change and the effect the change is expected to have on the project

The CCB will review the proposed Change Order and will approve it, approve it with modification, recommend the decision for further study and discovery, or reject it. The amount and payment of any additional fees and /or costs, and any impact on Project Plan/Schedule will be mutually agreed upon in writing by both FileONE and the MT SOS, in a final approved mutually-signed Change Order.

A Change Order template follows.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change Order FORM** | | | | | | | |
| **I. Change Request (CR) Information** | | | | | | | |
|  | | | | **CR#:** | | | |
| **Initiated by:** | | | | **Date:** | | | |
| **Change Request Name:** | | | | | | | |
| **Description:** | | | | | | | |
| **Benefits:** | | | | | | | |
| **Risks:** | | | | | | | |
| **Priority:** | | **❑ High** | | **❑ Medium** | | **❑ Low** | |
| **Logged by:** | | | | | | **Date:** | |
| **Assigned to:** | | | | | | **Date:** | |
|  | | | | | | **Due Date:** | |
| **II. Impact Analysis Information** | | | | | | | |
| **Description: (Impact on Existing System including Design, Hardware, and Software)** | | | | | | | |
| **Level of Effort:** | | | | **$ Value of Impact:** | | | |
| **Resource/Staffing Impact:** | | | | | | | |
| **Schedule Impact:** | | | | | | | |
| **Education/Training/Documentation Impact:** | | | | | | | |
| **III. Resolution Information** | | | | | | | |
| **Status:** | **❑ Accepted** | | **❑ Rejected** | | **❑ Withdrawn** | | **❑ Deferred** |
| **IV. Sign-Off** | | | | | | | |
| ***MT SOS***  **Signature:**  **Date:** | | | | ***FileONE, Inc.***  **Signature:**  **Date:** | | | |
| **If Accepted, Date Implemented:** | | | | | | | |

**Change Request Process Overview**

The inception of a change request can occur at any point during the project. A change request will be initiated at any point in time when it is recognized that some circumstance (or set of circumstances) has affected or will affect the scope, schedule, or cost of the project. At a minimum, the following high level process illustrates how a change request is managed:

* Upon recognition of a change, a formal change request document is created.
* The request is provided to the project management team for logging and subsequent review by the appropriate subject matter experts.
* Subject matter expert(s) review the change request to make sure that the change is fully defined and the impact of the change is appropriately documented. With the results of each of these reviews fully documented on the request, the change is presented for approval.
* The MT SOS Project Manager and the FileONE team’s Project Manager presents the Change to CCB, and supporting documentation or discussion occurs with regards to the nature of the change. The impact section of the change is used to provide an impact assessment to the decision-making team.
* Approved changes result in additional planning as they are incorporated into the project plan and Project Plan. All requirements are then entered into the requirements matrix.
* The full impact of a change to a schedule may not be available until the subsequent planning based on the change can occur. If required, ‘What If’ analysis and planning can be performed at a mutually agreed upon rate to better determine the impact of a change before it is finally approved.

### 3.1.5 Testing Requirements

In general, the FileONE testing methodology consists of the three concepts outlined below:

**Quality Control**

Quality control is the process of ensuring that the work product meets the documented requirement. Quality control includes requirement approvals, requirement tractability, testing design, coding standards, peer review of code, test case development and testing. These functions will be executed within the project team starting with the Analysis Phase. In this phase, the As-Is and To-Be process maps are documented and any gap analysis identified. The test scenarios are then created from these activities. Both MT SOS and FileONE resources including Business Analysts, Test Engineers, Subject Matter Experts and Project Management will review and approve the test scenarios that will evolve into the required test cases.

**Quality Assurance**

Quality assurance documents that the quality control processes are in place and used. This incorporates industry best practices as well established metrics. Specific metrics will be established as part of the Definition Phase.

**Quality Review Process**

Quality Review ensures that the quality processes are effective in reducing the existence of errors and validating that quality control is providing results as expected.

The testing process is initiated via the development of a comprehensive plan involving both MT SOS and FileONE Test Resources and Business Analysts. This plan will test general functionality, any customized features, integration and interfaces, as well as performance. The User acceptance test will be developed outside of this specific plan as it involves a different set of resources.

Strict quality control procedures are used. The process verifies that the application meets the requirements as specified in the requirements as part of the Analysis Phase. FileONE’s methodology comprises three levels of testing:

**System Testing**

The system is tested as a complete, integrated system. System testing first occurs in the development environment, but eventually migrates to the production environment. Dedicated testers and/or other key project staff perform system testing. Functionality and performance testing are designed to catch bugs in the system, unexpected results, or other ways in which the system does not meet the stated requirements. Testers carry out detailed scenarios to test the accuracy, strength, and limits of the system, trying to break it if possible. Editorial reviews not only correct typographical and grammatical errors, but also improve the system’s overall usability by ensuring that on-screen language is clear and helpful to users. Accessibility reviews ensure that the system is accessible to users with disabilities.

**Integration Testing**

Incremental integration testing involves continuous testing of an application as new functionality is added. This requires that aspects of an application's functionality be able to work separately before all parts of the application are completed. Full integration testing tests combined parts of an application to determine if they function together correctly.

**Acceptance Testing**

The software is assessed against the requirements defined in the system requirements document. The user or client conducts the testing in the production environment. Successful acceptance testing is required before submitting to the client for approval. During this phase, project managers will monitor the system defects to ensure adherence to the acceptance metrics established in the Definition Phase.

Additional details regarding how FileONE’s testing methodology will ensure that the system meets the acceptance testing criteria are included in sections 3.1.6 and 3.1.7.

**Performance Testing**

Performance testing is typically done to help identify bottlenecks in a system, establish a baseline for future testing, support a performance tuning effort, determine compliance with performance goals and requirements, and/or collect other performance-related data to help stakeholders make informed decisions related to the overall quality of the application being tested. In addition, the results from performance testing and analysis can help you to estimate the hardware configuration required to support the application(s) when you “go live” to production operation.

The performance testing approach used in the SIMS consists of the following activities:

**Activity 1. Identify the Test Environment.** Identify the physical test environment and the production environment, as well as the tools and resources available to the test team.

**Activity 2. Identify Performance Acceptance Criteria**. Identify the response time, throughput, and resource utilization goals and constraints.

**Activity 3. Plan and Design Tests.** Identify key scenarios, determine variability among representative users and how to simulate that variability, define test data, and establish metrics to be collected.

**Activity 4. Configure the Test Environment.** Prepare the test environment, tools, and resources necessary to execute each strategy as features and components become available for test. Ensure that the test environment is instrumented for resource monitoring as necessary.

**Activity 5. Implement the Test Design.** Develop the performance tests in accordance with the test design.

**Activity 6. Execute the Test.** Run and monitor your tests. Validate the tests, test data, and results collection. Execute validated tests for analysis while monitoring the test and the test environment.

**Activity 7. Analyze Results, Report, and Retest.** Consolidate and share results data. Analyze the data both individually and as a cross-functional team. Reprioritize the remaining tests and re-execute them as needed.

#### 3.1.5.1 System Performance During Testing

The FileONE solution is an iterative approach with many gates throughout the project lifecycle. A set of acceptance criteria identified in section 3.1.6. Acceptance will serve as the entrance into the iteration. The testing metrics identified in section 3.1.6 include a set of regression test measures that ensure that as additional iterations of functionality are delivered and tested, not only is the current iteration accepted, but the delivered functionality does not “break” anything already delivered and accepted. SystemWORKS is a configurable, rules-based system with an iterative testing process. As new configurations are added, real time empirical testing is executed to verify the functionality. Performance will also be monitored and verified in real time during each development and testing cycle.

#### 3.1.5.2 Related Expenses

Our proposal includes costs for all required resources, travel expenses,, equipment, materials and supplies for all testing phases

#### 3.1.5.3 Testing Plan Outline

Please reference Appendix B for detailed information regarding FileONE standard system testing efforts as well as a sample test plan.

### 3.1.6 System Acceptance

FileONE shares the MT SOS approach to an iterative review and acceptance process. At the end of each phase, FileONE will present documentation for completion and acceptance for that respective phase. FileONE proposes the following approach for the acceptance of deliverables/milestones, determination of acceptance, rejection of deliverables, and acceptance of the final completed system. Validation criteria for the deliverables are given below.

Design documentation deliverables are reviewed for approval by the following FileONE teams:

1. Development – can design be implemented (coded)?
2. Product Management – does design meet requirements?
3. Quality Engineering – is design testable?
4. Architecture – does design follow architecture standards?

Software deliverables:

1. Successful Unit Tests with Report Data containing no outstanding Urgent or Major faults. All of the test cases have been executed
2. Successful execution of memory and bounds checking tools with Report Data
3. Validation of all functionality planned to be delivered for that stage in accordance with the documentation against the MT SOS requirements matrix
4. Quality validation of functionality delivered
5. Validation of performance
6. Adherence to Quality Metrics for Acceptance
7. Validation that the documentation assets match the software deliverable

Acceptance Criteria specific for each Phase are:

1. 100% successful unit tests and manual smoke tests
2. Unit Test coverage report given to FileONE and MT SOS and stored in the document repository
3. All outstanding issues logged in the Defect Tracking System
4. All integration and interface code as well as new features executed in Unit Tests produce expected results (all problems corrected and revalidated)
5. Test Plan completed approved by FileONE and MT SOS Project Management
6. Test Cases are 100% Attempted, 95% Successful with no Urgent or Critical defects reported
7. Delivered features have test code coverage of 90%
8. Feature Test Report Summary completed
9. All cascaded defects fixed
10. All specified metrics in the Quality Plan are met
11. Risk Mitigation Reports

Following the implementation of each module, the FileONE Support Team will warrant that each module meets the needs as defined in the proposal response. More information regarding the SIMS system warranty is provided in Section 3.1.10, “System Warranty”.

### 3.1.7 Final Acceptance

FileONE acknowledges the final acceptance criteria as defined in RFP Section 3.1.7, “Final Acceptance.” FileONE offers the following process that will be conducted by FileONE and MT SOS staff to facilitate final acceptance. As part of the Final Acceptance methodology, FileONE will work closely with the MT SOS to confirm that SystemWORKS functions as defined in the Determination for Acceptance in Section 3.1.6. During the Final System Acceptance process, FileONE and the MT SOS project managers and key personnel will focus on the following key system and process areas to ensure the SIMS application meets the proposed needs. The table below outlines the Final Acceptance processes, including the high-level criteria categories, a description of the process, and the documentation that FileONE and the MT SOS will use to complete the review.

|  |  |  |
| --- | --- | --- |
| **Criteria Category** | **Description** | **Documentation Used** |
| SIMS Functional Requirements | This criterion refers to the extent that the system satisfies the business goals, specifications and requirements set forth in the proposal (and change requests). | * FileONE proposed Scope of Work * FileONE response to RFP Appendix J * Change Orders |
| Data Volume & Stress Capacity | Determines the capacity of a system to function normally when used at maximum stress limits with regard to the data volume and overload of its resources. | * Stress Test Plan |
| Performance | Determines the performance of SIMS with respect to predefined targets and non functional requirements. The most important factors defining the performance of SIMS is the response time, distribution and efficient use of its resources, frequency of errors and the data receiving rate and results production rate. | * Performance Testing Plan |
| Security & Control | This criterion refers to the existence and proper function of the security and control procedures of SIMS to ensure data integrity, confidentiality and security. | * Role and User Job Function Matrix * Non Functional Requirements Documentation |
| Recovery | This criterion refers to the recovery capability of SIMS following an unexpected failure of the hardware or software. | * Disaster Recovery Plan |
| Procedures & Documentation | Refers to the precision in the documentation of the functions and use of SIMS and the extent that the automated processes (workflow, scheduled jobs, interfaces, etc.) are working properly as an integral part of the entire system. | * Standard Operating Procedures |

If the Final Completed System is rejected, Montana will supply a consolidated set of comments clearly indicating issues, unacceptable items, and/or requested revisions along with the specific requirement from the documents referenced in Determination of Acceptance, Section 3.1.6. Upon rejection and receipt of comments, FileONE will resubmit the items requiring remedy to Montana with appropriate corrections or modifications made. Montana will determine whether the correction is acceptable and provide a written determination. This process will continue until the Final Completed System is accepted.

### 3.1.8 Enhancements

FileONE views system enhancements as a subset of scope management and addresses them through the Change Management Process. FileONE has extensive Change Management experience managing the implementation of enterprise Business Process solutions similar to the MT SOS. With each SOS system FileONE has successfully implemented, we have worked closely with our clients to ensure that needs were met through process improvement and system enhancements. The following section response outlines FileONE’s enhancement process which will be used to manage the SIMS project.

FileONE will consider all proposed enhancements for inclusion in the SystemWORKS COTS product. If the enhancements are created solely for the MT SOS, those customizations will be separately licensed back to the MT SOS according to the terms in 3.3.2. If the proposed enhancements are expanded and broadened by FileONE to be of general utility to most Secretary of State offices, they will be become available as a standard option in SystemWORKS.

FileONE has included an optional allotment of discounted professional service hours through our ServiceWORKS offering. These professional service hours will allow the MT SOS to direct FileONE to work on new enhancements or modifications to the RFP requirements after project commencement. Optional discounted professional service bundles are included in the cost proposal.

The enhancement proposal process below details FileONE’s approach to managing change for system enhancements.

#### 3.1.8.1 Enhancement Proposals

Standard procedures are used to handle the introduction of enhancements to projects, as well as the management of requested changes. Using the Change Control Board (CCB) highlighted in response Section 3.1.4 above, FileONE and the MT SOS will evaluate enhancement requests as they are identified. A formal documented enhancement/change request process is required to allow for enhancements to be incorporated into the project with clarity regarding the nature of the enhancements and the impact to the project. Prior to final review of an enhancement by the CCB, FileONE will provide the following information regarding the enhancement in a System Enhancement Proposal document:

* + - Description of the enhancement, including impact if not done
    - Scope
    - Benefits and drawbacks
    - Effects on current design
    - Impacts on completed system components
    - Costs
    - Impacts to hardware and software (including capacity)
    - Effects on SOS staffing and skill requirements
    - Project schedule
    - Training requirements

**Enhancement Register**

A register of all changes are maintained throughout the project, and are discussed in Change Control Board meetings that are scheduled as required throughout the project. After enhancements are submitted, they are reviewed for approval, and are either accepted or rejected. Upon the acceptance of an enhancement, all of the requirements for the enhancement are incorporated in the project schedule and work breakdown structure so that staffing management and time management can be performed.

All enhancement request documentation will be stored electronically in the project directory of the FileONE information repository

**Enhancement Communication & Review**

Communication and review of proposed enhancements will be handled as part of the change management process. Typically, ongoing communication and review for approved enhancements occurs as part of the regular project management activities, but may require separate dedicated activities and meetings. The approved enhancements are incorporated into the schedule at regular intervals so that efficiency in planning activities can be maintained. The specific logistics regarding enhancement communication are to be defined in the project communication plan that is reviewed and approved by the project team at the start of the project.

**Hourly Rate: Ad Hoc Reporting**

In response to the stated need in the RFP for ad hoc reporting, FileONE is confident that many of the MT SOS’ ad hoc reporting needs will be effectively met by SystemWORKS’ easy to use on-board comprehensive ad-hoc reporting tool. This tool allows MT SOS staff to quickly answer questions with real time access to the SystemWORKS database. This powerful reporting tool provides the following key features:

* Business users can generate custom reports without involving database experts
* Data, knowledge and information is more accessible to administrators
* Significant reduction in reporting delays for decision makers
* Deliver rich, compelling graphical reports and information to stakeholders (e.g. State Legislature)
* Easy sharing, scheduling and automated distribution of reports

If the MT SOS needs additional assistance in providing ad hoc reports, FileONE can provide this service at the standard hourly rates included in the cost proposal.

### 3.1.9 Enhancement Acceptance

FileONE accepts the RFP requirements in Section 3.1.9 and understands that future MT SOS requirements may change as the SIMS project progress. Montana may, by written order, request changes in the scope of this Agreement and in the services or work to be performed. No services for which additional compensation may be charged by FileONE will be furnished without the written authorization from an authorized Montana representative. When Montana desires any addition to the deliverables or a change in the services to be provided under this Agreement, it will notify FileONE, who will then submit to Montana an enhancement request for approval authorizing said change. The enhancement request will detail the specific changes requested or required, the reason for the proposed change, and a detailed analysis of the impact of the enhancement request on the project, the time for completion, and the effect on costs. The enhancement request will state whether the change will cause an alteration in the price or the time required by FileONE for any aspect of its performance. Pricing of changes will be consistent with those established within this proposal.

### 3.1.10 System Warranty

FileONE understands and agrees to the terms outlined in 3.1.10. We have extensive experience providing warranty and support for Secretary of State Business Services Systems. In each case, the systems were implemented and supported in a phased approach by module (UCC, Business Entity, Notaries, Trademarks). Currently we supports nine (9) enterprise-class applications for other Secretary of States very similar in scope to the SIMS project. All nine Business Services applications were wholly implemented with FileONE as the prime contractor. Through this process, FileONE has provided support of the new modules while the remaining system modules are under development. The table below highlights the Secretaries of State by module which FileONE currently supports:

FileONE understands the MT SOS’ stated concern surrounding staff availability for parallel support and development efforts. With 55 employees solely dedicated to the Secretary of State Business Services market, FileONE has the largest staff of any of our competitors solely dedicated to Secretary of State Business Services. Thus we are best able to handle the demands of concurrent support and implementation needs.

