

ILG Technologies

800 El Camino Real, Suite 180
Mountain View, CA 94040
www.ilgtechnologies.com
650-693-2332

April 24, 2017

The State Bar of California
Keith Jenkins
Office of General Services: Procurement Unit
180 Howard Street
San Francisco, CA 94105-1639

Dear Mr. Jenkins:

It is ILG Technologies' privilege to submit the enclosed response to the State Bar of California's Request for Proposal for the Admissions Information Management System.

Upon the release of our Electronic Bar Admission Solution in 2007, ILG Technologies, LLC, became the leading software provider in the bar admissions industry. Since 2007, our Electronic Bar Admission Solution has been deployed in eight jurisdictions total and is used by over 16,000 applicants annually. Our sole business is building partnerships with bar admission agencies across the United State in order to support them in meeting their needs.

The Electronic Bar Admission Solution is the most comprehensive solution on the market specifically created for bar admissions. The Electronic Bar Admission Solution offers the State Bar of California with an out-of-the-box solution that can be configured and customized to meet all of the needs specifically listed in the Concept of Operations.

Our team has over 75 years of combined experience working with and directly in bar admissions. The ILG Technologies team includes developers, graphic artists, programmers, a previous front line investigator as well as a former executive with experience in two separate jurisdictions. There is no other vendor with more direct experience than ILG Technologies.

Between the Electronic Bar Admission Solution, the experience ILG Technologies has obtained in bar admissions and the team ILG Technologies has assembled I can guarantee that ILG Technologies is poised to begin a partnership with The State Bar of California to implement the new Admissions Information Management System.

If we can be of any assistance during the review process, please do not hesitate to contact us. We look forward to hearing from you soon.

Sincerely yours,



Baris Misman
President, ILG Technologies, LLC



Response to Request for Proposal

Admissions Information Management System
DM #229866

The State Bar of California

Table of Contents

Statement of Objectivity	1
Company Information	2
Company Structure	2
Company Description	2
Company Contact Information	3
Financials	4
Similar Project References	5
ILG Staff	8
Techniques, Approaches and Methods for Project Completion	14
Chronology of Completion of Work	17
Rollout One	17
Rollout Two	17
Rollout Three	18
Detailed Cost Proposal	19
One-time Costs	19
Annual Costs	19
Admission Office Support	19
Applicant Support	20
Server Maintenance	20
Software Maintenance	20
Grading Costs	20
Additional Consultation Costs	20
Contract Acceptance	21
Reseller Certification	22
Security Audit	23
Description of Proposed Platform	24
Proposed Platform Configuration	24
Production Platform	25
Staging Platform	27
Description of Approach to Selecting Platform	29
Requirements for Network Access	31
Option 1: Private Cloud Hosted Solution at Rackspace	31
Option 2: Hybrid Hosting Solution	31
Option 3: All Servers Hosted on SBC Infrastructure	32
Documented Product Life Cycle Plan	33

Statement of Objectivity

ILG Technologies has no actual or potential conflicts of interest in providing services under the contract and our provision of service under the contract would not reasonably create an appearance of impropriety.

Company Information

Company Structure

ILG Technologies is registered as a Limited Liability Company (LLC) in the state of California with Entity ID: 201416210145. ILG Technologies is a privately-owned entity and is not a subsidiary of any other entity. See Attachment D.

Company Description

ILG Technologies was founded in 2006 in Mountain View, California and provides customized IT solutions to state bar admission organizations throughout the United States.

ILG Technologies has been the leader in providing services for bar admission offices since 2007 and has acquired immense and invaluable experience in developing solutions for bar admission offices that can be configured and customized to meet the needs of any bar admission office. ILG Technologies' Electronic Bar Admission Solution (EBAS), designed primarily for bar admission offices, has been developed and maintained completely in house by our dedicated team of software engineers and designers. Technical and Admission Office Support is performed by our dedicated support teams.

ILG Technologies has 75 years of combined experience working with and in state bar admission offices. Our staff includes a previous bar admissions executive director and staff level employee. No other company has bar admission solutions in more jurisdictions than ILG Technologies. This enables ILG Technologies to truly understand the needs of admission offices, complexity of the conversion projects and need to complete projects in the most efficient way.

ILG Technologies does not simply provide software for a service; we create partnerships with our clients to ensure our clients can meet the ever-growing challenges in the bar admission industry.

