

Project Scope of Work

Lake County

September 8, 2010

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Section I - Project Overview

CIS Infinity --- Upgrade To Version 3

The project is defined as the provision of CIS Infinity - Version 3, by Advanced Utility Systems (Advanced) to Lake County. The project as outlined in this Scope of Work encompasses all aspects of Lake County's CIS Infinity upgrade, including but not limited to project management, data conversion, software control file configuration, and training. The current CIS Infinity instance will be upgraded to Version 3 and will replace the current version of CIS Infinity.

Project Goals and Objectives

Key project goals as agreed upon by Advanced and Lake County include:

- The installation and upgrade of CIS Infinity Version 3 as defined in the Scope of Work and Migration Plan.
- Conversion of data from CIS Infinity Version 2 to CIS Infinity Version 3.
- Conversion of current Bill Print(s)/Notice(s) format from Crystal Reports 8.5 to Crystal Reports XI
- DBA services, if required
- Training as outlined in the Training Plan.
- Project Management.

Migration Strategy – Specific Goals and Objectives

The migration methodology incorporated into this schedule divides the migration of CIS Infinity into four strategic stages:

- Start-up – planning, initial system upgrade.
- Soft Parallel – training, conversion testing, and soft parallel testing.
- Billing Parallel – data refresh, trial balance, billing parallel testing.
- Transition to Live.

Stage I – Start-up Goals and Objectives

- Assemble the project teams for Advanced and Lake County.
- Review and finalization of the installation timeline.
- Initial system upgrade.
- Installation of CIS Infinity Version software/data on Lake County's server.

Stage 2 – Soft Parallel Goals and Objectives

- CIS Infinity Version 3 Training.
- Testing of upgraded data and system functionality after training.

Stage 3 – Billing Parallel Goals and Objectives

- Test upgrade preparation.
- Parallel data extraction.
- Trial balance and QA testing.
- Billing Parallel.
- Cut Over issues list generated.

Stage 4 – Transition to Live Goals and Objectives

- System Upgrade (final run).
- Final balance.
- Cutover plan execution.

Timeline

A migration timeline has been established, identifying a target date for live use of CIS Infinity - Version 3. A migration plan has been included in Section 6, Project Migration Plan.

It is understood that this timeline may change based on written agreement between Lake County and Advanced, following an amended Statement of Work being approved.

Scope of Work (General Obligations)

The upgrade of CIS Infinity to Version 3 is to be completed through a shared effort by Advanced and Lake County, which includes but is not limited to the following:

Primary Roles of Advanced:

- Provide and install CIS Infinity – Version 3 on Lake County’s computer server.
- Upgrade current instance of CIS Infinity to Version 3.
- Provide training services to assist Lake County with its use of the Software.
- Provide on-going issue resolution and software update support.

Primary Roles of Lake County:

- Install CIS Infinity – Version 3 on Lake County’s computer client workstations.
- Provide adequate training facilities during project (if applicable). The training facility will include the following items:
 - Nine (9) computers (one for each student plus one for the trainer)
 - Printer
 - Projector (connected to the training computer)
 - White board
 - Phone (or access to a phone)
- Test CIS Infinity – Version 3, software configuration, data conversion and canned reports, bill print, and notices.
- Operate the CIS Infinity software for its own business practices within the parameters of the Software License Agreement.
- Testing of all saved searches and filters that have been created by Lake County’s users
- Testing and modification of all customized reports that have been created by Lake County’s users

Specific Obligations of Advanced:

Delivery of CIS Infinity – Version 3, software and services:

- Advanced shall deliver CIS Infinity – Version 3, software and services associated with that delivery and Lake County shall accept such delivery, based on the installation timeline established during the Start-up Phase.

CIS Infinity – Version 3 software installation:

- Advanced will provide installation of the CIS Infinity – Version 3 software. Advanced will remotely install CIS Infinity – Version 3 on a server(s) designated by Lake County. Following the initial installation, Lake County will be responsible for installing the software on all other client workstations.

Training:

- Advanced will deliver all training via Web-Ex, unless otherwise determined by both parties. The quote included in this Scope of Work identifies the allocation of training hours.

- The allocation of hours between project management, conversion, configuration, consulting, and training categories may be adjusted from one category to another, by mutual agreement and as may be in the best interest of a successful upgrade.

Bill Print

- Advanced will convert the current bill print (Crystal Report) documents for use within CIS Infinity V3

Project Management:

- A Project Manager stationed at Advanced shall be assigned to coordinate all migration activities related to the CIS Infinity upgrade to Version 3.