FileONE’s support and maintenance team possess comprehensive knowledge of SystemWORKS and the MT SOS required functionality. These resources are solely dedicated to Secretary of State Business Services and will be leveraged throughout the project following each module go-live to support the SIMS application and project. As such, FileONE will meet the MT SOS requirement by assigning FileONE senior level resources with more than the six months minimum experience requirement to guide releases and other support tasks.

As detailed in our proposal, FileONE will accommodate the inclusion of Montana IT staff in the project in order to provide knowledge transfer to enable the State to perform the desired level of direct support of SIMS after the warranty period.

Some members of the SystemWORKS warranty team will be based at our offices in Cary, NC to leverage the entire team’s knowledge base of SystemWORKS. FileONE will work with the MT SOS to designate key resources to work onsite during the duration of the warranty period.

**SIMS Warranty Terms**

Please reference Appendix C, “Software Maintenance Agreement”, for details regarding the SIMS warranty and support terms.

For ongoing support after the initial one-year warranty period, FileONE has provided detailed pricing in our pricing proposal which will allow the State to fully understand the operational costs of support after the initial one year warranty expires. The optional support pricing is available in two packages:

(1)**Premium Support** including user helpdesk support and technical support with periodic software release updates and enhancements; and;

(2)**Standard Support** including technical support with periodic software release updates and enhancements but without user helpdesk support.

Under Standard Support, the State would provide support for user operational questions and FileONE will provide technical support to address software malfunctions. FileONE is flexible and open to other support arrangements that may be advantageous to the State. Other alternative support arrangements can be discussed at the proper time.

FileONE offers a full call center staffed by knowledgeable user and technical resources who can quickly and effectively answer most questions or create service desk tickets for items that cannot be addressed immediately. In addition, FileONE offers local onsite support through our Helena based partner, Front Desk Software. This combination of a comprehensive call center and a local onsite presence offers the benefits of a large knowledgeable call center staff coupled with onsite support staff that have directly worked on your implementation and are very familiar with your operations and infrastructure.

### 3.1.11 Roles and Responsibilities

As FileONE compiles customer requirements and configures SystemWORKS to support them, FileONE will work directly with the two MT SOS analysts to validate and make recommendations to optimize the system for your office. The MT SOS analysts will play a key role in system design reviews to validate application design, configuration and implementation. Their active participation and input is instrumental to ensuring the system is tailored to meet the MT SOS’ short and long term business objectives. When off site FileONE team participation is necessary, FileONE will provide teleconferencing and shared session technology to augment this process.

FileONE also welcomes participation from two to four State of Montana software development staff as stated in the RFP. FileONE has provided recommendations for training required for software developers for the SIMS project in section 3.1.3, “Training”. The State of Montana will be responsible for all costs related to training requirements for its internal IT staff. FileONE will also work with MT IT staff for four months (each developer) in order to provide side-by side development & system configuration, the goal of which is to provide training and knowledge transfer to position the state to provide possible future internal support and configuration of the SystemWORKS application.

FileONE has worked in step with a number of our partners to transfer knowledge of the systems we have implemented. The genesis of our legacy product, the Secretary of Knowledge Base (SOSKB), was developed in partnership with the North Carolina Secretary of State. FileONE provided critical system knowledge to four key NC SOS technical staff during the analysis, design, test, implementation, training and support phases. The North Carolina Secretary of State was able to fully support the application at the end of the project. FileONE’s approach typically involves creating documentation and test plans to optimize knowledge transfer. FileONE and the MT SOS will define responsibilities for both FileONE and the MT SOS during the analysis phase. Please reference section 3.1.1 for more details.

FileONE understands the requirement and value of incorporating MT SOS staff into all phases of the implementation of SystemWORKS. The approach we take varies on a client-by-client basis, but there are similarities in our methodology based on lessons learned and common sense. Examples of how we incorporate SOS staff follow:

* Identifying “early adopters” and those unafraid of changing to a new system, and assigning them leadership roles as appropriate
* Identifying skilled communicators and coaching them to help the project manager communicate goals and ideas
* Matching staff skill sets to appropriate tasks in the project
* Matching staff domain knowledge to particular LOBs and leveraging their experience as particular modules are rolled out
* Pairing counterpart SMEs from the MT staff with FileONE and/or Front Desk Software staff to leverage collective knowledge of each member of the pair
* Enforcing regular attendance by SOS staff at scheduled project management meetings
* Urging the SOS to name an executive “sponsor” within its organization that functions as an empowered overseer of the project, especially for times when timely high-level executive decisions are necessary

Please note that FileONE accepts the resources and project lead positions as outlined within the table on pages 23-25 of the original RFP.

**Independent Verification and Validation (IV&V) and Issue Management**

FileONE has successful previous experience working with 3rd party IV&V parties to implement Secretary of State IT solutions. As an example, IV&V was involved in a project for the State of New Mexico. During the course of the project, an extremely minor issue arose when the IV&V vendor requested project documentation that was not required for FileONE to produce under the contract but the IV&V vendor required the documents to fulfill its duties. In order to resolve the issue and to keep the project moving ahead, FileONE elected to provide the requested documentation without compensation. No other IV&V issues occurred during the project and the implementation was successful.

FileONE’s extensive enterprise-class implementation expertise helps us to identify potential risks and issues early on to mitigate their impact to the project. The overview below highlights FileONE’s issue management overview.

**Issue Management Approach**

During the Definition Phase, risk and issue management plans are conceived and a planning exercise is conducted. Issues are first identified and then categorized according to their potential impact on the project and their probability of occurrence. Next, the issues are reviewed so that they can be managed with appropriate strategies and specific activities that are then incorporated into the project plan and schedule. After the initial risk and issue assessment is performed, issues are reviewed, monitored and controlled throughout the project. Details regarding the issue assessment and issue management planning process are presented below.

The Issue Management Plan involves the following activities performed throughout the project lifecycle.

**Issue Identification**

The first step in creating an Issue Management Plan is to identify the likely issues that may affect the project. A series of issue categories is identified and for each category a suite of potential issues is listed. All issues identified throughout the project are described in detail and documented within the Issue Register. Issue Identification is an iterative process as new issues may become apparent throughout the project lifecycle; therefore issues are monitored and controlled throughout all phases of the project lifecycle.

**Issue Analysis**

Issue Analysis involves the prioritization of issues for subsequent analysis or action based upon the likelihood of occurrence and the assessed impact of the issue. The output of performing the issue analysis is that each issue identified is now classified in terms of probability and the impact of the issue is defined in terms of how the issue will affect project objectives. The results of the issue analysis are recorded in the Issue Register.

**Issue Response Planning**

Issue response planning involves identifying options and actions that can be applied to reduce the impact of issues such that the project objectives are not compromised.

The three primary strategies available for managing issues are avoidance, transfer, and mitigation:

* Issue Avoidance - largely involves a modification to the project management plan to eliminate the threat posed by the issue or take specific actions to prevent the occurrence of the issue.
* Issue Transfer - involves the transfer of issue to a third party. This strategy is almost exclusively used to address financial issues and is rarely applied in software development projects.
* Issue Mitigation - involves reducing the probability of a issue event occurrence or the impact of the issue to an acceptable level. Of the three issue management strategies, issue mitigation is often the most complex due to the assessments involved in what is determined as acceptable.

Once the specific strategies for responding to issue have been identified, the specific actions for managing the issue are recorded in the Issue Register. Each task/action to be taken to manage issue is then incorporated into the overall project plan at the project task level through incorporation into the Project Schedule, Work Breakdown Structure, and Staffing Management Plan.

**Issue Monitoring and Control**

Issue Monitoring and Control involves the ongoing process of identifying, analyzing, and responding to new issues as they are encountered, as well as managing issues that have already been identified. This process involves a regular review of the Issue Register to identify those issues that should be closely monitored. Any issues that require heightened monitoring are noted and an additional issue management activity is subsequently incorporated into the Project Schedule, Work Breakdown Structure, and Staffing Management Plan. Any issues that are identified as avoided or no longer relevant should be updated in the Issue Register so subsequent review of these issues is not performed.

The Issue Register will be reviewed on a periodic basis as agreed upon by the project team so that adequate monitoring and control can be performed.

### Development Phases

With eleven (11) enterprise Secretary of State Business Process solutions implemented over nine years solely dedicated to this market, FileONE success delivering systems of this size and scope is unmatched. Through each implementation, FileONE has employed our subject matter and technical expertise to implement a solution that offers the MT SOS the best short-term and long-term return on investment.

FileONE recommends that the SIMS project be implemented in a phased approach by Lines of Business modules. In this manner, there is reduced risk as smaller components are implemented and build on top of each other. The benefits of this approach are that you realize quicker replacement of your legacy systems; reduced risk associated with a “big bang” approach and increased flexibility for change as you become familiar with the new system earlier in the SIMS lifecycle. The Lines of Business modules will be implemented in the following order:

1. UCC and UCC Online
2. Corporate (Business Entity) and Corporate Online (Business Entity Online)
3. Trademark and Notary

FileONE recognizes that the MT SOS may want to implement the SIMS project as one large implementation. The FileONE solution can easily be accommodated to meet this request if required by consolidating similar phase activities. For example all Analysis phase activities for all Lines of Business would be done together.

The work plan and timelines that follow illustrate this approach. Please reference section 3.1.1, Methodology for specific detail on the approach activities and deliverables.

]