Jurisdictions that currently use ILG Technologies' EBAS include:

- Illinois - 2007 - <https://www.ilbaradmissions.org>
- Missouri - 2010 - <https://www.mble.org>
- Georgia - 2012 - <https://www.gabaradmissions.org>
- New Jersey - 2012 - <https://www.njbarexams.org>
- Indiana - 2014 - <https://myble.courts.in.gov>
- Alabama - 2015 - <https://admissions.alabar.org>
- Alaska - 2015 - <https://admissions.alaskabar.org>
- Texas - 2016 - <https://ble.texas.gov>

Company Contact Information

ILG Technologies, LLC
800 West El Camino Real, Suite 180
Mountain View, CA 94040

Phone: (650) 943-2332
Fax: (650) 962-1188

Web: <http://www.ilgtechnologies.com>
Email: info@ilgtechnologies.com

Baris Misman, President Phone: (650) 200-0647 baris.misman@ilgtechnologies.com	Joseph Figo, Executive Vice President Phone: (757) 343-5090 joseph.figo@ilgtechnologies.com
--	--

Financials

ILG Technologies has provided a copy of the audited financial statement for 2016. Financial overviews for 2015 and 2016 are also provided. See Attachment B for all financial information.

Similar Project References

Each of the projects listed below included migration from legacy applications to ILG Technologies' EBAS within the past five years. Missouri and New Jersey have also adopted the use of ILG Exam360 for laptop essay testing as well as electronic grading. Illinois has adopted the use of ILG Exam360 for electronic grading. ILG Technologies partners with Rackspace for hosting all or some services for Alabama, Georgia, Illinois, Missouri and New Jersey.

- | | |
|-----------------------------------|---|
| 1. State Agency or Other Entity: | New Jersey Board of Bar Examiners |
| Description of Services Provided: | Electronic Bar Admission Solution Exam360 |
| Date Services Provided: | 2012 - Ongoing |
| Name of Contact: | Susanne Johnson, Bar Administrator |
| Telephone Number of Contact: | (609) 984-2111 |
| E-mail Address of Contact: | susanne.johnson@judiciary.state.nj.us |

- | | |
|-----------------------------------|-----------------------------------|
| 2. State Agency or Other Entity: | Georgia Office of Bar Admissions |
| Description of Services Provided: | Electronic Bar Admission Solution |
| Date Services Provided: | 2012 - Ongoing |
| Name of Contact: | Leigh Burgess, Assistant Director |
| Telephone Number of Contact: | (404) 656-4217 |
| E-mail Address of Contact: | burgessl@gasupreme.us |

3. State Agency or Other Entity: Indiana State Board of Law Examiners
Description of Services Provided: Electronic Bar Admission Solution
Date Services Provided: 2014 - Ongoing
Name of Contact: Bradley Skolnik, Executive Director
Telephone Number of Contact: (317) 232-2552
E-mail Address of Contact: bradley.skolnik@courts.in.gov
4. State Agency or Other Entity: Alabama State Bar
Description of Services Provided: Electronic Bar Admission Solution
Date Services Provided: 2015 - Ongoing
Name of Contact: Justin C. Aday, Admissions Director
Telephone Number of Contact: (334) 269-1515
E-mail Address of Contact: justin.aday@alabar.org
5. State Agency or Other Entity: Alaska Bar Association
Description of Services Provided: Electronic Bar Admission Solution
Date Services Provided: 2015 - Ongoing
Name of Contact: Deborah O'Regan, Executive Director
Telephone Number of Contact: 907-272-7469
E-mail Address of Contact: oregand@alaskabar.org

6. State Agency or Other Entity: Texas Board of Law Examiners
Description of Services Provided: Electronic Bar Admission Solution
Date Services Provided: 2016 - Ongoing
Name of Contact: Susan Henricks, Executive Director
Telephone Number of Contact: 512-463-8929
E-mail Address of Contact: susan.henricks@ble.texas.gov

ILG Technologies has also completed additional projects outside of the past five years; however both jurisdictions below have implemented the use of ILG Exam360 for some exam processes.

1. State Agency or Other Entity: Illinois Board of Bar Admissions
Description of Services Provided: Electronic Bar Admission Solution
Exam360 Electronic Grading
Date Services Provided: 2007 - Ongoing
Name of Contact: Larie Leskera, Deputy Director
Telephone Number of Contact: (217) 522-5917
E-mail Address of Contact: larie.leskera@ilbaradmissions.org

2. State Agency or Other Entity: Missouri Board of Law Examiners
Description of Services Provided: Electronic Bar Admission Solution
Exam360
Date Services Provided: 2009 - Ongoing
Name of Contact: Margie Hartman, Director of Testing
Telephone Number of Contact: 573-751-7315
E-mail Address of Contact: margie.hartman@courts.mo.gov

ILG Staff

ILG technologies has a full-time staff of 12 and a part-time staff of 3.