Specific Obligations of Lake County:

a) Procurement of hardware. Lake County shall be responsible, at its expense, for the updating of hardware as may be needed. If not yet completed, Lake County shall complete its procurement and installation of the computer hardware and associated system software at least fifteen (15) days before the CIS Infinity – Version 3 installation date.

b) Access to facilities and employees. Lake County shall provide Advanced access to Lake County's equipment and employees and shall cooperate with Advanced as reasonably necessary for Advanced to perform its project management, installation, configuration, training, support and other obligations under this Agreement. Lake County shall devote the necessary equipment, facilities, personnel and other resources reasonably necessary to (a) upgrade CIS Infinity to Version 3, (b) be trained in the use of CIS Infinity – Version 3 and (c) begin using the CIS Infinity – Version 3 on a timely basis as contemplated by this Agreement.

c) Lake County will provide competent staff during the upgrade project as identified below:

- Project Manager.
- Core Test Team (Lake County staff) – for testing accuracy of upgrade.
- Accountant (general ledger) – for testing accuracy of G/L figures.
- Programmer/Analyst – for specifications related to conversion and configuration.
- Database Administrator – for ongoing database management.
- Network Administrator – for network and operating system management.

Primary tasks for Lake County identified in this section are listed below:

- Manage installation and operation of hardware and network.
- Identify software issues.
- Test software configuration and verify results in writing.

- Create written specifications with screen prints of data and/or system anomalies.
 - Validate and test data and verify results in writing.
 - Test all system processing before live operation and verify results in writing.
 - Provide ongoing system and database administration.
 - Assume management and updating of the production account database.
- d) Training Facility. Lake County shall provide a suitable training environment for training classes held at Lake County's (if applicable) location including a computer for each user, network access and access to a photocopier and fax. Class size is not to exceed 8 users. Lake County shall provide an Internet connection (at least 128 kilobytes of bandwidth), and access to a printer from the training room.
- e) Internet access. Lake County agrees to maintain, for the duration of this Agreement and any renewal hereof, an Internet connection consistent with the Advanced Remote Access policy which will allow unassisted access to Lake County's server system to facilitate updates and remote support.
- f) Obtain third party training. Lake County shall ensure that its system and database administration staff is sufficiently trained on database management. Training for the database is arranged separately by Lake County with the respective database vendor.

Escalation Process:

Several processes may trigger the escalation process, including issue tracking, contract management, and risk management. This process assumes that prior attempts have been made to resolve the item and the appropriate parties cannot reach a resolution.

When an item is escalated, the appropriate participants are notified via formal communication (email, fax, or registered mail), which includes a summary of the concern/issue and the analysis of each party's position. The participants must be provided with sufficient time, to review the analysis and concerns prior to scheduling any resolution meetings.

The levels of escalation and the participants in each level include:

1. Engagement Resource (Technical Specialist, Migration Specialist, Application Consultant)
2. Engagement Manager (Project Manager)
3. Engagement Sponsor (Director of Operations)

Weekend Hourly Rates

Specified blended hourly rate pertains only to work performed during Advanced's regular business hours. If desired by Lake County, Advanced may execute a portion of this SOW during extended, weekend or holiday hours at a premium hourly rate of \$525.

Section 2 – Project Hours by Category

	Units	Unit Cost	Total
Professional Services*			
Conversion	60 hours	\$150	\$9,000.00
Installation and Configuration	60 hours	\$150	\$9,000.00
Bill Print	80 hours	\$150	\$12,000.00
Training (onsite)	40 hours	\$150	\$6,000.00
Onsite Tech Visit for Go Live	40 hours	\$150	\$6,000.00
DBA	15 hours	\$150	\$2,250.00
Project Management	50 hours	\$150	\$7,500.00
Summary of Services			
Total			\$51,750.00

* This is a fixed-price contract

* The Organization shall reimburse the Consultant for its direct expenses, including, but not limited to courier services, photocopying, faxing and reproduction, all reasonable travel costs including a travel time rate of \$75.00 per hour, meal expenses of not more than \$65.00 per diem on weekdays and not more than \$120 per diem on weekend days (no receipts provided) and a mileage charge based on the current Internal Revenue Service recommended rate per mile, long distance telephone calls, and all other reasonable expenses incurred in the performance of the Consultant's duties.