|  |  |
| --- | --- |
| ***SystemWORKS Project Plan For SIMS*** | |
| **PHASE** | **TASK** |
| ***DEFINE*** | ***General Project Module Define Phase*** |
| Project Planning | **Project Planning** |
| Define | Internal Kickoff Meeting/Review Background Materials |
| Define | Conduct Project Planning Meeting with Client |
| Define | Identify & Confirm Client Project Team and Resources |
| Define | Confirm Project Scope, Milestones |
| Define | Confirm Project Budget |
| Define | Confirm Project Work Area and Logistics |
| Define | Initial Project Setup (Time & Billing, SharePoint Site, Project Calendar) |
| PM | Plan Change Management Approach |
| Define | Plan Pre-engagement with Internal Team |
| Define | Review Project Startup readiness |
| Define | Update Project Plan |
| Project Kickoff | **Project Kickoff** |
| Define | Prepare for Project Kickoff Meeting/Develop Presentation |
| Define | Conduct Kick off meeting with Client |
| ***ANALYSIS*** | ***General Project Module Analysis Phase*** |
| Setup Tech Environment | **Setup Tech Environment** |
| Analysis | Conduct Business Systems Architecture Assessment for SystemWORKS |
| Analysis | Procure Hardware (hours only assigned if FileONE provides the effort) |
| Analysis | Install & Configure Hardware & Create Test and Production Environments |
| Analysis | Security Configuration – Network |
| Analysis | Procure Software |
| Analysis | Install & Configure Software on Test & Production Environments |
| Analysis | Install SystemWORKS |
| Backup and Recovery | **Backup and Recovery** |
| Analysis | Create a centralized inventory of software titles owned |
| Analysis | Create a centralized set of backup copies of installation media for software titles owned. |
| Analysis | Create a centralized set of proof of ownership documentation for software titles owned. |
| Analysis | Assemble and verify availability of all necessary hardware, software, and resources at the back-up site |
| Analysis | Install and test systems and applications software |
| Analysis | Arrange for and test/verify full recovery of communications capabilities |
| Analysis | Determine starting point for recovered operations |
| Analysis | establish latest back-up files to Trademark & Notary restored |
| Analysis | establish priority sequence for restoring most critical applications |
| Analysis | revise production schedules |
| Analysis | Develop alert the user community to status and potential gaps in data and/or changes procedure |
| Analysis | Develop Restore operations in Trademark & Notary process |
| **UCC and UCC On-line (OL) Module** | |
| ***DEFINE*** | ***UCC Define Phase*** |
| Project Planning | **Project Planning** |
| Define | Internal Kickoff Meeting/Review Background Materials |
| Define | Conduct Project Planning Meeting with Client |
| Define | Identify & Confirm Client Project Team and Resources |
| Define | Confirm Project Scope, Milestones |
| Define | Confirm Project Budget |
| Define | Confirm Project Work Area and Logistics |
| Define | Initial Project Setup (Time & Billing, SharePoint Site, Project Calendar) |
| PM | Plan Change Management Approach |
| Define | Plan Pre-engagement with Internal Team |
| Define | Update Project Plan |
| Project Kickoff | **Project Kickoff** |
| Define | Prepare for Project Kickoff Meeting/Develop Presentation |
| Define | Conduct Kick off meeting with Client |
| ***ANALYSIS*** | ***UCC & UCC OL Analysis Phase*** |
| System Design | **UCC & UCC OL Functional System Design** |
| Analysis | Review and Document Current Business Processes |
| Analysis | Demonstrate Software Functionality |
| Analysis | Discover Object & UI Requirements – UCC |
| Analysis | Determine Organization Structure and Security Model |
| Analysis | Develop Prototype |
| Analysis | GAP Assessment (Prototype Review) |
| Analysis | Montana State Statutory Compliance |
| Analysis | Define System Parameters & User Options & Job Scheduling |
| Plan Data Conversion | **UCC & UCC OL Data Conversion** |
| Analysis | Scope and Movement of Data |
| Analysis | Conversion Design Analysis |
| Analysis | Data Source Conversion Mapping (source - to - destination) |
| Analysis | Document Data Conversion Plan |
| Analysis | Develop Conversion Programs |
| Integration Design | **UCC & UCC OL Integration Design** |
| Analysis | **Design Integration** |
| Analysis | Define Functional Integration Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Integration Design |
| Analysis | Finalize Entire Integration Design & Obtain Signoff - |
| Integration Design | **UCC & UCC OL Interface Design** |
| Analysis | **Design Interfaces** |
| Analysis | Define Functional Interface Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Interface Design |
| Analysis | Finalize Entire Interface Design & Obtain Signoff - |
| Custom Report Design | **UCC & UCC OL Report and Form Design** |
| Analysis | Define Reports |
| Analysis | Reports Design |
| Analysis | Form Redesign |
| Train & Deploy Options | **UCC and UCC OL Train & Deploy Options** |
| Analysis | Define Training Scope |
| Analysis | Define Testing Scope and Requirements |
| Analysis | Define Deployment |
| Analysis | Create design documentation |
| Confirm Build Estimate | **Confirm UCC and UCC OL Estimates** |
| ***Configuration and Test*** | ***UCC and UCC OL Configuration/Test Phase*** |
| System Configuration and Test | **UCC and UCC OL System Configuration** |
| Configuration and Test | User Interface Configuration |
| Configuration and Test | Workflow Processing Configuration |
| Configuration and Test | Roles/Access Templates Configuration |
| Configuration and Test | User Access Configuration |
| Configuration and Test | User Account Configuration |
| Configuration and Test | Business Rules Configuration |
| Configuration and Test | Filing Types/Rates Configuration |
| Configuration and Test | Financial & Accounting Configuration |
| Configuration and Test | Payment Type Configuration |
| Configuration and Test | Report Format Configuration |
| Configuration and Test | Document Form Configuration |
| Configuration and Test | UCC On Line |
| Configuration and Test | Roles/Access Templates Configuration |
| Configuration and Test | User Access Configuration |
| Configuration and Test | User Account Configuration |
| Configuration and Test | Business Rules Configuration |
| Configuration and Test | Payment Type Configuration |
| Configuration and Test | Report Format Configuration |
| Configuration and Test | Document Form Configuration |
| Configuration and Test | Payment Processing |
| Configuration and Test | Fees |
| Configuration and Test | Orders |
| Configuration and Test | Refunds |
| Configuration and Test | System |
| Configuration and Test | Key Encryption |
| Configuration and Test | Folder permissions |
| Configuration and Test | Create Users (Active Directory) |
| Configuration and Test | Configure DB |
| Configuration and Test | Set System Preferences |
| Configuration and Test | Configure System Settings |
| Configuration and Test | Job Scheduling |
| Configuration and Test | Security |
| Configuration and Test | Set up Roles |
| Configuration and Test | Workflow(s) |
| Configuration and Test | Application Data Administration (dev) |
| Configuration and Test | International Considerations |
| Configuration and Test | Other |
| Configuration and Test | Correspondence |
| Develop Reports | **Develop Reports and Forms** |
| Configuration and Test | Report Creation - Build, Test |
| Configuration and Test | Form Creation - Build, Test |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix UCC Integration with NIC |
| Configuration and Test | Build, Unit Test and Bug Fix Corporate (Business Entity) Integration with NIC |
| Configuration and Test | Build, Unit Test and Bug Fix Trademark and Notary Integration with NIC |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix UCC Interface with NIC |
| Configuration and Test | Build, Unit Test and Bug Fix Corporate (Business Entity) Interface with NIC |
| Configuration and Test | Build, Unit Test and Bug Fix (Trademark and Notary) Interface with NIC |
| Initial Data Conversion | **Initial Data Conversion** |
| Configuration and Test | Perform Conversion |
| Configuration and Test | Run Scripts in Development and Test/Training Environments |
| Configuration and Test | Test & Verify Data |
| Configuration and Test | **Image Conversion** |
| Configuration and Test | Image Conversion Mapping |
| Training & Pilot Planning | **Training & Pilot Planning** |
| Configuration and Test | Deployment Plan - Finalize Timing, Approach & Resources |
| Configuration and Test | Develop Training Materials |
| **Test** | **Test** |
| Configuration and Test | Design User Test Scenarios |
| Configuration and Test | Identify Key User Roles and Data Flows |
| Configuration and Test | Document Scenarios for User Functional Testing |
| Configuration and Test | Document Workflow Test Scenarios |
| Configuration and Test | System, Integration, and Interface Testing |
| Configuration and Test | System and Integration Test Execution |
| Configuration and Test | Run All Reports & Verify Results |
| **Test** | **User Acceptance Test** |
| Configuration and Test | Pilot the System |
| Configuration and Test | Train Pilot Users |
| Configuration and Test | Run Application Test Scenarios |
| Configuration and Test | User Review Sessions |
| Configuration and Test | Implement Changes Based on Test Results |
| **Test** | **Performance Testing** |
| Configuration and Test | Performance Testing |
| Configuration and Test | Run Workflow Manager Tests |
| Configuration and Test | Update Functional & Technical Documents |
| Configuration and Test | Implement Changes Based on Test |
| ***DEPLOY*** | ***UCC and UCC OL Deploy Phase*** |
| Train Users | **Train Users** |
| Deploy | Conduct User Training / Mentoring Users |
| Deploy | Conduct Technical Training Data Administration |
| Documentation | **Documentation** |
| Deploy | Document Customized Modules |
| Migrate to Production | **Migrate to Production** |
| Deploy | Review Cut-Over and System Usage |
| Deploy | Promote Customizations to Production |
| Deploy | Setup Users |
| Execute Data Conversion | **Execute Data Conversion** |
| Deploy | **Data Conversion** |
| Deploy | Run scripts to Populate Production |
| Deploy | Confirm Data Conversion |
| Deploy Integration | **Deploy Integration** |
| Deploy | Point UCC integrations to Prod Systems and Confirm |
| Deploy Integration | **Deploy Interface** |
| Deploy | Point UCC integrations to Prod Systems and Confirm |
| Deploy Reports | **Deploy Reports and Forms** |
| Deploy | Publish Reports to Production |
| Deploy | Deploy Forms to Production |
| Go Live / Post Impl Support | **Go Live / Post Impl Support** |
| Deploy | Go Live - Cut Over to Live System |
| Deploy | Monitor System & Provide Application Support |
| Deploy | Obtain Implementation Signoff |
| ***Project Management*** | ***ONGOING PROJECT MANAGEMENT*** |
| PM | **PM Work** |
| PM | Create Status Reports |
| PM | Conduct Project Status Meetings |
| PM | Scheduling and Tracking (Project Plan and Actuals) |
| PM | Risk Management and Issue Resolution |
| PM | Quality Assurance |
| PM | Communications |
| PM | Warranty related activities |
| Change Management | **Change Management** |
| **Corporate (Business Entity and Business Entity Online (OL)) Module** | |
| ***DEFINE*** | ***Corporate (Business Entity) Define Phase*** |
| Project Planning | **Project Planning** |
| Define | Internal Kickoff Meeting/Review Background Materials |
| Define | Conduct Project Planning Meeting with Client |
| Define | Identify & Confirm Client Project Team and Resources |
| Define | Confirm Project Scope, Milestones |
| Define | Confirm Project Budget |
| Define | Confirm Project Work Area and Logistics |
| Define | Initial Project Setup (Time & Billing, SharePoint Site, Project Calendar) |
| PM | Plan Change Management Approach |
| Define | Plan Pre-engagement with Internal Team |
| Define | Update Project Plan |
| Project Kickoff | **Project Kickoff** |
| Define | Prepare for Project Kickoff Meeting/Develop Presentation |
| Define | Conduct Kick off meeting with Client |
| ***ANALYSIS*** | ***Corporate (Business Entity) Analysis Phase*** |
| System Design | **Corporate (Business Entity) Functional System Design** |
| Analysis | Review and Document Current Business Processes |
| Analysis | Demonstrate Software Functionality |
| Analysis | Discover Object & UI Requirements - Corporate (Business Entity) |
| Analysis | Determine Organization Structure and Security Model |
| Analysis | Develop Prototype |
| Analysis | Montana State Statutory Compliance |
| Analysis | GAP Assessment (Prototype Review) |
| Analysis | Finalize Functional Design Documentation/Obtain Client Signoff - Deliverable |
| Analysis | Define System Parameters & User Options & Job Scheduling |
| Plan Data Conversion | **Corporate (Business Entity) Data Conversion** |
| Analysis | Scope and Movement of Data |
| Analysis | Conversion Design Analysis |
| Analysis | Data Source Conversion Mapping (source - to - destination) |
| Analysis | Document Data Conversion Plan |
| Analysis | Develop Conversion Programs |
| Integration Design | **Corporate (Business Entity) Integration Design** |
| Analysis | **Design Integration** |
| Analysis | Define Functional Integration Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Integration Design |
| Analysis | Finalize Entire Integration Design & Obtain Signoff - |
| Integration Design | **Corporate (Business Entity) Interface Design** |
| Analysis | **Design Interfaces** |
| Analysis | Define Functional Interface Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Interface Design |
| Analysis | Finalize Entire Interface Design & Obtain Signoff - |
| Custom Report Design | **Corporate (Business Entity) Report Design** |
| Analysis | Define Reports |
| Analysis | Forms re-design |
| Train & Deploy Options | **Corporate (Business Entity) Train & Deploy Options** |
| Analysis | Define Training Scope |
| Analysis | Define Testing Scope and Requirements |
| Analysis | Define Deployment |
| Analysis | Create design documentation |
| Confirm Build Estimate | **Confirm Corporate (Business Entity) Estimates** |
| Analysis | Update Implementation Work plan and Estimate |
| ***Configuration and Test*** | ***Corporate (Business Entity) Configuration/Test Phase*** |
| System Configuration and Test | **Corporate (Business Entity) Configuration** |
| Configuration and Test | Financial & Accounting Configuration |
| Configuration and Test | Payment Type Configuration |
| Configuration and Test | Document Form Configuration |
| Configuration and Test | Image Conversion Mapping |
| Configuration and Test | Interface(s) Configuration |
| Configuration and Test | Static Lookup Table Configuration |
| Configuration and Test | Corporate(Business Entity) On-line |
| Configuration and Test | User Interface Configuration |
| Configuration and Test | Workflow Processing Configuration |
| Configuration and Test | Roles/Access Templates Configuration |
| Configuration and Test | User Access Configuration |
| Configuration and Test | User Account Configuration |
| Configuration and Test | Business Rules Configuration |
| Configuration and Test | Filing Types/Rates Configuration |
| Configuration and Test | Financial & Accounting Configuration |
| Configuration and Test | Payment Type Configuration |
| Configuration and Test | Document Form Configuration |
| Configuration and Test | Payment Processing |
| Configuration and Test | Fees |
| Configuration and Test | Orders |
| Configuration and Test | Refunds |
| Configuration and Test | System |
| Configuration and Test | Key Encryption |
| Configuration and Test | Folder permissions |
| Configuration and Test | Create Users (Active Directory) |
| Configuration and Test | Configure DB |
| Configuration and Test | Set System Preferences |
| Configuration and Test | Configure System Settings |
| Configuration and Test | Job Scheduling |
| Configuration and Test | Security |
| Configuration and Test | Set up Roles |
| Configuration and Test | Workflow(s) |
| Configuration and Test | Application Data Administration (dev) |
| Configuration and Test | International Considerations |
| Configuration and Test | Other |
| Configuration and Test | Correspondence |
| Develop Reports | **Develop Reports and Forms** |
| Configuration and Test | Report Creation - Build, Test |
| Configuration and Test | Form Creation - Build, Test |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix Trademark & Notary Integration |
| Configuration and Test | Build, Unit Test and Bug Fix Corporate (Business Entity) Integration |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix Trademark & Notary Interface |
| Configuration and Test | Build, Unit Test and Bug Fix Corporate (Business Entity) Interface |
| Initial Data Conversion | **Initial Data Conversion** |
| Configuration and Test | Perform Conversion |
| Configuration and Test | Run Scripts in Development and Test/Training Environments |
| Configuration and Test | Test & Verify Data |
| Configuration and Test | **Image Conversion** |
| Configuration and Test | Image Conversion Mapping |
| Training & Pilot Planning | **Training & Pilot Planning** |
| Configuration and Test | Deployment Plan - Finalize Timing, Approach & Resources |
| Configuration and Test | Develop Training Materials |
| **Test** | **Test** |
| Configuration and Test | Design User Test Scenarios |
| Configuration and Test | Identify Key User Roles and Data Flows |
| Configuration and Test | Document Scenarios for User Functional Testing |
| Configuration and Test | Document Workflow Test Scenarios |
| Configuration and Test | System, Integration, and Interface Testing |
| Configuration and Test | System and Integration Test Execution |
| Configuration and Test | Run All Reports & Verify Results |
| **Test** | **User Acceptance Test** |
| Configuration and Test | Pilot the System |
| Configuration and Test | Train Pilot Users |
| Configuration and Test | Run Application Test Scenarios |
| Configuration and Test | User Review Sessions |
| Configuration and Test | Implement Changes Based on Test Results |
| **Test** | **Performance Testing** |
| Configuration and Test | Performance Testing |
| Configuration and Test | Run Workflow Manager Tests |
| Configuration and Test | Update Functional & Technical Documents |
| Configuration and Test | Implement Changes Based on Test |
| ***DEPLOY*** | ***Corporate (Business Entity) Deploy Phase*** |
| Train Users | **Train Users** |
| Deploy | Conduct User Training / Mentoring Users |
| Deploy | Conduct Technical Training Data Administration |
| Documentation | **Documentation** |
| Deploy | Document Customized Modules |
| Migrate to Production | **Migrate to Production** |
| Deploy | Review Cut-Over and System Usage |
| Deploy | Promote Customizations to Production |
| Deploy | Setup Users |
| Execute Data Conversion | **Execute Data Conversion** |
| Deploy | **Data Conversion** |
| Deploy | Run scripts to Populate Production |
| Deploy | Confirm Data Conversion |
| Deploy Integration | **Deploy Integration** |
| Deploy | Point Trademark & Notary integrations to Prod Systems and Confirm |
| Deploy Integration | **Deploy Interface** |
| Deploy | Point Trademark & Notary integrations to Prod Systems and Confirm |
| Deploy Reports | **Deploy Reports** |
| Deploy | Publish Reports to Production |
| Deploy | Publish Forms to Production |
| Go Live / Post Impl Support | **Go Live / Post Impl Support** |
| Deploy | Go Live - Cut Over to Live System |
| Deploy | Monitor System & Provide Application Support |
| Deploy | Obtain Implementation Signoff |
| ***Project Management*** | ***ONGOING PROJECT MANAGEMENT*** |
| PM | **PM Work** |
| PM | Create Status Reports |
| PM | Conduct Project Status Meetings |
| PM | Scheduling and Tracking (Project Plan and Actuals) |
| PM | Risk Management and Issue Resolution |
| PM | Quality Assurance |
| PM | Communications |
| PM | Warranty related activities |
| **Trademark and Notary Module** | |
| ***DEFINE*** | ***Trademark and Notary Define Phase*** |
| Project Planning | **Project Planning** |
| Define | Internal Kickoff Meeting/Review Background Materials |
| Define | Conduct Project Planning Meeting with Client |
| Define | Identify & Confirm Client Project Team and Resources |
| Define | Confirm Project Scope, Milestones |
| Define | Confirm Project Budget |
| Define | Confirm Project Work Area and Logistics |
| Define | Initial Project Setup (Time & Billing, SharePoint Site, Project Calendar) |
| PM | Plan Change Management Approach |
| Define | Plan Pre-engagement with Internal Team |
| Define | Update Project Plan |
| Project Kickoff | **Project Kickoff** |
| Define | Prepare for Project Kickoff Meeting/Develop Presentation |
| Define | Conduct Kick off meeting with Client |
| ***ANALYSIS*** | ***Trademark & Notary Analysis Phase*** |
| System Design | **Trademark & Notary Functional System Design** |
| Analysis | Review and Document Current Business Processes |
| Analysis | Demonstrate Software Functionality |
| Analysis | Discover Object & UI Requirements |
| Analysis | Determine Organization Structure and Security Model |
| Analysis | Develop Prototype |
| Analysis | Montana State Statutory Compliance |
| Analysis | GAP Assessment (Prototype Review) |
| Analysis | Finalize Functional Design Documentation/Obtain Client Signoff |
| Analysis | Define System Parameters & User Options & Job Scheduling |
| Plan Data Conversion | **Trademark & Notary Data Conversion** |
| Analysis | Scope and Movement of Data |
| Analysis | Conversion Design Analysis |
| Analysis | Data Source Conversion Mapping (source - to - destination) |
| Analysis | Document Data Conversion Plan |
| Analysis | Develop Conversion Programs |
| Integration Design | **Trademark & Notary Integration Design** |
| Analysis | **Design Integration** |
| Analysis | Define Functional Integration Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Integration Design |
| Analysis | Finalize Entire Integration Design & Obtain Signoff - |
| Integration Design | **Trademark & Notary Interface Design** |
| Analysis | **Design Interfaces** |
| Analysis | Define Functional Interface Requirements |
| Analysis | Define Data Elements (source & destination), Direction, Frequency |
| Analysis | Document Interface Design |
| Analysis | Finalize Entire Interface Design & Obtain Signoff - |
| Custom Report Design | **Trademark & Notary Report Design** |
| Analysis | Define Reports |
| Analysis | Design Forms |
| Train & Deploy Options | **Trademark & Notary Train & Deploy Options** |
| Analysis | Define Training Scope |
| Analysis | Define Testing Scope and Requirements |
| Analysis | Define Deployment |
| Analysis | Create design documentation |
| Confirm Build Estimate | **Confirm Trademark & Notary Estimates** |
| Analysis | Update Implementation Work plan and Estimate |
| ***Configuration and Test*** | ***Trademark & Notary Configuration/Test Phase*** |
| System Configuration and Test | **Trademark & Notary System Configuration** |
| Configuration and Test | Financial & Accounting Configuration |
| Configuration and Test | Payment Type Configuration |
| Configuration and Test | Document Form Configuration |
| Configuration and Test | Image Conversion Mapping |
| Configuration and Test | Interface(s) Configuration |
| Configuration and Test | Static Lookup Table Configuration |
| Configuration and Test | Payment Processing |
| Configuration and Test | Fees |
| Configuration and Test | Orders |
| Configuration and Test | Refunds |
| Configuration and Test | System |
| Configuration and Test | Key Encryption |
| Configuration and Test | Folder permissions |
| Configuration and Test | Create Users (Active Directory) |
| Configuration and Test | Configure DB |
| Configuration and Test | Set System Preferences |
| Configuration and Test | Configure System Settings |
| Configuration and Test | Job Scheduling |
| Configuration and Test | Security |
| Configuration and Test | Set up Roles |
| Configuration and Test | Workflow(s) |
| Configuration and Test | Application Data Administration (dev) |
| Configuration and Test | International Considerations |
| Configuration and Test | Other |
| Configuration and Test | Correspondence |
| Develop Reports | **Develop Reports** |
| Configuration and Test | Report Creation - Build, Test |
| Configuration and Test | Forms Creation - Build, Test |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix Trademark & Notary Integration |
| Build System Integration | **Build System Integration** |
| Configuration and Test | Build, Unit Test and Bug Fix Trademark & Notary Interface |
| Initial Data Conversion | **Initial Data Conversion** |
| Configuration and Test | Perform Conversion |
| Configuration and Test | Run Scripts in Development and Test/Training Environments |
| Configuration and Test | Test & Verify Data |
| Configuration and Test | **Image Conversion** |
| Configuration and Test | Image Conversion Mapping |
| Training & Pilot Planning | **Training & Pilot Planning** |
| Configuration and Test | Deployment Plan - Finalize Timing, Approach & Resources |
| Configuration and Test | Develop Training Materials |
| **Test** | **Test** |
| Configuration and Test | Design User Test Scenarios |
| Configuration and Test | Identify Key User Roles and Data Flows |
| Configuration and Test | Document Scenarios for User Functional Testing |
| Configuration and Test | Document Workflow Test Scenarios |
| Configuration and Test | System, Integration, and Interface Testing |
| Configuration and Test | System and Integration Test Execution |
| Configuration and Test | Run All Reports & Verify Results |
| **Test** | **User Acceptance Test** |
| Configuration and Test | Pilot the System |
| Configuration and Test | Train Pilot Users |
| Configuration and Test | Run Application Test Scenarios |
| Configuration and Test | User Review Sessions |
| Configuration and Test | Implement Changes Based on Test Results |
| **Test** | **Performance Testing** |
| Configuration and Test | Performance Testing |
| Configuration and Test | Run Workflow Manager Tests |
| Configuration and Test | Update Functional & Technical Documents |
| Configuration and Test | Implement Changes Based on Test |
| ***DEPLOY*** | ***Trademark & Notary Deploy Phase*** |
| Train Users | **Train Users** |
| Deploy | Conduct User Training / Mentoring Users |
| Deploy | Conduct Technical Training Data Administration |
| Documentation | **Documentation** |
| Deploy | Document Customized Modules |
| Migrate to Production | **Migrate to Production** |
| Deploy | Review Cut-Over and System Usage |
| Deploy | Promote Customizations to Production |
| Deploy | Setup Users |
| Execute Data Conversion | **Execute Data Conversion** |
| Deploy | **Data Conversion** |
| Deploy | Run scripts to Populate Production |
| Deploy | Confirm Data Conversion |
| Deploy Integration | **Deploy Integration** |
| Deploy | Point Trademark & Notary integrations to Prod Systems and Confirm |
| Deploy Integration | **Deploy Interface** |
| Deploy | Point Trademark & Notary integrations to Prod Systems and Confirm |
| Deploy Reports | **Deploy Reports** |
| Deploy | Publish Reports to Production |
| Deploy | Publish Forms to Production |
| Go Live / Post Impl Support | **Go Live / Post Impl Support** |
| Deploy | Go Live - Cut Over to Live System |
| Deploy | Monitor System & Provide Application Support |
| Deploy | Obtain Implementation Signoff |
| ***Project Management*** | ***ONGOING PROJECT MANAGEMENT*** |
| PM | **PM Work** |
| PM | Create Status Reports |
| PM | Conduct Project Status Meetings |
| PM | Scheduling and Tracking (Project Plan and Actuals) |
| PM | Risk Management and Issue Resolution |
| PM | Quality Assurance |
| PM | Communications |
| PM | Warranty related activities |
| Change Management | **Change Management** |
| PM | Warranty related activities |

Additional detail for the FileONE solution is noted below:

* FileONE has included an estimated project plan timelines for each phase of the project in Section 3.1.1. Methodology
* There are specific tasks in the Project Plan to address and account for forms re-design activities
* There are specific tasks in the Project Plan to address and account for Data conversion activities
* There are specific tasks in the Project Plan to address and account for Montana State Statutory compliance reviews

The resource allocation by module and phase is shown on the next page:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General Project Module** | | | | | | | | | | |
| **FileONE resources On Site Resource in Helena** | | | | | | | | | |  |
| **Project Phase** | **Duration** | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Define | October 1, 2008 - October 20, 2008 | 110.00 | 80.00 |  |  |  |  |  | 190.00 |  |
| Analysis | October 21, 2008 - December 10, 2008 | 450.00 | 500.00 | 120.00 | 950.00 | 200.00 | 252.50 |  | 2,472.50 |  |
| Totals  October 1, 2008 - December 9, 2009 | | 560.00 | 580.00 | 120.00 | 950.00 | 200.00 | 252.50 |  | 2,662.50 |  |
| **FileONE resources in Cary** | | | | | | | | | |  |
| **Project Phase** | **Duration** | **Project Manager** | **Business Analyst(s)** | **Software Engineer** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer - on site in Helena** | **Total** |  |
| Define | October 1, 2008 - October 20, 2008 |  | 95.00 | 3.20 |  |  |  |  | 98.20 |  |
| Analysis | October 21, 2008 - December 10, 2008 |  | 510.00 | 19.20 | 360.00 | 20.00 | 41.60 |  | 950.80 |  |
| Totals  October 1, 2008 - December 10, 2009 | |  | 605.00 | 22.40 | 360.00 | 20.00 | 41.60 |  | 1,049.00 |  |
| Total Hours for General Project Module | |  |  |  |  |  |  |  | 3,711.50 |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **UCC Module** | | | | | | | | | | |
| **FileONE resources On Site Resource in Helena** | | | | | | | | | |  |
| **Project Phase** | **Duration** | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Define | December 11, 2008 - January 20, 2009 | 167.20 | 121.60 |  |  |  |  |  | 288.80 |  |
| Analysis | January 21, 2009 - May 7, 2009 | 684.00 | 760.00 | 182.40 | 1,444.00 | 152.00 | 383.80 |  | 3,606.20 |  |
| Configuration and Test | May 5, 2009 - July 23, 2009 | 684.00 | 720.00 | 395.20 | 395.20 | 76.00 | 486.40 |  | 2,756.80 |  |
| Deploy | July 24, 2009 - September 29, 2009 | 364.80 | 182.40 | 182.40 | 273.60 | 38.00 | 326.80 |  | 1,368.00 |  |
| Totals  December 11, 2008 - September 29, 2009 | | 1,900.00 | 1,784.00 | 760.00 | 2,112.80 | 266.00 | 1,197.00 |  | 8,019.80 |  |
| **FileONE resources in Cary** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineer** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer - on site in Helena** | **Total** |  |
| Define | December 11, 2008 - January 20, 2009 |  | 144.40 | 15.20 |  |  |  |  | 159.60 |  |
| Analysis | January 21, 2009 - May 7, 2009 |  | 775.20 | 91.20 | 547.20 | 15.20 | 197.60 | 91.20 | 1,717.60 |  |
| Configuration and Test | May 5, 2009 -  July 23, 2009 |  | 539.60 | 273.60 | 1,292.00 | 15.20 | 851.20 | 182.40 | 3,154.00 |  |
| Deploy | July 24, 2009 - September 29, 2009 |  | 334.40 | 273.60 | 273.60 | 15.20 | 486.40 | 106.40 | 1,489.60 |  |
| Totals December 11, 2008 - September 29, 2009 | |  | 1,793.60 | 1,040.00 | 2,112.80 | 45.60 | 1,535.20 | 380.00 | 6,520.80 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Hours for UCC module | |  |  |  |  |  |  |  | 14,540.60 |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Corporate (Business Entity) Module** | | | | | | | | | | |
| **FileONE resources On Site Resource in Helena** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Define | June 19, 2009 -  July 13, 2009 | 118.80 | 86.40 |  |  |  |  |  | 205.20 |  |
| Analysis | July 14, 2009 - October 21, 2009 | 486.00 | 800.00 | 129.60 | 1,026.00 | 152.00 | 272.70 |  | 2,866.30 |  |
| Configuration and Test | October 22, 2009 - January 25, 2010 | 486.00 | 432.00 | 280.80 | 280.80 | 76.00 | 345.60 |  | 1,901.20 |  |
| Deploy | January 25, 2010 - March 9, 2010 | 259.20 | 129.60 | 129.60 | 24.30 | 38.00 | 232.20 |  | 812.90 |  |
| Totals  June 19, 2009 - March 9, 2010 | | 1,350.00 | 1,448.00 | 540.00 | 1,331.10 | 266.00 | 850.50 |  | 5,785.60 |  |
| **FileONE in Cary** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineer** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer - on site in Helena** | **Total** |  |
| Define | June 19, 2009 - July 13, 2009 |  | 102.60 | 10.80 |  |  |  |  | 113.40 |  |
| Analysis | July 14, 2009 - October 21, 2009 |  | 550.80 | 64.80 | 388.80 | 10.80 | 140.40 | 64.80 | 1,220.40 |  |
| Configuration and Test | October 22, 2009 - January 25, 2010 |  | 383.40 | 194.40 | 918.00 | 10.80 | 604.80 | 129.60 | 2,241.00 |  |
| Deploy | January 25, 2010 - March 9, 2010 |  | 237.60 | 194.40 | 194.40 | 10.80 | 345.60 | 75.60 | 1,058.40 |  |
| Totals June 19, 2009 - March 9, 2010 | |  | 1,274.40 | 1,040.00 | 1,501.20 | 32.40 | 1,090.80 | 270.00 | 4,633.20 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Hours for Corporate (Business Entity) | | |  |  |  |  |  |  | 10,418.80 |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Trademark and Notary** | | | | | | | | | | |
| **FileONE resources On Site Resource in Helena** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Define | February 25, 2010 - March 4, 2010 | 44.00 | 32.00 |  |  |  |  |  | 76.00 |  |
| Analysis | March 5, 2010 -  April 1, 2010 | 180.00 | 200.00 | 48.00 | 380.00 | 40.00 | 101.00 |  | 949.00 |  |
| Configuration and Test | April 2, 2010 -  May 3, 2010 | 180.00 | 160.00 | 104.00 | 104.00 | 20.00 | 128.00 |  | 696.00 |  |
| Deploy | May 4, 2010 -  May 19, 2010 | 96.00 | 48.00 | 48.00 | 72.00 | 10.00 | 86.00 |  | 360.00 |  |
| Totals  January 25, 2010 - May 19, 2010 | | 500.00 | 440.00 | 200.00 | 556.00 | 70.00 | 315.00 |  | 2,081.00 |  |
| **FileONE in Cary** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineer** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer - on site in Helena** | **Total** |  |
| Define | February 25, 2010 - March 4, 2010 |  | 38.00 | 4.00 |  |  |  |  | 42.00 |  |
| Analysis | March 5, 2010 -  April 1, 2010 |  | 204.00 | 24.00 | 144.00 | 4.00 | 52.00 | 24.00 | 452.00 |  |
| Configuration and Test | April 2, 2010 -  May 3, 2010 |  | 142.00 | 72.00 | 340.00 | 4.00 | 224.00 | 48.00 | 830.00 |  |
| Deploy | May 4, 2010 -  May 19, 2010 |  | 88.00 | 72.00 | 72.00 | 4.00 | 128.00 | 28.00 | 392.00 |  |
| Totals  January 25, 2010 - May 19, 2010 | |  | 472.00 | 172.00 | 556.00 | 12.00 | 404.00 | 100.00 | 1,716.00 |  |
| Total Hours Trademark and Notary | |  |  |  |  |  |  |  | 3,797.00 |  |
|  |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Post Deploy Warranty** | | | | | | | | | |  |
| **FileONE resources On Site Resource in Helena** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Warranty/Post Deploy | May 20, 2010 - December 31, 2011 | 3,200.00 | 480.00 | 480.00 | 100.00 | 160.00 | 320.00 | 100.00 | 4,840.00 |  |
| Totals  May 20, 2010 - December 31, 2011 | | 3,200.00 | 480.00 | 480.00 | 100.00 | 160.00 | 320.00 | 100.00 | 4,840.00 |  |
|  |  |  |  |  | | |  |  | 4,840.00 |  |
| **Post Deploy Warranty** | | | | | | | | | |  |
| **FileONE resources On Site Resource Cary NC** | | | | | | | | | |  |
| **Project Phase** |  | **Project Manager** | **Business Analyst(s)** | **Software Engineers** | **Database Admin/Dev(s)** | **System Analyst/Network** | **QA Engineers** | **Trainer** | **Total** |  |
| Warranty/Post Deploy | May 20, 2010 - December 31, 2011 |  | 160.00 | 100.00 | 100.00 | 100.00 | 120.00 | 25.00 | 605.00 |  |
| Totals  May 20, 2010 - December 31, 2011 | |  | 160.00 | 100.00 | 100.00 | 100.00 | 120.00 | 25.00 | 605.00 |  |
|  |  |  |  |  | | |  |  | 605.00 |  |
|  | |  |  |  |  |  |  |  |  |  |
| **Total Hours for Post Deploy Warranty** | | |  |  |  |  |  |  | **5,445.00** |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Totals for the SIMS Project** | |  |  |  |  |  |  |  | **37,912.90** |  |

## 3.2 System Requirements

### 3.2.1 Processing

FileONE understands and acknowledges the requirements for processing described in the workflow proposed by the Montana SOS. The SystemWORKS application complies with how the application needs to manage batches, sub-batches, events, and transactions throughout the processing of receipts, imaging, compliance and notification.

Throughout the analysis and implementation phase of the project, FileONE staff will work closely with the SOS to recommend and develop procedures for any manual processes that are necessary to complete processing outside of SIMS. FileONE has worked with the staff of numerous SOS offices to detail their existing process and assist in re-engineering their process to define an efficient workflow and effective business processes. This process leads to the identification and design of enhancements to the application that focus on the express needs of the SOS office.

The design and implementation of the SystemWORKS application centers around the concepts of usability, flexibility and reliability. FileONE strongly believes in and follows detailed testing phases including unit (developer) testing, a thorough quality assurance testing process as well as believing the application is not ready for production release until our customers complete and sign-off on a user acceptance testing phase.

FileONE is experienced working with our customers to develop solutions based upon conceptual designs, ideas, and generalizations about potential processing and functional solutions. Building solutions from conceptual ideas with our customers has truly required taking their interests as our own; this sounds cliché, but viewing concerns from the customers’ perspective produces a different dynamic that is optimal for joint solution creation development. Starting with conceptual ideas, FileONE subject matter experts work with our customers to understand and formulate concepts into potential business solutions by defining the concept in terms of possible benefits and specific candidate solutions that could be created, as well as developing and providing an understanding of any costs or drawbacks.

FileONE leverages our Secretary of State business domain knowledge and experience to apply best practices as well as less common solutions to meet our customers’ business needs. We understand that as we help our customers, our ability to provide further assistance and grow in a professional relationship will be fostered. Our commitment to our customers has allowed us to create more custom solutions in the SOS marketplace than any other company.

**Notable Solutions Created for Customers – Application of Conceptual Designs**

Working from thoughts to solutions the following achievements are examples of FileONE’s commitment to partnering with our customers:

* **Created a low cost solution that helped save customer $100k+ in support costs**. Identified, designed, and implemented a solution that allowed one of our customers to produce custom correspondence out of our application solution. The customer’s cost for this solution was low, but FileONE identified and created this solution without solicitation after coming to understand that the proposed solution would allow the customer to retire an extremely old legacy system that was costing over a hundred thousand dollars a year in support costs.
* **Implemented UCC module in less than 2 Months**. Implemented a UCC filing system in two months to meet a customer’s changing objectives. FileONE understood the customer’s needs and modified implementation efforts to accommodate a UCC module go-live in an extremely condensed timeframe. The customers processing times were dramatically increased as a result of the implemented UCC solution.
* **Created custom filing solution in accelerated time frame dramatically reducing processing effort and related costs.** FileONE created a custom annual report filing solution for paper filings to allow for efficient processing. Based on the presentation of peak filing period issues, FileONE was able to design a solution that allowed a state to process annual reports in a faction of the time previously required. FileONE allowed processors to identify those Annual Reports filed without changes to any company information, associate those images directly with the entities in one step after identifying the relevant entities. This solution was developed in an accelerated timeframe as the issues were presented a short time before the peak annual report filing season.
* **Developed temporary solution to meet customer’s long term objectives.** Developed a custom solution to allow a jurisdiction to accept online annual report filings by developing a web interface to a legacy mainframe application. The solution allowed the customer to start realizing the efficiencies of online filing prior to a full system implementation that replaced the mainframe. The reduced time required for processing the annual reports afforded existing customer staff with the capacity to further assist in analysis for the full system implementation.
* **Introduced the concept of lockbox processing to several states.** Lockbox processing interfaces are currently in production in two states and a third lockbox solution is in being implemented. In many cases, the cost of lockbox processing results in a net savings to a state as a result
* **Worked directly with large filers to facilitate processing solutions.** FileONE has worked with large filers on behalf of our customers strengthen relationships and improve the efficiency and effectiveness for processing filings for large filing agencies.
* **Business Process Re-engineering.** Re-engineered overall filing processes resulting in resource cost reductions of greater than 50% in one jurisdiction. Process re-engineering and custom solutions for another jurisdiction allowed the state office to reduce processing backlog time from over several weeks to less than one day.

System reliability is critical in any enterprise system. High reliability and availability is an absolute requirement for Secretary of State Business services. FileONE has implemented numerous mission critical systems as outlined in our proposal. These implementations required a very high level of reliability. FileONE believes that system up-time for our implemented systems for Secretaries of State exceed 99.5%.

### 3.2.2 Administration

FileONE understands and accepts the requirements identified in section 3.2.2 to enable designated users to perform key administration activities in the system via a front-end interface. SystemWORKS supports all requirements for administration of the system, as defined by MT SOS is this section for function identified as within the scope of the project in the FileONE response to Appendix J.

SystemWORKS includes specific screens which support processing and configuration needs, as applicable, for each of the areas identified in this section – customer request; customer accounts; accounting and transactions; data and images; control tables and administration; security and user accounts; retention.

In addition to the above, the custom reporting engine in SystemWORKS has flexible reporting capabilities, including but not limited to generating statistical and detailed reports for any and all fields in the database.

All administration screens are restricted to MT SOS staff with appropriate access levels (user role), based on the security configuration of the system. Security configurations and assignment of users by defined roles are determined in the analysis and design phases.

### 3.2.3 Analysis

FileONE understands that the ability to monitor and report system and user performance is vital to maximizing processing efficiency and achieving related business objectives. SystemWORKS offers specific functions that enable performance monitoring and tuning of the system as follows:

Standard Performance Reports

SystemWORKS includes key user performance and filing analytical reports for purposes of understanding performance and filing activity. This information can be used to fine tune resource allocations and SystemWORKS configurations to tailor the system for the most efficient processing. Examples include but are not limited to:

* User activity tracking – time to complete processing steps by user and department, processing volume by user and department
* Filing volume – increase over previous period or same period in previous years, online vs. paper, filing volume by jurisdiction, filing volume by type or line of business (corporations, UCC)
* Financial statistics - increase over previous period or same period in previous years by line of business or type, online vs. paper filing

Supervisor Dashboard

The supervisor dashboard provides designated users (per user role / security level) an at-a-glace view of vital production processing information, with the ability to quickly access a detailed view for each item if applicable. Example of production vitals available on the Supervisor Dashboard include but aren’t limited to:

* Work items count by queue
* Work items count by user
* Priority request count
* Current processing time and backlog by line of business
* System notifications
* User notifications

Functionality for re-assigning and re-queuing work items is directly accessible from the Supervisor Dashboard.

User (processor) Dashboard

Similar to the supervisor dashboard, the User Dashboard provides users (per user role/security level) an at-a-glace view of vital production processing information for their assigned items and work item queues, with the ability to quickly access specific work items where applicable.

* Work items count by queue
* Priority request count
* Current processing time and backlog
* User notifications

Functionality for sending notifications pertaining to specific work items and re-assigning a work item to another queue (as allowed per configuration) is available from the User Dashboard also.

Refunds/Payables Dashboard

SystemWorks provides a Payables Dashboard containing a consolidated set of information and metrics as well as the ability to process refunds, approve refund requests, and manage all payables. This is another example of how SystemWORKS has been designed to provide business information and functionality together in the application to create overall processing efficiency.