#	Payment Milestone	Payment Amount	Deliverable
1	Contract Signing 25 Percent of Contract	\$12,937.50	Executed Statement of Work submitted to Advanced Utility Systems Finalized Project Plan
2	Installation of the Software Installation of the software on [Client's] server. 25 Percent of Contract	\$12,937.50	Advanced to notify Lake County of the Installation of the upsized Version 3 test system of CIS Infinity Lake County to provide written approval of the

			successful upsize of CIS Infinity Version 3.
3	Initial Data Conversion 25 percent of contract	\$12,937.50	<p>Lake County to provide a copy of up-to-date version 2 data to be upsized for the Hard Parallel process of CIS Infinity V3</p> <p>Advanced to provide notification that the Version 3 upsize of CIS Infinity has been completed and ready for testing</p> <p>Lake County to provide written approval of CIS Infinity v3 test system balances</p>
4	Go-Live 25% of Contract	\$12,937.50	<p>Advanced to provide notification to Lake County of the completed CIS Infinity Version 3 Production System as Live.</p> <p>Lake County to provide written approval of CIS Infinity Version 3 system balances for Go Live</p>

Section 3 - Hardware Recommendations

Recommended Specifications

CIS Infinity Application/Database Server

General	
Configuration	Intel Xeon Dual Processor Server
Architecture	
Form factor	Rack Mountable or Tower Design
Processor(s) (Intel)	
Processor (CPU)	Dual Xeon 3.0 GHz/4 MB processors
Memory Standard	
Cache memory	4 MB cache per processor
Memory (RAM)	8 GB ECC SDRAM
Network controller(s)	
Gigabit Ethernet NIC PCI	Dual port copper gigabit network adapters.
Storage Controller(s)	
SCSI Controller	PERC3, 2 internal channels, 2 external channels, 128MB cache
Internal Storage	Internal 12 Bay hot plug wide Ultra3 SCSI drive cage with cooling fan
Storage	
Diskette Drive	3.5" 1.44 MB
Optical Drive	DVD-ROM Drive 24x
Hard Drives (Universal Hot Plug)	Two 36 GB 10,000 rpm Ultra 320 SCSI – (RAID1 or better) Three 73 GB 10,000 rpm Ultra 320 SCSI – (RAID5 or better)
Redundancy	
Cooling	Hot Plug Redundant fan
Power Supply	Hot Plug redundant power supply
Operating system	Microsoft Windows 2003 Server Enterprise or standard Edition XP or Vista with the latest service pack
RDBMS Server	Oracle 8i, 9.x or 10g or higher or MS SQL (Standard or Enterprise)

CIS Infinity Desktop Configuration

General	
Configuration	Intel Pentium Quad Core Processor
Architecture	
Form factor	Mini-Tower
Processor(s) (Intel)	
Processor (CPU)	Quad Core 4 3.6 GHz 800MHz FSB
Memory Standard	
Cache memory	6 MB L2 cache
Memory (RAM)	8 GB
Storage	
Diskette Drive (optional)	3.5" 1.44 MB
Optical Drive	24 x DVD RW
Hard Drives	120 GB IDE Hard Drive 10,000 rpm
Communications	
Fast Ethernet NIC	Integrated Gigabit Ethernet NIC
Video	
Internal Video	Integrated Video card with 128 MB of memory
Operating system	Microsoft Windows XP Professional or Vista with the latest service pack.
Applications	
Installed applications	Microsoft Office 2003 or higher with the latest service pack

Section 4 – Version 3 Upgrade Plan

Project Life Cycle – Overview

There are four major stages of a CIS Infinity Version 3 Upgrade: Project Start-up, Soft Parallel, Billing Parallel and Transition to Live. Within each project phase are milestones that need to be achieved in order to move to the next project stage. Each phase also includes associated training.

Project Start-up

During this first phase of migration, the project teams at Advanced and Lake County are assembled. The Advanced team allocates resources and project schedules and plans are solidified.

Project Plan

Lake County and the Advanced Project Managers will discuss the project plan and internal project dates affecting project milestones (for example, third party delivery dates). Lake County will manage the timeline of any third party vendors, which may affect project milestone dates and provides these dates to Advanced prior to base lining the project schedule. Any significant changes to the project timeline are to be communicated to and reviewed by Project Sponsors at Lake County and at Advanced.

Significant changes affecting the overall scope of the project may necessitate the use of the Amended Statement of Work process.

Amended Statement of Work Process

Once the project baseline scope has been documented and agreed to by Lake County and Advanced, any changes to the project which impact project schedules, costs, resources and risk must go through a clearly defined Statement of Work (amended) process. A change must be identified and documented by the Project Managers and the schedule and costs impact assessed and documented. If there is no impact on the project schedule or costs then the change will be implemented in writing by the Project Managers. If the change impacts on the schedule or costs, then the Statement of Work process must be undertaken.

Change Identified and Documented: A Change is usually initiated via an amended Statement of Work. When a request is deemed to be a change, the Project Manager enters this change process.

Change Owner Assigned: Through project meeting discussions, a single Change Owner is identified (normally a Project Manager). This person speaks to the change, ensures it is analyzed by the appropriate team members and works through any approval processes to determine final disposition.

Change Logged: Service Wise will be used to control/log changes. The Project Manager logs a new incident into the database where the change is given a control number. Included in this document is a copy of the Change form showing the information collected.

Change Communicated to Impacted Team Members: The Project Manager will ensure that each new Change is communicated (electronically where possible) to all impacted team members. The Change Owner will determine who these people are.

Change Impact Assessed and Documented: Each Project Manager is responsible for analysis of any change that may impact their project deliverables. Impact is documented in the Change database.

Project Schedule Impacted: If the change impacts the Project Schedule, the Change must receive Lake County's approval.

Project Costs Impacted: If the Change impacts project costs, the change must receive Lake County approval.

No Cost/Schedule Impact: If the change does not result in any revisions to either costs or schedules, the change will be implemented as per the next step.

Schedule and Implement Change: If all necessary approvals are received (or none were required), the change is scheduled and implemented. If the project schedule is impacted, a new revised project schedule is created.

Change Deferred/Cancelled: If the change is not approved, the reasons are to be documented and it will be cancelled or deferred until after the project is completed.

Regular Status Update: Project Managers must be provided with any new information related to Change Status so that the database is kept current and the Change Summary form reflects current information. Project Managers will create a Change Summary report on request only.

Regular Status Review: Review of the ongoing status of changes is a mandatory item on each project management meeting agenda.

Data Extraction

The CIS Infinity Version 2 application folders and database residing on the Lake County servers will be sent by Lake County to Advanced, according to dates established in the Project Plan (for the initial upgrade only).

Initial Version 3 Upgrade Conversion

The initial Version 3 Upgrade Conversion will average one to two days. The length of time necessary for conversion is dependent on several key factors including the size of the current database.

The Advanced technical team will upgrade the database and software.

Once the initial upgrade conversion has been completed, the Advanced team will install the system on the Lake County servers.

Installation

An Advanced technical specialist will conduct the installation of the software and data with the assumption that all hardware requirements have been met by Lake County prior to installation. The initial installation of CIS Infinity generally takes place remotely unless otherwise specified.

The CIS Infinity Version 3 software and the converted database are loaded onto the server. The Advanced technical team requires administrative access to Lake County's server during Installation and Lake County's technical staff will work closely with Advanced during this time.

Version 3 Overview Training will be conducted for the users following initial installation to ensure that they can access the system and navigate through CIS Infinity Version 3 for testing purposes. To ensure an efficient and effective parallel process, Advanced recommends setting up a separate area for testing and training.

Version 3 Overview Training

Version 3 Overview training will take place immediately following the installation of CIS Infinity – Version 3. This training is designed to provide users with an overview of changes to the CIS Infinity user interface.

Following this training, the users will start soft parallel.

Conversion Testing

During the Conversion Testing phase, Lake County's team will undertake testing of the Version 3 Upgrade conversion. Lake County's project manager will coordinate the completion of the Version 3 Upgrade conversion and submit any issues identified through Service Wise. This testing will provide the Advanced team with information relating to upgrade conversion anomalies to be corrected. Re-testing of identified conversion issues will be necessary.

During Conversion Testing, the Advanced team will access Lake County's server in order to upload data corrections, with the assistance of Lake County's technical staff. The users will re-test anomalies based on initial test results and established base line accounts.

Soft Parallel Testing

Following training, Lake County's test team will be ready to run parallel on the Version 3 environment, defined as performing identified processes on both Version 2 and Version 3 test systems and the monitoring of results for variances. This comparison testing between the systems ensures that CIS Infinity - Version 3 is performing properly and calculating correctly.

Trial Balance/Quality Assurance Testing

Advanced will work with Lake County to complete a trial balance. After the Version 3 data environment has been created, Lake County will generate Trial Balance reports from CIS

Infinity – Version 2 and compare the results to Trial Balance reports generated from CIS Infinity – Version 3. All parties are to reach consensus on the results prior to Lake County's approval of the trial balance.

Billing Parallel Process

Lake County's team will test every billing cycle during this phase to ensure that every account calculates correctly. Lake County will perform identified processes on CIS Infinity – Version 2 and on CIS Infinity – Version 3 and compare the outcomes. Lake County's Project Manager will track the results of the testing on both systems during the Billing Parallel phase.

Final Upgrade

Advanced will remotely perform the Version 3 upgrade in preparation for live.