Accounts Receivables Dashboard

SystemWORKS provides a separate dashboard for receivables processing. The ability to assess the total amounts due, totals pending write-off, as well as top receivable account information is all available from SystemWORKS AR Dashboard.

Logging and Auditing Capability

SystemWORKS, since its conceptualization and initial design, incorporates robust logging and auditing capabilities, so that the systems performance can be monitored and tuned to maximize processing efficiency.

User Monitoring

All user actions in the system are logged and reportable via the Custom Reporting Module if not available otherwise or if preferred. This includes but is not limited to tracking of entity history, customer accounts and related financial transactions. Again, *all* user activity is logged in SystemWORKS.

System Monitoring

System health monitoring is available via either SystemWORKS directly or related, third-party tools inherent with the technology platform SystemWORKS has been developed, depending on the item being monitored. Examples include but are not limited to: Automated job monitoring and logging (available from within SystemWORKS) and database monitoring and tuning (Microsoft SQL performance monitoring and tuning standard tools). See responses to related items in Appendix J for further details.

Configurable Workflow

SystemWORKS provides the flexibility to change the workflow processing rules on the fly to enable the most efficient path for processing of work items in the system. This will allow for MT SOS to adjust processing workflow from the default initial configuration workflow (which supports requirements in section 3.2.1) if desired or determined that efficiency can be improved in doing so, as well as to accommodate filing volume trends and forecasting. Workflow can be changed for individual users to help focus processing for specific lines of business, specific filing types, or any combination for lines of business and specific filing types.

Fully Integrated, Advanced System Reporting Module

SystemWORKS Reporting Module contains a powerful report generation designer that will allow MT SOS staff to generate analytical reports, with the ability to select and include any or all data from related fields, views, and queries in the SystemWORKS database. This tool consistently allows MT SOS the ability to access both user and system performance related data. These reports are flexible, re-usable, and can be published and exported in a variety of formats (See Section 3.5 for a list of Reporting Module features). The process for initially creating a performance report is simple: Select fields, views, or queries containing the relevant data for user or system performance, specify ranges and other parameters (e.g. date range) for items selected, specify output inclusions and format, and create. Formulas can be added before or after report generation, and provided in either a summary or detail format. Further analysis can be performed from within the report designer itself, or the report can be exported to another file format, e.g. Microsoft Excel compatible file format.

**Flexible Parameter Driven Reporting**

FileONE understands that reporting is one of the core functions of the proposed system. As the primary information repository, the information stored in SystemWORKS is of considerable value to a variety of parties for equally varied functions. FileONE has created a number of such reporting solutions for Secretary of State information systems including the following

* **Custom Business Listing Reports -** FileONE has developed custom reports that provide specific selection criteria and parameters unique to the information available in the custom reports. Such reports include: Business Entity Listing Reports that can be filtered by date range for creation, street address, city, county, zip codes business entity types, date range of dissolution withdrawal.
* **Detailed Customer Transaction Reporting -** FileONE has developed transaction detail reports for customers maintaining and using credit balance (pre-paid) accounts for large filing volume; such customers are interested in reconciliation for both financial and filing information. FileONE developed these transaction detail reports to allow customers with such accounts to reconcile financial and filing information for custom date ranges. Such detailed transaction reporting as subsequently made available for all entities.
* **Custom OLAP Reporting Solution -** FileONE developed a custom OLAP solution for analysis of historical entity, filing, and financial information. This reporting solution allowed for parameters to be selected for any of the data fields available in the OLAP data store. For example, this solution allowed a user to filter for specific filing types by custom reporting periods (quarters in a year, last year, months in a year, etc) entity domesticity, business entity type, and other available attributes. This solution would allow users to drill down several layers from summary information to extremely detailed information.

These and many other custom dynamic parameters driven reporting solutions have been developed by FileONE and are still used in production application environments today. In SystemWORKS, FileONE will provide a substantial number of static reports and views of information in the application as well as custom reporting and data analysis tools; combined, these solutions in SystemWORKS will provide significant parameter driven reporting functionality.

**Form Design**

The plan, schedule and outline for forms redesign are presented in section(s) 3.1.1 Methodology, 3.1.12, Development.

FileONE has helped a number of jurisdictions designing forms to meet specific information requirements while tailoring the forms to further optimize processing efficiency. Our experience in this area is unsurpassed in the Secretary of State market place. Working with multiple jurisdictions FileONE has teamed with Secretary of State offices to design filing, orders, and other request forms. FileONE has helped jurisdictions with a significant number of filing forms and high filing volume re-design forms and migrate to usage of the new forms. For forms with significant changes, communication to the interested filing community is imperative. FileONE has assisted with the development of communications regarding the adoption of new forms. Such communications have varied in format from the presentation of information on web sites, the presentation of filing instructions on or with the new forms, and the design and generation of custom letters detailing form changes.

FileONE will apply proven logical and methodical approaches to form design for the MT SOS. Aligning the placement of information required on the form with the order data will be reviewed and entered allows users to process logically and sequentially through a form top to bottom right to left without searching through the form for information. This simple approach provides significant dividends in improved processing efficiency. Another logical consideration FileONE applies to form design is to highlight required information so that acceptance and rejection decisions can be made quickly, thus reducing unwarranted data entry for incomplete filings. Another prime design consideration FileONE will apply is usability in consideration of the filing constituents; the filing forms will be designed to be clear, intuitive, easy to fill with information as well as distinguish required and optional informational requirements. FileONE’s User Interface Development Experts and Functional Subject Matter Experts will team with MT SOS to design forms that meet business information needs and attain optimal processing efficiency. Ultimately, FileONE and MT SOS will partner to create forms that are official and professional in appearance, easy to understand, and straightforward to populate by the filing public.

### *3.2.3.1 Interfaces*

FileONE understands that all inputs to the system, whether paper and electronically received, must comply with the SIMS format and requirements. SystemWORKS will ensure that all items input into the system meet specified automated processing requirements and file layouts. The SystemWORKS application will validate that the integrity of the data entered by a system user or received via an uploaded file meets the business requirements specified by the SOS. While data conversion/data import will be required from legacy systems, the phased implementation approach we are proposing does not anticipate direct interfaces to legacy system which are replaced by SIMS being required. FileONE will work with the State to determine interface requirements.

FileONE envisions a detailed analysis phase that includes the redesign of legacy SOS forms. During the analysis and implementation phase of the project, FileONE will work closely with the staff of the SOS office in the redesign of the input forms. This effort will start with determining general guidelines that the redesigned forms need to match. The redesign will also include steps to ensure consistency across forms as well as verification that each form conforms to the business needs and requirements of the SOS. Each form will be reviewed in its current state and an assessment will be made as to how it needs to be modified to meet the overall guidelines of the redesign as determined by the project team. FileONE has performed similar form redesign with several SOS offices including incoming documents, outbound documents, certificates and general business letters.

### *3.2.3.2 Department of Administration Information Technology Services Division* (ITSD)

FileONE recommends using SystemWORKS comprehensive image repository functionality. FileONE’s proposed scope of effort includes the use of SystemWORKS imbedded image repository, available to the MT SOS at no additional cost. Moreover, using SystemWORKS image repository could save the MT SOS substantial FileNet licensing and support costs. However, the SystemWORKS application can interface with FileNet to meet the MT SOS requirements. FileONE has provided optional FileNet pricing in the cost proposal.

SystemWORKS features a comprehensive batch job scheduler that is used to process jobs of various types. Examples of job types are: data transmission to 3rd party vendors, comprehensive data edits or corrections, and large report generation.

SystemWORKS interface engine was designed to be highly configurable using the Service Oriented Architectural (SOA) approach which allows SystemWORKS flexibility in supporting and interfacing with 3rd party data sources or repositories.

#### 3.2.3.3 Non ITSD interface Areas

SystemWORKS provides a flexible and powerful data interface mechanism to transact data between any number of Non ITSD interfaces. ServiceWORKS will provide services to interface with the Non ITSD interfaces. SystemWORKS has been specifically architected to perform such interfaces with such third party systems and sources of data.

FileONE has specifically worked with NIC, the parent company of Montana Interactive, to interface their eGovernment online filing portals for another Secretary of State office. Our experience interfacing with NIC technologies is a substantial and unique benefit which only FileONE can offer. We understand not only the complexity of interfacing with NIC’s complex technology, but the overarching importance of providing timely and accurate access to MT SOS data and services. As the primary access point for many of Montana citizens and stakeholders, FileONE is best positioned to promote the Secretary’s vision for reducing processing times and increasing data accuracy and access.

Additionally, FileONE has experience working with a variety of external business partners on complex interfaces, including but not limited to:

* Custom Financial and Filing Imports from Lockbox Service Providers
* Credit Card Processing through a Variety of Processing Vendors and Software Solutions
* Interfacing with USPS ‘CASS’ Approved Address Validation Solutions
* State Payment Processing Portals
* State Filing Systems – both Legacy and Active Filing Systems
* External Accounting and ERP Systems
* Financial Institutions for ACH and E-Check Processing
* UCC B2B Filing System for a Number of Existing States
* Online Filing for Secretary of State Business Services Filings
* FSA/EFS Listing Information Retrieval Solutions
* Custom Data and Image Extracts from Secretary of State Filing Systems for the Benefit of External Business Partners

### 3.2.4 System Business Requirements (INCLUDES APPENDIX J REQ MATRIX)

Please reference Appendix A, “Scope of Work”, for a detailed response to Appendix J of the MT SOS RFP.

## 3.3 Project Infrastructure

### 3.3.1 System and Architect Standards

The SystemWORKS solution is based on the latest Microsoft .Net technology using a Services Oriented Architecture pattern. Services provide the capability to scale dynamically on an as-needed basis to support an almost unlimited user base. Systems loads are monitored real-time and hardware can be strategically added for optimal user experience.

SystemWORKS contains technologies that enable SystemWORKS to provide dynamic user configurable workflows and business logic. Custom data deployment technologies to safeguard software upgrades occur with minimal downtime and ensure data validity for system of record.

SystemWORKS will leverage and utilize Microsoft Active Directory for centralized or decentralized end user credential management. Security is enforced throughout the application tiers to provide the most robust credential enforcement possible

FileONE has architected SystemWORKS to evolve to meet future MT SOS needs. As new versions of the software are released, the MT SOS would have access to those versions and enhancements from other jurisdictions if it is actively engaged in an ongoing support and enhancement agreement.

The projected lifetime of the suggested hardware to operate SystemWORKS is estimated at five (5) years. The SystemWORKS software can be migrated to new hardware at any time due to hardware failure or upgrade initiatives.

### *3.3.1.1 Operating System*

The FileONE solution includes providing installation assistance for all necessary hardware and software for all environments required to successfully deliver the SIMS project. This will include setting up and configuring all :

* Application Servers
* Web Servers
* Database Servers
* Imaging and Redaction Servers
* Storage Area Network Devices
* Network Infrastructure associate with SystemWORKS such as load balancing
* Backup and Recovery Infrastructure
* Peripherals such as check and bar code scanners, document scanners

Additionally, for the duration of the project, FileONE will monitor and consult with hardware and software manufacturers and vendors to ensure that all service packs, upgrades, and hot fixes are applied to keep all MT SOS systems current and compliant.

### *3.3.1.2 Database*

SystemWORKS leverages Microsoft SQL Server 2005 as its data repository. FileONE ServiceWORKS will provide all installation and configuration services during the deployment process. Moreover, FileONE will drive recommendation and compatibility testing for new database upgrades and enhancements. Recommendations for database enhancements will be provided to the MT SOS. Assistance with database upgrades can be provided with our ServiceWORKS offerings. Database performance tuning and reporting will be included with solution.

SQL server has a robust set of tools that allow database administrators to effectively manage and monitor the system. The FileONE solution will include the development of specific reports and scripts utilizing SQL Server tools and utilities necessary for the required database analysis. In addition, any training or knowledge transfer on these tools, utilities and reports will be provided.

### *3.3.1.3 Front-End*

FileONE SystemWORKS is a complete Web-based solution developed using the most current Microsoft technologies, including C#.NET 3.5, ASP.NET and AJAX. FileONE will assist with the installation and configurations of all software utilized in any operation of the system. As newly released versions, modifications, and enhancements on software applications are made, FileONE will make recommendations to the MT SOS for those enhancements which provide the most benefit for the MT SOS. Assistance with upgrade activities on software can be provided in tandem with OEMs and assisted via ServiceWORKS offerings.

FileONE will use the most recently tested production version of software supplied by the manufacturer prior to the acceptance of the detail design. All updates of commercial software used in the system will be obtained by SOS and installed by FileONE, except by documented mutual agreement of SOS and the FileONE.

### *3.3.1.4 Development Tools*

The development tools that are used in the development of the SystemWORKS product are as follows:

* Microsoft Visual Studio 2008 provides the source code editor, C# compiler, debugger, class browser, object inspector, and GUI designer.
* Erwin database modeling tool provides comprehensive data modeling, schema reporting, schema editing, diagram generation, and data dictionary.
* Active Reports is the implemented canned report creation and generation tool for SystemWORKS reports.
* MS SQL Management Studio is utilized for SQL Query generation and testing.
* SystemWORKS provides a proprietary messaging system that generates and distributes e-mail notifications.
* RoboHelp is the SystemWORKS help generation tool.

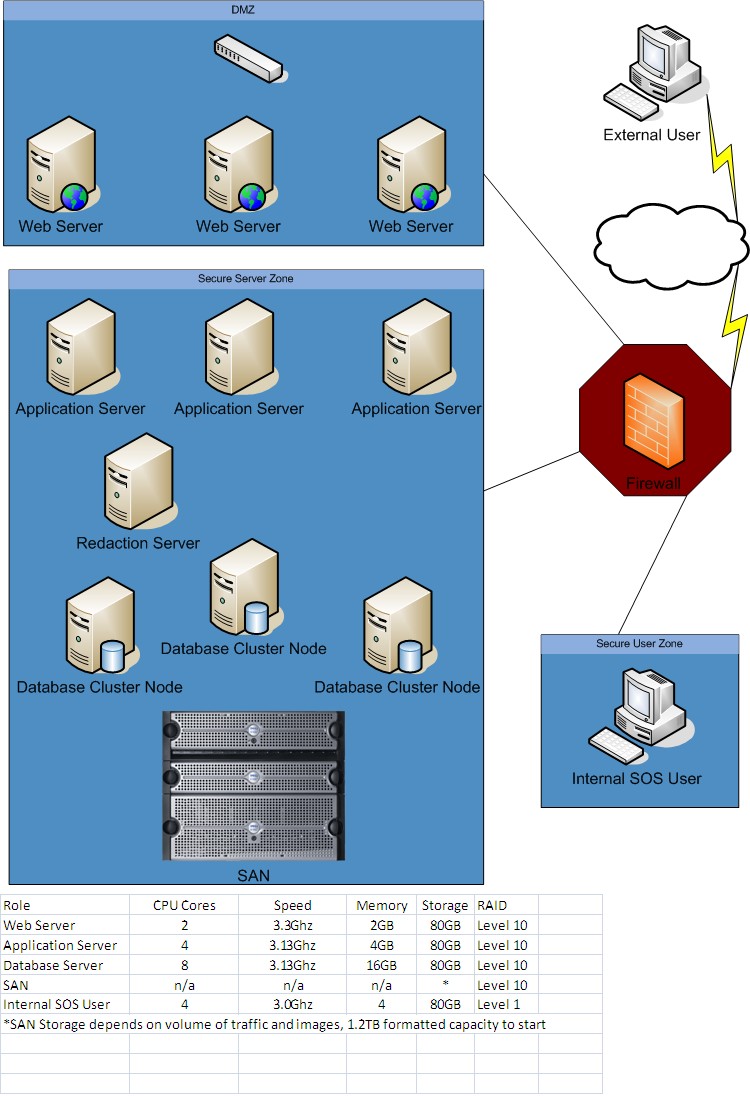
### *3.3.1.5 Hardware*

FileONE has estimated the expected hardware requirements for the SystemWORKS product for the MT State. The recommendation below does not include equipment that may be needed for such things as backup and recovery, switches, routers. It also does not represent any associated costs for a MT SOS firewall as it is anticipated that the implementation will utilize the current MT SOS firewall. The MT SOS will be responsible for the initial procurement as well as the ongoing support fees for all hardware required to operate SystemWORKS. The following factors were considered in this evaluation:

* Provide high availability
* Provide optimal performance
* Identify the required hardware
* Identify required peripherals such document scanners, check scanners, and label printers
* Identify the need to provide both a Production and User Acceptance Testing (UAT) environments

| Operating System | Server / Device Type and Purpose | Minimum Hardware Requirement | Qty |
| --- | --- | --- | --- |
| N/A | Load Balancer | Manufacturer recommended throughput | 1 |
| Windows 2003 R2 Web Edition | Web Servers (Internal and External Use) | Dual Core 3.33 GHz Xeon Processor, 4 GB Memory, rackmount, 2 x 73GB SAS hard drives, Raid 1, Dual NIC | 4 |
| Windows 2003 R2 Standard Edition | Dual Purpose Internal User Intranet and Application Servers | Quad Core 3.16 GHz Xeon Processor, 4 GB Memory, rackmount, 2 x 73 GB SAS hard drives, Raid 1, Dual NIC | 2 |
| Windows 2003 R2 Enterprise x64 | Database Servers | 2 x Quad 3.16 GHz Xeon Processor, 16 GB Memory, rackmount, 2 x 146GB SAS hard drives, Raid 1, 2xDual Intel NIC, Dual NIC onboard. | 2 |
| Windows 2003 Datacenter Edition x64 4 sockets | A single high-end physical server partitioned into virtual servers for UAT environments to accomplish Web, Application, File and DB Testing | 4x Quad 2.13 GHz Xeon Processor, 64 GB Memory, rackmount, 8 x 146GB SAS hard drives, Raid, Quad NIC | 1 |
| N/A | iSCSI SAN | Redundant Controllers, 2x74gb 15k SAS for RAID1 Quorum Volume, 12x146gb 15k SAS for RAID1 and RAID10 volumes | 1 |
|  | Peripherals | Label Printers | as needed |
|  | Peripherals | Check Scanner/Endorser | as needed |
|  | Peripherals | Document Scanners | as needed |
| SQL Server 2005 | Standard Edition Processor License | UAT Server | 1 |
| SQL Server 2005 | Enterprise Edition Processor License | Federated Database  Cluster Option | 4 |

The recommended server topology is illustrated in the following diagram:



As part of the Definition Phase in section 3.1.1 “Project Methodology”, FileONE’s infrastructure assessment will include the installation and configuration of the required hardware. Hardware performance will be measured as part of Performance Testing phase. FileONE’s hardware recommendation is based on internal testing. Specifically for the MT SOS, hardware performance testing will be conduct to ensure optimal application performance. Assistance with upgrade activities on hardware can be provided in tandem with OEMs and assisted via ServiceWORKS offerings.

### 3.3.2 Custom Software

FileONE accepts the requirements of 3.3.2. For the SIMS project, FileONE anticipates minimal custom software being developed solely for the State within the SystemWORKS COTS application. FileONE’s COTS product is highly configurable; changes in the configuration will address virtually all requirements in the core system. Anticipated custom software to be developed solely for the state of Montana which would fall under the licensing terms of 3.3.2 will largely consist of:

1. New custom interfaces for communication with specific external systems,
2. Newly developed custom public web pages, and
3. Initial data conversion scripts to the extent that they are not part of the ServiceWORKS standard software conversion toolkit.

The SystemWORKS license structure is very simple and straightforward. The Montana SOS will be granted a perpetual, non-exclusive site runtime license for all proposed modules. The license has no limits on numbers of users and contains no restrictions on named users, concurrent users or number of servers. This simple model provides the State great savings over time and avoids the need for the State to manage named user licenses, concurrent licenses and server licenses over the life of the system.

An optionally priced source code and development license is offered to the State in the pricing proposal. This development license is complete and only restricts the Secretary of State’s office from making available, disclosing and/or disseminating the SystemWORKS source code to another agency or third party. The optional, perpetual source code license will be available for purchase by the State for a period of seven (7) years after the system goes live.

All custom software developed solely for the State and within the scope of the project will be unconditionally licensed back to the State under the RFP terms stated in 3.3.2. This custom software license will provide a full source code and development license.

During the warranty period and succeeding support periods during which FileONE is supporting the installed system, new versions of the software will be released periodically by FileONE and provided to the State for testing. In order to be eligible for support, the State must install the new releases of the software after the State has successfully performed acceptance testing. FileONE will maintain a copy of all software and will carry forward any custom software in future releases while the State is under warranty or support with FileONE.

This licensing structure provides exceptional advantages to the State. The State does not need to initially expend funds on the source code license and may do so at any time within the first seven (7) years if it is deemed advantageous to the State at any time. This offers the benefit of a lower upfront investment with the security of guaranteed source code availability for seven (7) years after system go-live. We do not see any risks to the State under this licensing model.

### Offeror Provided Items

FileONE accepts the requirements of 3.3.3

### *3.3.3.1 Included Items*

FileONE SystemWORKS includes the following services or documentation for MT SOS consumption:

* Contracted services
* Training manuals
* Operator manuals
* Technical manuals
* Disaster and recovery documentation
* Complete system functionality
* SystemWORKS provides configuration utilities, documentation, and consultation for system configuration and functional modification
* SystemWORKS does not provide source code as it is a COTS product

### *3.3.3.2 Listing of Required Components*

FileONE will provide a complete inventory of all hardware and infrastructure requirements for a SystemWORKS deployment based on MT SOS requirements.

As referenced in section 3.1.1 describing the ServiceWORKS methodology, during the Analysis Phase a technical infrastructure audit will be completed. As a result of that audit all necessary hardware, infrastructure and software requirements listed in RFP section 3.3.3.2 will be determined.

### 3.3.4 State Provided Items

Per the requirement of this RFP, FileONE hereby again identifies our proposed application SystemWORKS as a COTS system.

FileONE has reviewed RFP section 3.3.4 and has not discovered any deficiencies in the State Provided Items. The SystemWORKS solution proposed by FileONE optimally meets the State’s requirements identified.

Product documentation for Major Components used in SystemWORKS solution includes:

* Microsoft SQL Server
* <http://msdn.microsoft.com/en-us/library/ms130214.aspx>)
* Microsoft Internet information Services ( IIS )
* <http://www.microsoft.com/technet/prodtechnol/WindowsServer2003/Library/IIS/848968f3-baa0-46f9-b1e6-ef81dd09b015.mspx?mfr=true>
* Microsoft Windows Server 2003
* <http://www.microsoft.com/windowsserver2003/proddoc/default.mspx>

RDMS Recommendation:

The FileONE SystemWORKS product leverages Microsoft SQL Server 2005 enterprise edition as the standard RDBMS. SQL Server 2005 is an industry standard enterprise class RDBMS. Microsoft provides an excellent platform producing high-end features such as: load balancing, fault tolerance, performance tuning, .Net integration, reporting service, data mining, and various other enterprise class features.

FileONE’s proposal appendix section includes product documentation from Extract Systems. Extract’s powerful ID Shield application supports comprehensive redaction functionality as described in this proposal’s section 3.3.8.

Development tools being utilized in the FileONE SystemWORKS product are as follows:

* Microsoft Visual Studio 2008
* Microsoft .Net 3.5
* Microsoft C# programming language
* Microsoft ASP.NET
* Microsoft ADO.NET
* Microsoft AJAX
* Microsoft Team Foundation Server
* Java Script

SystemWORKS is at its very core the ideal business services solution for SIMS. The application and database match Montana’s preferred technology platforms. The application is highly configurable and scalable, allowing Montana a certain degree of independence from the vendor. The application functionality reflects decades of collective staff experience, lessons, learned, and best practices gained in diverse operating environments throughout the US. The licensing structure is simple and straightforward. Finally, the young “age” of the product will attract a vibrant community of users that will allow the system to grow, blossom, and continue to be supported in future years.

### 3.3.5 Imaging

The system will allow scanning of multiple documents. Each document scanned in a batch will be identified automatically based on the bar codes placed on the documents. Individual scanning can also be performed on a document-by-document basis at several optional points in the intake and filing process. Re-scanning of multiple (batch) or individual documents is also supported.

During indexing, documents are automatically linked to specific ID (control/file) numbers. While viewing the particular filing activity (data file) for an entity, the image related to the data file is always available for access and presentation in SystemWORKS.

Users with the ability to edit documents will be able to delete and rename the documents. Moving an image from one specific ID to another can be performed in SystemWORKS. When scanning can be performed to create an image, uploading an image file will also be an option for the user. Furthermore, users can redact imaged documents using SystemWORKS automated or manual redaction tools (reference Section 3.3.8 “Redaction” for more details). Depending on flexible image archival standards, the SystemWORKS application can purge records according to the retention schedule within SystemWORKS (reference Section 3.3.7 “Retention” for more details).

FileONE recommends using SystemWORKS comprehensive image repository functionality. FileONE’s proposed scope of effort includes the use of SystemWORKS imbedded image repository, available to the MT SOS at no additional cost. Moreover, using SystemWORKS image repository will save the MT SOS substantial FileNet licensing and support costs. However, should the MT SOS require that SystemWORKS interface with FileNet, FileONE has provided optional FileNet integration pricing in the Cost Proposal.

As part of the conversion process, FileONE will incorporate the MT SOS’s current image inventory, including data from the controlling Montana databases. Our assumption is that all images will be supplied in non-proprietary electronic formats that allow accurate and efficient migration to the SystemWORKS database.

SystemWORKS has been designed to be a centralized repository of documentation for the specific business services and processes SystemWORKS supports. Content such as word processing documents, e-mails, notifications, request forms, invoice statements, payment documents, support documents, certificates, and specific reports that are either input into or are generated by SystemWORKS will be maintained and made available consistent with Montana’s specific retention policies.

The specific documents, certificates, e-mails, reports, and other documents are logically associated with relevant objects in SystemWORKS; for example, correspondence related to a specific entity will be accessed through that entity, financial reports will be available from relevant financial screens and functions, and certificate and copy requests will be associated with the specific requests for which the documentation was generated.

### 3.3.6 Conversion Overview

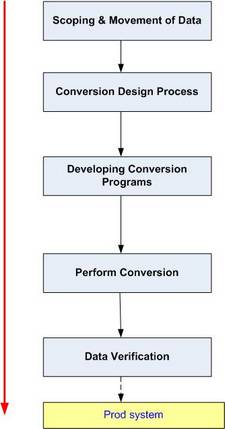
FileONE accepts the requirements, referenced appendices, processes, roles and responsibilities outlined in the RFP in section 3.3.6

FileONE has extensive experience in large scale data conversion projects for mission critical enterprise applications. Specifically, FileONE provided full data conversion services in order to implement full Business Services systems for 11 Secretaries of State offices across the United States. As part of these conversions, orders and invoices, fee transactions, payment history and other financial and accounting data were converted and were very similar to the Montana Secretary of State’s legacy data conversion requirements.

There may be alternatives to performing full data conversion of all legacy data. Some data may not need to be converted due to age and retention rules. Rarely referenced data may be printed, burned to CD or put into a data warehouse rather than converted to SIMS. Additionally, non-normalized data that is used only as reference information but is not required for processing may be converted in textual form and associated with the appropriate entity or other parent records as a text note. Another less frequently used alternative is to maintain data in a legacy system.

FileONE employs a five step data conversion process. The methodology is outlined below.

**1. Scope and Movement of Data or Transport of Data**

In this phase of data conversion, the scope of the data to be moved from a legacy system to the SystemWORKS system is determined. For example, will the conversion require all legacy data be migrated, or just certain sets of data? Once the scope of the data to be moved is determined, the next step in this step is developing a detailed conversion plan for each entity, listing all design, development, testing, and conversion tasks. The activities in this phase occur primarily in the Definition Phase of the project.

Resources for this phase include:

* FileONE and MT SOS business analysts
* FileONE and MT SOS SMEs
* FileONE Database Administrators
* FileONE and MT SOS Project Management

**2. Conversion Design Process**

This phase of the data conversion focuses on the specifics of the data to be converted. This starts with identifying all objects and their corresponding volume. The design phase activities will occur primarily in the Analysis Phase of the project.

The key activities in this phase include:

* Examine the business objectives and requirements to determine the data to be converted
* Specify time constraints for the conversion, especially for transactional data
* Determine the appropriate conversion method, e.g., automated, manual
* Data mapping
* Determine and procure hardware and software required for the conversion process
* Determine the testing requirements

Resources for this phase of data conversion include:

* FileONE and MT SOS Business Analysts
* FileONE and MT SOS Subject Matter Experts
* FileONE and MT SOS Database Administrators
* FileONE and MT SOS Infrastructure, Procurement, and Network resources
* FileONE and MT SOS Project Management

**3. Development of Conversion Programs**

In the Data Conversion Development phase, the Extract, Transform, and Load and Verification scripts are created and an initial “data run” is executed. The Data Conversion Development will be executed in the Analysis Phase.

The following key activities occur in the Data Conversion Development Phase:

* Development of extract and import programs
* Scripts to create any interface or translation tables in the RDBMS
* Writing validation, translation, and migration programs
* Write verification scripts and reports

Resources for this phase of the data conversion include:

* FileONE and MT SOS Database Administrators
* FileONE and MT SOS Business Analysts
* FileONE and MT SOS Project Management

**4. Performing Conversion**

This phase consists of a number of “data runs” using the tools created during Data Conversion Development. The conversion activities occur in the Configuration and Test phase. Each “data run” includes the following activities:

* Extract and format data
* Create temporary interface tables
* Upload data to interface tables
* Run translation programs & validation programs
* Migrate data into production tables
* Run verification scripts
* Run application reports to verify converted data

**5. Data Verification**

In this phase, each converted entity that is designed and populated in the conversion process will be verified from data extraction through data verification. Data verification will consist of a number of “data runs” and will continue until the MT SOS project manager approves the state of the data as production ready. The verification will be a comparison of the data against business rule, objectives and expected results as defined in the data conversion plan. The Data Verification will occur in the Configuration and Test Phase of the project. Resources required for this phase include:

* FileONE and MT SOS Business Analysts
* FileONE and MT SOS Subject Matter Experts
* FileONE and MT SOS Database Administrators
* MT SOS End Users
* FileONE and MT SOS Project Management

FileONE has included the recommended conversion timeline within the Project Plan in section 3.1.12, “Development Phases”.

### 3.3.7 Retention

FileONE accepts the requirement and understands the importance of retention for both data documents, images and other files through the logical lifecycle of the relevant record. Data, document retention, and usage of both were among the most fundamental design considerations applied in the design of SystemWORKS. The lifecycles of records including image files are tracked, maintained, and accessed, until they are appropriately archived or purged as required per applicable business rules.

As a record, image, or file moves through SystemWORKS, the actions applied are recorded along with the date/time and performing user, if relevant. This information is available throughout the application as presented in standard history views and lookup functions that detail the changes to the record over the record’s lifecycle. The name history of an entity, the current and previous officers for a corporation, the different registered agents an entity had are all examples of record retention and maintenance throughout a record’s lifecycle. Additionally, using SystemWORKS standard auditing functionality, recorded actions that occur during the lifecycle of a record, file, or image can be viewed in the application and are available in a number of tracking and auditing reports.

The nature and state of the data and related files (images and other documents) are maintained with statuses, by state of data in processing or workflow queues, through image versioning, through the use of dates/time, and other record attributes related to a specific system record.

Each image file that moves through SystemWORKS is stored with versions. Based upon configuration, the initial unedited version of a document can always be maintained and accessed in SystemWORKS. Any subsequent revisions to the image file such as those modified by redaction or annotations are saved as a separate version of the document. Such image and version history allows for a visual representation of the changes to an image file over the life of that image. Additionally, for each new version of an image that is saved, MT SOS can require the entry of a description of the change by the system user. The full lifecycle for filings and other images is maintained in SystemWORKS from arrival, to association, maintenance, retrieval and final removal. FileONE understands the importance of such support as the filing images often represent the true ‘record’ in the system.

FileONE’s archiving and purging functions address the need for data, image, and file removal while maintaining application functionality as well as the integrity of data. Scheduling specific purging and archiving jobs to meet MT SOS specific requirements will be performed with SystemWORKS Data & Image Manager. The Data & Image Manager allows for the specification of data and image removal based on SystemWORKS data and application structure. The Manager addresses all requisite removal restrictions, allows for configuration of specific elements for removal, and interfaces with SystemWORKS Job Manager for scheduling and approval.

Prior to the removal of any data through the scheduled purge or archive functions, a notification is sent to the appropriate SystemWORKS users so that they are aware of the pending removal activity. The users can then review information about the data, files, or images that will be impacted by the pending removal routine. SystemWORKS Archive and Purge functionality can be configured to require express acknowledgement and acceptance by particular SystemWORKS users prior to executing a purge routine.

FileONE’s experience working with files such as spreadsheets, e-mails, images and other file and document types is extensive as related to SOS filing systems. Through various solutions in the SOS marketplace, FileONE has performed intake and reception of data, files and images through multiple forms of input into a SOS filing system including:

* Image input via scanning
* Image input via electronic interfaces with other systems
* B2B filing reception
* Generation of image files from data submitted via B2B
* Generation of image files from data submitted via online filing
* Generation of documents and image files from system data for items such as certificates and licenses
* Reception of images and related files via e-mail
* Reception of images and related files via fax
* Reception of images from lockbox processing solutions
* Importing files of all types with specific file size restrictions; attach image files to system data such as attaching a trademark bitmap file to a trademark record

FileONE’s experience in storage media for files and images includes but is not limited to:

* Storage in file systems
* Storage in database as Binary Large Objects or similar
* Third party imaging solutions such as FileNet, custom Oracle based storage solution
* Outbound interface for microfilm/microfiche production
* Archive storage

Similar to our experience receipting files and images, FileONE’s experience in providing such records from SOS filing systems is extensive:

* E-mail attachment
* HTTP posting
* Image exports through transmission or subscription
* Electronic fax
* Online web retrieval
* Image ordering through online purchase such as shopping cart
* Export to external systems such as FileNet and other custom image stores
* Automated periodic image file exports

FileONE’s experience with retention processes for elements of row level data for tables in relational database systems is also extensive. FileONE’s specific experience involves and can be summarized by the following:

* Defined purge/archive policies. FileONE has defined policies specifying the sub-sections of business data eligible for purging/archiving. Policies for purging have involved specification of data selection criteria including: specific data attributes relevant to the data type, date ranges, correspondence types, and other attributes.
* Designed schemas to allow for the purge/archive process. Database schemas were designed to allow for purging/archiving of data. In circumstances where the creation of orphaned records could not be avoided, specific data validation scenarios and business rules were created to allow for the removal of data while maintaining core data integrity. Application modifications were developed to address the presentation of data where expected purged or archived information was no longer present.
* Archival and purge jobs were designed to select record sets based upon appropriate specified selection criteria as defined in purge/archival business policies and rules.
* Designed simulator/preview function. Development of jobs to simulate the purge/archival were performed to allow a user to approve or reject further processing of the records/record sets slated for purging or archival. The specific jobs were designed to optionally require final user approval for record level purge/archival; final acceptance resulted in either the transfer of row data to an archive data repository or ultimate record purge.
* Data restoration procedures. Designed archival maintenance screens and related functionality to allow for the selection, preview, and approval of data for restoration to back end production repository. Upon user approval, data would be migrated back to production repository for use in production system.