Final Conversion – Final Balance

During this phase no activity will occur on the CIS Infinity – Version 2 environment in order to enable a final balance to be obtained. Final data extraction will be delivered to Advanced in an expedient manner. The CIS Infinity – Version 2 environment be read only after this point, and no new data is to be entered into it. Lake County will run Month End/Year end reports from CIS Infinity – Version 2 environment and produce balance reports and hold these reports to be used on the Transition Day.

Cut over to Live

At least one complete day is required to transition. During this day, inquiry only functionality will be available in version 2. Once Version 3 is ready for production use, it will be released to the client. During the transition, the payment link on Infinity.Link will be disabled until the production V3 instance is released. Once V3 is in production, Advanced will re-enable the payment link for Infinity.Link.

Lake County will be required to approve the final balance.

CIS Infinity Live

Advanced will assist Lake County throughout the upgrade period to identify and respond to any needs and concerns. A meeting will be arranged between Lake County's Project Manager and the Advanced Project Manager two weeks post live to discuss any remaining issues and scheduling.

Section 5 - Acceptance Testing

Description

Acceptance testing is a key to the successful outcome of the CIS Infinity - Version 3 upgrade. Testing occurs throughout the upgrade process to ensure that all anomalies are identified and addressed, and that all software issues are resolved prior to the Go Live.

The primary responsibility of Lake County is to test the CIS Infinity product, in terms of its functionality operating as designed, without errors, and in a manner that meets the needs of the users.

Baseline Accounts

Lake County will select a group of baseline accounts prior to the completion of the first upgrade conversion. Baseline accounts provide Lake County's staff with a point of reference when completing testing. The baseline accounts will represent a cross-section of account types and accounts handled differently than "normal" accounts. For example, a sample of an account for each rate code, an account with automatic withdrawal, accounts with multiple meters, and account with compound meters. Lake County will use these baseline accounts to test each data conversion.

Section 6 – Project Migration Plan

The Project Plan for Lake County identifies the activities and resources required for the successful upgrade of CIS Infinity. Advanced and Lake County will finalize the project plan within the timeframe agreed upon in this Scope of Work. The Project Plan includes key phases, activities, tasks, milestones and deliverables.

All work undertaken throughout the course of the CIS Infinity Version 3 Upgrade, is assumed to take place during the regular work week (Monday to Friday) and regular business hours. When a request is made for work to be completed outside of the regular work week, over a holiday or after business hours, a change order will be issued to request resources and an hourly rate of \$525/hour will be used to calculate a quote for the required hours.

Work Back Plans

The Project Plan above identifies the activities and general milestones associated with an upgrade of CIS Infinity. Advanced utilizes work back plans in addition to the timeline above in order to highlight specific roles and responsibilities of each milestone. A sample work back plan is provided below. Once the project begins, the project managers from both organizations will work together to identify the roles and responsibilities and specific timeframe for each milestone.

Sample Version 3 Upgrade Work Back Plan

Description of Activity	Individual(s) Assigned	Date
<p>Data Extraction (for the initial upgrade only)</p> <p>Data extracted from the current database and uploaded to the Advanced FTP site.</p> <p>Record Count Document to be completed and returned with data</p>	<p>Project Manager(s)</p> <p>Lake County Technical Team</p> <p>Advanced Technical Team</p>	
<p>Upgrade Conversion</p> <p>Preparation of Version 3 environment</p>	<p>Advanced Technical Team</p>	

Description of Activity	Individual(s) Assigned	Date
On Site Upgrade On-site upgrade completed	Advanced DBA	

Section 7 – Training

Version 3 Overview Agenda

Main Inquiry

- Toolbars
- Button Graphics
- Editing Accounts

Billing

- Bill Number Sorting
- Batch Statuses

Collections

- Collections Processing
- Collection Notice/Action Control

Reports

- Upgrade to Crystal Reports XI

New Services

- Automatic Update of Accounts
- Settings tab

Deleting Accounts Form

- Deleting CIS Infinity accounts

Security

- Applying security to Command Group buttons
- Applying security to Option Group buttons
- Applying security to tabs on the Customer Account Inquiry form
- Applying security to columns in system grids

On the Job Learning is a supplement to classroom training, and is ideally delivered one-to-one or in small groups of 2 or 3. It is conducted with the end user actually performing the tasks on CIS Infinity at their workstation with the trainer's guidance.

Web Training

Training will be performed based on the training plan that is prepared by the project managers from both teams to ensure that the needs of the users are met.

Training will be conducted via the web unless otherwise mutually agreed.

Conclusion

The Training Plan outlines the training modules designed to serve the users. Changes to the Training Plan will only be made following consultation between the Advanced Project Manager and Lake County's Project Manager.