### 3.3.8 Redaction

FileONE accepts the requirements of Section 3.3.8.

The SystemWORKS application will provide both manual and automated redaction capabilities. Using the manual redaction functions, the SOS can flag and redact imaged documents throughout the workflow process.

The SystemWORKS application also includes an automated redaction suite powered by ID Shield technology from Extract Systems. The tightly integrated automated redaction software uses a rules-based engine to search scanned documents to locate and redact the information. Using OCR and a rules-based technology enables the system to locate sensitive information anywhere in the document rather than only within a specific region. The system uses a combination of words, phrases, patterns of text, proximity, and location to identify potentially sensitive information. For example, the engine may find the clue word “SSN:” within a document followed by a pattern of numbers such as xxx-xx-xxxx, or the engine may recognize a number patter alone such as xx-xxxxxxx. The combination of the clue word with the format of text provides high confidence that the potentially sensitive information needs to be redacted.

After locating the sensitive information on an image, the system can be configured to either automatically redact the data and post the newly protected image or send the information to an end user (verifier) to manually confirm the redaction. The system creates a copy of the image and then “burns-in” the redaction zone. The advantage of this solution is that the original is maintained should a certified copy of the document be requested at the counter, while the redacted image is published for viewing via the Internet. Access to original, non-redacted documents can be controlled using SystemWORKS native security tools. The system allows for automated, global restriction for the general public and internal staff. Only administrators or authorized personnel can access the original image copy.

In addition to a truly automated redaction process, the system also provides a semi-automated verification workflow. This introduces an additional step for an end user to verify the automatically located redaction zones prior to “burn-in.” Both the image and sensitive information are presented to the verifier to “accept or reject” potential redaction zones. Each piece of sensitive information is presented to the verifier using different colored highlights to signify higher or lower confidence levels determined by the software. These confidence levels are based on user-defined criteria. If a verifier locates sensitive information on the image that was not identified automatically, a built-in redaction marker and “rubberband” tool allows he or she to quickly add the proper redaction zone at his discretion.

### 3.3.9 Environments

FileONE understands and will comply with the requirements in this section. The SystemWORKS product is written using Microsoft .Net development tools and complies with Microsoft best practices for development and deployment standards. Using the SystemWORKS Deployment Manager, in conjunction with an implementation plan, FileONE will distribute SystemWORKS binaries to any number of test or production environments.

FileONE currently supports eleven (11) deployments of the SOSKB business services management product and uses this methodology to deploy and manage software updates in a multi-tiered environment. FileONE has an aggregate ~75 years of experience with implementations, Web-based solutions, and multi-tier environments.

FileONE understands that each development, test, training, and implementation environments will be hosted at ITSD’s Helena data center at various phases throughout the project. VPN access will be available and is critical to the timely and cost-effective implementation of SystemWORKS. Once agreed to by both FileONE and the MT SOS, changes in the VPN access will require mutual written approval.

### *3.3.9.1 Development System*

FileONE understands the requirement included in the RFP. SystemWORKS is a COTS product solution that is developed at FileONE and would not require a traditional development infrastructure located at the MT SOS offices. All core code development is conducted at FileONE. A development platform would be created, including appropriate VPN access, to allow development of interfaces to production systems requiring data transfer between SystemWORKS and MT SOS offices.

### *3.3.9.2 Test System*

FileONE understands the requirement included in the RFP. The FileONE solution will be loaded into a Pre-Production or User Acceptance Test (UAT) environment. This environment should functionally mirror production, but does not need to be an exact duplication of the physical production hardware. The test environment will be hosted on virtual servers that mimic the production environment.

### *3.3.9.3 Training System*

FileONE understands the requirement included in the RFP. The FileONE solution will be loaded into a training system. This environment should functionally mirror production, but does not need to be an exact duplication of the physical production hardware. The test environment will be hosted on virtual servers that mimic the production environment.

### *3.3.9.4 Production System*

FileONE understands the requirement included in the RFP. FileONE provides a comprehensive deployment plan for all hardware required to deploy the SystemWORKS solution in an optimal manner for production environment based on MT SOS requirements.

### *3.3.9.5 Version Control*

The FileONE SIMS solution utilizes SystemWORKS, a Commercial-off-the-Shelf product which requires minimal code customization. However, FileONE does anticipate that there will be development required for system integration and interface functionality. This development will require a development environment and it is recommended that Microsoft’s Team Foundation Server (TFS) be used. TFS integrates the development environment with build and code versioning functionality. TFS is also highly configurable so that constraints such as check-in and check-out, versioning, and comments are enforced.

Technical and non-technical documentation can also be kept in TFS and versioned.

FileONE anticipates quarterly releases for major and minor upgrades. Hot fixes will be deployed on an as-needed basis to address unanticipated critical issues. The exact scope and timing of each release will be determined by our Product Management team in cooperation with our Customer Advisory Board. The Product Management team is the direct liaison between our customers and our Product Development team. In this manner, FileONE is able to leverage strategic customer needs in creating our releases.

SystemWORKS releases include release notes indicating included new functionality, as-needed bug fixes, and appropriate configuration information. The release will be provided electronically. The software release can also be installed by a MT SOS resource with system administrator rights or FileONE can perform the installation.

Please reference Section 3.1.1, “Project Methodology” for more information regarding version control.

### 3.3.10 Securities and Control

FileONE accepts the requirements of Section 3.3.10

.

The SystemWORKS security module leverages Active Directory which can be trusted with an existing domain to leverage credentials and facilitate single sign-on. SystemWORKS is designed to leverage the most current Microsoft security technologies to ensure the highest level of security.

FileONE’s SystemWORKS application conforms to state statutes and guidelines for securities and control.

### 3.3.11 System Performance Specifications

FileONE accepts the requirements of Section 3.3.11

SystemWORKS will be tested using performance metrics that exceed the MT SOS standards. While FileONE fully anticipates that the implementation will meet or exceed MT SOS requirements as stipulated in Appendix J but, respectfully, would like to point out that performance can degrade for reasons beyond the control of the application. Examples include network traffic, power outages, hardware failures, and various types of system activity.

FileONE will performance test SystemWORKS in a “clean room” type environment that uses an industry accepted approach for testing system load. SystemWORKS will be load-tested throughout the development process to ensure the highest standard of performance. FileONE will work with the MT SOS to select a predetermined set of features that are representative of key system processing functions. Load tests will be executed against internal environment and optionally the MT SOS infrastructure to evaluate load levels over specified period of time. The findings of these tests will be reported to MT SOS for review.

Please reference section 3.1.5, “System Testing” for additional details regarding the SIMS system performance specifications.

### 3.3.12 Backup and Recovery

FileONE accepts the requirements given in Section 3.3.12.

### *3.3.12.1 Recovery*

FileONE has created disaster recovery and back-up plans for other Secretary of State clients. A comprehensive disaster recovery plan will be devised during the ServiceWORKS Analysis phase for the MT SOS SystemWORKS environment. The plan will include disaster recovery methods as well as recovery options. This plan will be implemented and tested per the scheduling requirements of this RFP. The high level process for recovery can be described by the following four steps: Assessment, Preparation, Testing, and Repetition.

Assessment

In coordination with MT SOS, FileONE will first assess readiness by validating that required facilities, personnel, hardware, software, and data are in place to fulfill recovery. Inventories of software and relevant licenses will be created. The existing infrastructure is assessed so that the readiness of all required hardware, software, and resources at the recovery site are understood. Existing system backup procedures are validated and documented.

Preparation

Copies of required installation media and proof of ownership will be secured and available for application at the recovery site. The available systems are then prepared for recovery operations; such preparation can include installation of software to the point where the required hardware and software infrastructure can be assessed as ready for actual recovery testing. Validation of network connectivity, server operability, storage and other infrastructure functions as expected at a base level. Backup procedures are adjusted as required to meet recovery needs. Availability of all required backups at the recovery site is validated.

Testing

This is the most critical and resource intensive part of the recovery validation process. This process may start with the installation and testing of applications software and any required systems software. Testing and verification of network and other communications capabilities are also performed. Next, determination of the specific recovery point will be determined as will be the priority sequencing for the restoration of production functions.

When the environment is validated as ready, the appropriate backups are applied for required files and data. After initial validation that application functionality is back online, key processing functions are validated. An assessment of ability to perform and resume operations (or simulated operations) is determined.

Communications are provided to all system users, stakeholders, and appropriate interested parties. The details of the communications will vary depending on the success of the recovery. If successful, details regarding progression of operations and any ongoing issues will be communicated. With a fully successful recovery, production operations should commence with standard operating procedures defined for a full recovery.

Testing will be used to compile approximations of recovery times based upon actual execution times realized in the testing cycles. This information will allow MT SOS and FileONE the best information regarding expected recovery timing.

Repetition

Recurrence of testing is the only way to assure ongoing recovery readiness. The assessment and preparation activities will require significantly less effort after the recovery validation cycle. Assessment and preparation activities will focus on any changes related to backups and the recovery process. Periodic testing of a fully simulated recovery must be performed to guarantee that changes since the previous testing cycle have been appropriately addressed in the recovery processes and will not further impact system availability in an adverse manner.

Recovery from a server failure will vary depending upon the nature of the server failure. The failure of any one single server can be tolerated and will not take SystemWORKS offline as the SystemWORKS Enterprise Application Environment has been designed with no single points of failure.

Due to the architectural and application design, data storage is not maintained on individual servers, and as a result there is not a need to recover data in the event of a server failure event.

Server restoration is accomplished by re-installing or installing the SystemWORKS software and running the SystemWORKS Service Configuration Utility.

All system of record data are stored on the SAN device. This fact is why we can tolerate server failures without taking SystemWORKS offline. The SAN is resilient with significant redundancies thus providing a high level of fault tolerance by design. In the unlikely event of a total SAN failure, recovery procedures would vary based upon available technologies but would typically be performed by restoring the array backup to another storage device.

Reasons for total failure include the complete power loss of primary and tertiary backup power supplied as well as multiple concurrent failures of items such as servers, appliances, and other hardware and network infrastructure. Both of these situations are unlikely due to the number and combination of failures that will occur at the same time.

FileONE is a web based application and does not require any application specific recovery procedures for desktop processing. Desktop machines with operable browsing functionality will be able to fully operate SystemWORKS within five (5) minutes of power restoration.

### *3.3.12.2 Backup*

To address MT SOS backup and recovery planning needs, FileONE will provide a backup plan and recovery plan for implementation with the SystemWORKS solution. Providing an appropriate backup solution will require analysis to account for all factors of existing MT SOS existing infrastructure relevant to backup requirements and processing. The backup and recovery services are provided through ServiceWORKS and will be conducted from the Analysis phase during the appropriate warranty and maintenance periods.

At a minimum, the backup plan produced will include the following

* Identification of appropriate backup hardware. Installation and validation that the backup infrastructure is connected to all appropriate servers, file and image systems, and storage devices.
* Installation and configuration of the backup software on all required servers and devices.
* Verification that the backup software is able to detect tape libraries, drives, or other requisite network devices/locations.
* Installation and configuration of backup agents on the servers, including any agents for components such as SQL remote servers, exchange or others.
* Installation of any updates available for the backup software and hardware.
* Preparation of an inventory of files, folders, and databases that need to be b acked up on various servers.
* Documentation of where data, files and folders are stored on the appropriate server(s).
* Creation and documentation of a schedule of backup jobs and creation of an inventory of backup media.
* Development of library/cataloging system for the proper labeling and storage of backup media.
* Initial testing of backups for all servers and data and the performance of recovery testing consistent with the recovery process in section 3.3.12.1.

### 3.3.13 System Documentation

The FileONE solution will include system documentation for the system development lifecycle.

Process documentationrefers to documents that record the process of development and maintenance. Process documentation is produced so that the development of the system can be managed and monitored. Process documentation included with the FileONE solution will include:

* Project Plans
* Business Process Flows
* Quality Plans
* Project Standards
* Requirement Documentation
* Maintenance and Support Plans

Product documentation describes the product that is being developed and is made up of System documentation and User documentation. System documentation describes the product from the point of view of the engineers developing and maintaining the system. User documentation provides a product description that is oriented toward the system user audience.

FileONE will partner with the MT SOS to provide system documentation of reasonable scope which may include the following items:

* Comprehensive database diagrams or entity relationship diagrams
* Data dictionary entries covering data domains, tables, and attributes
* Functional and process decomposition diagrams
* Data flow diagrams
* User and procedure manuals for each system unit defined in the requirements matrix
* Operations production schedules
* Disaster recovery plan
* System back-up and recovery procedures
* Action diagrams for all programs
* Input/output layouts
* Optional program source code (see cost proposal) including technical specifications and class diagrams
* Copies of test data files and test scripts/criterion

FileONE has provided a sample training document in Appendix C, “Training Sample,” for a high-level example of training material FileONE provides.

Documentation is an important part of the FileONE SystemWORKS offering for Montana. The documentation in Appendix C is representative of how FileONE will leverage documentation to support training planning, training execution, and further reference for ongoing learning and knowledge transfer. SystemWORKS help will provide a significant body of functional documentation that can be used for ongoing knowledge transfer. The help documentation as well as release notes will together be updated periodically to provide information and knowledge transfer on SystemWORKS functionality enhancements. The entire backup and recovery process will be documented to provide pragmatic information on detailed backup and recovery procedures, record all inventoried items, chronicle test recovery times.

## 3.4 Operational Support Requirements

### 3.4.1 Issues, Enhancements & Defects

The following table outlines FileONE’s standard response times for reported system issues. As noted in the RFP, FileONE and the MT SOS will work in partnership to classify new support items when they are logged. Please note, FileONE has combined high and medium level issues to better simplify the support classification process and reduce the time and effort required for the MT SOS and FileONE to manage the ticket tracking process.

| **Severity Level** | **Description (recommended)** | **Initial Response Time** | **Status Update** |
| --- | --- | --- | --- |
| Severity Level 1:  **Critical System Failure** | * Total System Outage | 15 minutes | As needed (including anticipated resolution timeframe ) |
|  | * Web services are inoperable |
| Severity Level 2/3:  **High/Medium** | * Time-critical SIMS function is inoperable  (i.e., Dissolution processing) | 4 hours | Regularly, as needed |
| * System-Wide Impact, Major to Moderate severity, but system is operational |
| * Financial impact |
| Severity Level 4:  **Low** | * Non-System Wide Impact | 8 hours | Weekly |
|  | * SIMS features that cease functioning that do not impact operations |

FileONE understands that the MT SOS may wish to assume support of the SIMS application internally. FileONE requests a minimum six month notice prior to the termination of any support agreement to provide sufficient time to smoothly transition support duties to the MT SOS.

### *3.4.1.1 Help Desk*

FileONE’s support service goes far beyond providing a passive pager support system. FileONE provides a fully staffed and qualified help desk team and technical support department focused on addressing support needs for the MT SOS. At a minimum, FileONE will have seven (7) FileONE resources to the Help Desk in addition to five (5) developers available to handle SystemWORKS support requests. FileONE’s support services will be available during the State’s normal business hours, 8:00am to 5:00pm Mountain Time.

FileONE will provide a call center for MT SOS Designated Points of Contact during the standard MT SOS business hours listed in the RFP.

FileONE will manage the SIMS warranty and maintenance effort using the RightNow support management system. FileONE will use RightNow to produce the bi-weekly reports identified in the proposal.

While acknowledging acceptance of the RightNOW RFP requirement, FileONE offers a potential alternative in the form of a proven third-party Professional Service Automation (PSA) application, Autotask, to track and manage all support requests. FileONE has used Autotask to track our support tickets and manage product releases over the past three (3) years. Using the Autotask application, the MT SOS would have access to product release information and general reports for other jurisdictions which are part of the SystemWORKS users group. FileONE recommends that the MT SOS and FileONE jointly determine whether to use RightNow or Autotask following contract award.

FileONE understands that the liquidated damages reference included at the end of this section no longer applies as the State has removed the requirement for SIMS-related liquidated damages provisions.

### 3.4.2 Batch Processes

FileONE understands and acknowledges the requirement to perform batch processing without manual intervention and to provide front end functionality that will allow users to modify batch parameters. SystemWORKS’ Job Manager is seamlessly integrated as part of the SystemWORKS Application. The Job Manager is accessed in the application front end and such access is restricted by user roles and permissions. The Job Manager provides the following functions:

* Schedule Jobs Including Execution of Sequenced and Dependent Jobs
* Execute Works Flows
* Perform Data Updates
* Interface with 3rd Party Vendors
* Job Prioritization
* Job Notifications
* Job History and History Reporting
* Job Schedule Monitoring
* Manual Job Execution
* Notification Configuration

The following list represents a few examples of the types of jobs that can be managed through the SystemWORKS Job Manager:

* Renewal Letters and Other Mass Mailings
* Generation of Pro-Forma Reports
* Status Changes Such as Expirations of Name Reservations
* Compliance Processing Jobs Such as Entity Dissolutions
* Periodic Report Production

Batch parameters may also be modified in either the SystemWORKS Business Rules Manager or in the Workflow Editor depending on the nature of the modification to the particular batch job. Flexibility and control are provided to users for scheduling, sequencing, content production, and activities performed by batch jobs in SystemWORKS.

### 3.4.3 Production Schedules

FileONE understands and acknowledges the requirement to coordinate with external agencies to record, maintain, and track well-documented production schedules including, but not limited to, those required in order to process production jobs.

FileONE will coordinate with key stakeholders as appropriate, including external agencies, throughout the project lifecycle such that scheduled and ad hoc ‘jobs’ are maximized for performance and processing efficiency, and same will be scheduled for minimal impact to system users during all phases of project delivery and SystemWORKS production life. It will be the responsibility of MT SOS to ensure the availability of key personnel, including those within external agencies, who must be empowered to work directly with FileONE staff wherever possible.

Special consideration will be given to peak production times, which will be identified and analyzed for daily, weekly, monthly, quarterly and yearly cycles. As stated in FileONE’s response to section 3.4.2 “Batch Process,” front end functionality, which enables system users to modify batch parameters via SystemWORKS Job Manager, is seamlessly integrated as part of the SystemWORKS Application. The Job Manager is accessed in the application front end and such access is restricted by user roles and permissions. (See section 3.4.2 for Job Manager functions.)

All job scheduling will be well documented, and a report of job schedules can be generated from SystemWORKS Job Manager. Job scheduling will be part of the project plan, and a specification incorporating analysis of daily, weekly, monthly, quarterly and annual production volume will be developed. Cross-agency sign-off of the specification will be required prior to scheduling of jobs, and the final configuration will be reflected in a report that will be distributed to cross-agency stakeholders and to whomever else MT SOS chooses to include in the distribution of this report.

### 3.4.4 Batch Processing Monitoring

FileONE understands and acknowledges the requirement to capture exceptions or errors that occur during the processing of a batch job using the SystemWORKS Logging Manager. The Logging Manager is a centralized component that is used to intercept and record the details of an error or exception encountered in the application. In the event of an exception, the Logging Manager will record the nature of the error/exception and communicate this information back to the Job Manager where the users can view details regarding the specific job related processing history.

In addition to logging the details of the error/exception so that error information is available in the Job Manager; upon detection of an exception, the Job Manager can be configured to perform a number of activities including, but not limited to, the re-processing of the job, notification via e-mail, generation of a system message that is reported to specified SystemWORKS users, processing other specific jobs or routines.

The Job Manager in SystemWORKS allows for the configuration of notifications for every job. For each job that is processed a notification can be sent real-time to different parties for job processing success, upon job processing errors, or for both scenarios.

### 3.4.5 Special Requests

FileONE understands and acknowledges that the SOS Project Manager may request special reports or data extracts. In response to the stated need in the RFP for ad hoc reporting, FileONE is confident that many of the MT SOS’ ad hoc reporting needs will be met by the SystemWORKS Advance System Reporting Module. This module allows MT SOS staff to quickly answer questions with real time access to the SystemWORKS database. This powerful reporting tool provides the following key features that enable the fulfillment of special requests:

* Business users can produce custom reports without involving database experts
* Data, knowledge and information is more accessible to administrators
* Significant reduction in reporting delays for decision makers
* Deliver richer reports and better information to stakeholders (e.g. State Legislature)
* Easy sharing and automated distribution of reports

See more about the advanced custom features offered in SystemWORKS fully integrated Advanced System Reporting Module in Section 3.5. If the MT SOS needs additional assistance in providing ad hoc reports, FileONE can provide this service at the standard hourly rates included in the cost proposal.

### 3.4.6 Data Integrity

FileONE understands and acknowledges the RFP requirements relating to data integrity. There are two primary monitoring approaches for identifying and enforcing data integrity: prevention and detection. SystemWORKS employs both approaches.

Enforcing integrity for data entered through the application is done primarily through prevention. Identifying potential data integrity violations and preventing them in advance is the most efficient means of avoiding data integrity issues. Modifications to data are introduced during standard application processing though inserts, updates, and deletes. SystemWORKS enforces data integrity for these changes through a series of integrity constraints or rules. Three types of integrity constraints are an inherent part of the relational data model: entity integrity, referential integrity and domain or semantic integrity. These types of data integrity are enforced in SystemWORKS for application processing that result in data inserts, updates and deletes:

* **Entity Integrity:** The ability to identify each record in a table as unique using a primary key. All data input into the database must meet the specific entity requirements so that the record is uniquely identifiable.
* **Domain (or Semantic) Integrity:** The data entered into a column reflects an allowable value for that column. The value must be within the domain or allowable set of values for that column.
* **Referential Integrity:** The relationship between data in different tables. The relationships of meaningful data relationships through the use of foreign keys are enforced; any modification or deletion of data that would result in a destruction of a defined relationship would be prevented. Any addition of data will require the creation of a new instance of a relationship between tables where a defined foreign key relationship is present.

During the data conversion process, converted data is validated at multiple stages to ensure integrity. At each stage of the data migration, cleansing, transformation and loading processes, data is validated to ensure integrity before the data is ultimately entered into the SystemWORKS database. As data is migrated, checks for domain integrity and entity integrity are performed. These specific checks are performed before and after data cleansing, and after transformation and upon loading to the database. Referential integrity checks may be performed upon the data source prior to data migration, if applicable. Referential integrity may also be validated as appropriate before and after data cleansing, but will be performed after transformation and after data is finally loaded.

The data will go through both prevention and detection processes but most of the data cleansing and validation will be performed through prevention. Some business rule validation will be performed from time-to-time during the overall data conversion process and will be coordinated closely with the MT SOS Subject Matter Experts.

Reconciliation processes are performed during data conversion to identify any discrepancies in the data. The following reconciliations will be performed as required:

* **Data Migration:** After the data from the source systems have been migrated to any staging area, reconciliation is performed between source systems data and staging area data.
* **Cleansing:** After the cleansing process has completed, reconciliation is performed between un-cleansed data, the exception listing and cleansed data in the staging area.
* **Transformation:** After the transformation process has completed, reconciliation is performed between cleansed data, the exception listing and transformed data in the staging area.
* **Loading:** After the loading process has completed, reconciliation is performed between transformed data in the staging area and the data in the application.

During our Data Migration, Conversion, Generation and Transformation, FileONE will maintain a Staging and Mapping environment and will keep a log of bad/invalid/questionable data for reference and analysis. Achieving a full consistency on image data, archived/purged, migrated and new, application inserted data will be addressed by mapping and migration & date range rules.

## 3.5 SIMS Bonus Features and Functionality

In response to the “Bonus Points” scoring section on page 54 of the RFP. The following section includes SystemWORKS SIMS functionality and other benefits not specifically requested that add substantial value to the FileONE solution for the Montana Secretary of State.

| **SystemWORKS Bonus** | **MT SOS Benefit Overview** | **Value** |
| --- | --- | --- |
| **500 hours of Professional Services** | Annual allotment of 500 pooled professional services hours at no additional cost for use in partnership with other Customer Advisory Board members to enhance SystemWORKS. These professional service hours are valued at $100,000 per year and guaranteed for a minimum of four (4) years (to correspond with the one (1) year warranty and three (3) optional FileONE support periods). | Up to $400,000 for System Enhancements |
| **CRM** | SystemWORKS will include a Customer Resource Management module to allow the MT SOS to make informed, proactive, and strategic operational decisions to continuously improve services available to customers. At a high level, the CRM functionality includes the ability to:   * Record documentation received * Record documentation sent (e.g., outbound correspondence) * Attach e-mail correspondence to the entity account in standard text form * Attach files to correspondence events * Index public and private comments for all filing records | $150,000 module offered at no cost to the MT SOS |
| **Membership in Customer Advisory Board** | As a member of the Customer Advisory Board, the MT SOS would join the New Hampshire Secretary of State and a small number of select jurisdictions to provide input over key system features. As a Customer Advisory Board Member, the MT SOS will directly influence the future direction of SystemWORKS after the initial release. | Key Strategic Direction |
| **Leadership Role in SystemWORKS User Group** | In addition to the Customer Advisory Board role, the MT SOS will appoint key Business Processing Subject Matter Experts to work in conjunction with all SystemWORKS jurisdictions to define best practices and other system enhancements for consideration by FileONE and the Customer Advisory Board for future system releases. | Best Practice and Knowledge Sharing |
| **Microsoft User Interface** | SystemWORKS leverages the Ribbon navigational controls developed as part of Microsoft’s new User Interface technology.  This technology provides an intuitive familiar interface and requires no full page refreshes enhancing the overall user experience. Users of Microsoft’s Office 2007 application suite will be familiar with the Ribbon application interface present in SystemWORKS. | As a Microsoft Partner, FileONE leverages billions ($US) of Microsoft R&D investments |
| **Fully Integrated, Advanced System Reporting Module** | SystemWORKS powerful report generation designer allows for MT SOS staff to generate analytical reports   * Modify and create copies of existing reports reducing report development time (Save-As) * Create custom parameters and selection criteria * Specify custom schedules for report creation and automated e-mail distribution to specified e-mail recipients in any of the following formats:   + CSV (Comma Separated Value)   + XLS   + PDF   + HTML   + Link to report * 100% Graphical Report writer. Graphically select report information to specify report criteria and presentation format; no SQL query writing is required. * Export reports in the following formats with the push of a button:   + PDF   + CSV (Comma Separated Value)   + XML   + HTML   + Open Office Document   + RTF (Rich Text Format) * Create reports with nearly unlimited drill-down capabilities to further levels of detail * Ad-Hoc Report tool is tightly coupled to application so that links from data in the reports can provide navigation to the relevant areas of the SystemWORKS application * Include Charts along with data for graphical representation to generate:   + Pie Charts   + Line Charts   + Bar Charts   + Trend Charts * Export SQL Query generated by tool to use SQL statement for other functions | Comprehensive Real-Time Ad-Hoc Reporting; enhanced turnaround time for report request fulfillment; more responsiveness to business community and external stakeholders |
| **Auto-Populate Entity Information Check Scan** | SystemWORKS will automatically populate payer information for scanned checks. When a check is scanned, SystemWORKS encrypts and stores the routing number and account number presented in the MICR section of a check, and records the associate of this MICR data to the specific paying entity. The next time a check with the same routing and account number are scanned, the paying entity will automatically be populated providing significant processing efficiency for the processing of checks submitted by repeat filers. Additionally, in SystemWORKS, images of all scanned checks are maintained. | Reduces Processing Time and Errors |
| **Automated Check Endorsement** | SystemWORKS is designed to interface with check scanning devices that provide automatic endorsement functionality. This information can be maintained digitally with duplex scanning that allows for the capture and storage of both sides of the check in SystemWORKS. | Reduces Processing Time and Errors |
| **SystemWORKS Customizable Automated Workflow Processing** | For items that require processing by specific user resources, unique workflows are created for those specific users or groups of users. User workflow processing assignments can be adjusted so that the users are authorized to process all filings in a Business Processing unit (UCC, Notary, etc.), specific filing types, filings with specific priority levels, and filings that arrived in certain date ranges. The work items available for processing by a user will be governed by that user’s current workflow processing assignments. Based on a user’s workflow processing assignment, staff will be automatically moved to the next work item (next filing in queue) based on their permissions. User workflow assignment settings can be changed by supervisors/managers at any time. | User friendly, robust system configuration tool |
| **Payment Card Industry Data Security Standard** | SystemWORKS has been designed with full consideration of the Payment Card Industry Data Security Standard (PCI DSS).  Any and all sensitive credit card information, such as the card number and CVV are encrypted. To further increase security, the portion of the credit card number that is stored is broken into four (4) individually encrypted sections. To maintain PCI compliance, the temporarily stored encrypted CVV code is deleted as soon as the bank transaction is completed. SystemWORKS will not store the full contents of any track from the credit card magnetic stripe and will only store those data elements which have been approved by PCI DSS. Furthermore, SystemWORKS will mask the PAN (Primary Account Number for Credit Cards) when displayed. | Superior Security to protect Sensitive Data |
| **Industry Leading Automated Image Redaction Solution** | SystemWORKS provides the industry’s leading automated redaction ID Shield solution provided by Extract Systems. The Automated Redaction Tool allows the MT SOS to define specific criteria to flag high risk items for manual review or automated redaction. The Automated Redaction Tool will be set to work with the same documents (up to 15 total documents) configured for the OCR Auto Indexing Tool. See section 3.1.8 “Redaction” for more information. | Automated, Rules Based System reduces processing time and human error |
| **Image Redaction Multiple Review Points** | In addition to the automated image redaction with ID Shield, a filing image can be reviewed and flagged for redaction and/or actually redacted at five (5) different points during the filing process:   * Prior to scanning, a user can flag a document for redaction during entry processing\* * As part of the scanning process with an image review * While indexing the filing and processing the filing * During filing verification * During final correspondence generation   \* The document can only be flagged for redaction, and not actually redacted at this stage as the document has not yet been scanned into the system. | Provides multiple check points to further reduce risk of releasing sensitive data |
| **SystemWORKS Graphical Workflow Editor** | System users can customize all workflows using the SystemWORKS Workflow Editor. The Workflow Editor is a graphical tool designed to allow easy creation of new workflows or modification of existing workflows.  Custom workflows can be developed for specific filings and processes; these types of functional workflows govern how things are processed and how they move through the system. Workflows of this nature are configured in SystemWORKS Workflow Editor.  The Workflow Engine that processes workflow configured using the Workflow Editor was designed to incorporate complex processing rules in the workflow composition process. Each customized workflow processing rule integrates seamlessly to the Business Rules Manager to perform the customer validation and rules enforcement, while the Workflow Manager handles execution and progression of a logical work item through the filing process. | Allows for future configuration through easy to use graphical editor; less reliance on vendor for minor or major workflow modifications |
| **Optical Character Recognition (OCR) and Auto Data Population of Forms** | To maximize processing efficiency, MT SOS SystemWORKS implementation includes automatic population of data entry fields from filed documents using OCR technology:     For optimal results, filed forms eligible for OCR recognition and automatic data entry must be typewritten     Filed forms eligible for OCR recognition and automatic data entry can be filed using any and all methods configured in SystemWORKS, e.g., paper or online     FileONE will configure up to 15 forms, as specified by MT SOS for OCR recognition and automatic data entry     In addition to the 15 included forms, additional forms may be configured for OCR recognition and automatic data entry via ServiceWORKS (not included) | Reduces processing time and data entry errors |
| **Automated Search to Reflect for UCC** | SystemWORKS allows for the automated production of Search reports for UCC1 filings when the search for the first, second, or all debtors is specified. SystemWORKS automatically performs the search, includes the search results with the correspondence, and saves an image of the search results and entire correspondence package. This comprehensive solution for addressing Search to Reflect processing allows the MT SOS to meet this search process with a few mouse clicks during the internal processing of UCC filings. | Reduces processing time and ensures request is completed |
| **Job Manager** | SystemWORKS Job Manager provides functionality well beyond common job scheduler functionality. The Job Manager provides the ability to:   * Schedule jobs including execution of sequenced and dependent jobs * Execute works flows * Perform data updates * Interface with 3rd party vendors * Job prioritization * Job notifications * Job history and history reporting * Job schedule monitoring * Manual job execution * Notification configuration | Enhanced Batch Processing Control and Reporting |
| **Configurable Business Rules Manager** | SystemWORKS offers a highly configurable product to meet ever-changing business needs. Complex business rules are handled through the SystemWORKS Business Rules Manager and engine. This engine communicates with the SystemWORKS Graphical Workflow Editor which allows drag and drop functionality in setting up filing workflows without complex programming. SystemWORKS also provides the capability of user-defined fields allowing additional flexibility in customizing a solution to meet the MT SOS corporate objectives. | Less reliance on vendor to make system changes; simplified, segregated business rule management |
| **Refund Processing to Payment Source** | SystemWORKS provides the ability to process refund payments using ‘In-Kind’ payment types directly from the SystemWORKS application.  Transactions that are refunded for payment types of ACH, Credit Card, and pre-paid accounts can be processed directly through SystemWORKS.  Such processing provides a quick and easy process for processing such refunds.  All requisite financial reporting is subsequently performed.  Specific personnel are required to perform segregated functions in this refunding process.  The ability to refund credit card transactions requires functionality to be available from the payment processor. | Simplified Accounting Procedures |
| **Expanded User Defined Fields** | SystemWORKS provides the capability of User-Defined Fields (UDFs) allowing additional flexibility in customizing a solution to meet the MT SOS corporate objectives. UDFs are used to record customized information in SystemWORKS. UDFs allow for the addition of details to the system that are not included as standard but are important to MT SOS.  UDFs can be used to maintain custom data needs for general entity information, information specific to business entity details, or for information for specific filing events. The user-defined fields allow SystemWORKS to easily support custom fields that the legacy system currently supports. | Allows SOS to process non-standard filing types through SIMS application |
| **Business Community Outreach** | As part of FileONE’s training effort, FileONE will provide and deliver a SystemWORKS SIMS program overview for key MT SOS stakeholders (e.g., banking association, legal community, major service providers). As part of the curriculum, FileONE will create overview materials that specifically addresses SystemWORKS’ impact and benefits.  Business Community Outreach programs will be conducted in Helena, Montana. Specific content will be determined by FileONE and the MT SOS prior to the training phase. | Increases awareness, reduces key stakeholder concern and promotes SOS vision and objectives |
| **Document Auto-Recognition** | Bar Code Recognition is used for all outbound documents that will be returned for further processing. This allows for an efficient alternative to batch scanning as data related to the document will be auto-populated during entry processing. Bar Codes can be recognized by scanners or optionally can be configured to be recognized by wand or hand-held devices. | Data query accuracy; workflow efficiency |