Staff Person's Name: Baris Misman - President

Qualifications: In-depth knowledge of the bar admission process

Developing scalable web applications for the enterprise

Years of experience in managing software development teams

Education: M.B.A.: San Francisco State Univ. San Francisco, CA

B.S.: METU, Ankara- Department of Metallurgical and Materials Engineering

Training: 2001 - BEA WebLogic Training Level 1-2

Experience: 1997-1999 - Interactive Marketing Group - NJ - Software Developer

1999 - 2000 - UsWEB/CKS (Later MarchFIRST) - CA - Software Developer

2000 - 2003 - Kick.com - CA - Founder, Senior Software Developer / Manager

2003 - 2006 - Sony Inc. - CA - Senior Software Developer

2006 - Present - ILG Technologies, LLC, Ankara, Turkey, Founder, President

Staff Person's Name: Joseph Figo - Executive Vice President

Qualifications: 13 years' experience in bar admission at all levels of responsibility including executive director

2006 Project leader for custom application processing program

2016 Development of ILG Exam360 software

Education: M.P.A.: Old Dominion University, Norfolk, VA

B.A.: Old Dominion University, Norfolk, VA

Training: Accessibility for Adobe Acrobat
Building Strong Teams and Relationships
Leading Change
Lessons in Leadership
Microsoft Office: Access / Excel / PowerPoint / Word

Experience: 2003 - 2007 - Florida Board of Bar Examiners - Investigator

2007 - 2011 - Florida Board of Bar Examiners - Director of Administration

2011 - 2017 - Missouri Board of Law Examiners - Executive Director

2017 - Present - ILG Technologies, LLC - Executive Vice President

Staff Person's Name: Marcia Ketcham - Customer Representative

Qualifications: 18 years experience processing files and administering the Bar Exam at the Missouri Board of Law Examiners

2010 worked with ILG staff during Phases 2-4 assisting in the implementation of EBAS at the Missouri Board of Law Examiners

Education: A.A.: Columbia College, Columbia, MO

Training: State of Missouri web based training on MicroSoft Office; Access / Excel / PowerPoint / Word

Experience: 1996 - 2013 - Missouri Board of Law Examiner - Analyst

2014 - Present - ILG Technologies, LLC - Customer Representative

Staff Person's Name: Tuğba Güvenç Şaman - General Coordinator

Qualifications: Over 15 years of management experience
Specialized in Administrative-Executive Office Management and Human Resource Management

Education: M.B.A.: Middle East Technical University, Ankara, Turkey

B.S.: Middle East Technical University, Ankara, Turkey

Training: Human Resources Management Certificate Program - MCT

Communication Skills Workshop - TMI

Coaching Skills Training Program - ERA

Staff Selection and Interview Techniques Education - ERNST&YOUNG Selection of Target Distribution for a Team – Adisa

Emotional Intelligence Workshop – TMI

Experience: 1996 - 1999 - Gentek LTD. ŞTİ. - Ankara - Project Specialist

1999 - 2001 - Meteksan Sistem ve Bilgisayar Teknolojileri A.Ş., Ankara - Tender and Contract Department Manager

2001 - 2009 - Meteksan Sistem ve Bilgisayar Teknolojileri A.Ş., İstanbul, Turkey - Administrative Affairs (Tender and Contract Department) and HR Manager

2010 - 2011 - İşNet A.Ş. - Ankara - HR and Contract Manager

2012 - Present - ILG Technologies, LLC, Ankara, Turkey - General Coordinator

Staff Person's Name: Andaç Gözükan - Senior Engineer

Qualifications: Over 5 years of experience in developing software applications using Java, JavaScript technologies

In depth knowledge in developing and maintaining Content Management Systems (CMS) for the enterprise

Expertise in developing applications for the Android and iOS platforms

More than 6 years of experience in software development includes Analysis, Design and Development of Web-based applications.

Excellent at design and development of web based applications using Java, J2EE, Struts2, Hibernate, JSP, XML, XSD, WSDL, HTML, Tag Libs, Javascript, JQuery, AJAX, JSON.

Excellent at client side technologies such as HTML, HTML5, CSS, Javascript and JQuery.

Strong experience in different database systems like MySQL, PostgreSQL, MS SQL.

Education:

M.B.A.: Ankara University, Ankara, Turkey

Training:

B.S.: TOBB University, Ankara, Turkey
Java Training - APTECH

Java, Java Virtual Machine, Object Oriented Programming, J2EE applications with JSP

.Net Training - APTECH

HTML, DHTML, JavaScript, Database Concepts with SQL Server 2005, XML Basics, C# Programming, Winforms, ASP.NET with C#.

Adobe Training - APTECH

Adobe Photoshop, Adobe Flash , Adobe Illustrator.

Basic Foreign Trade and Exportation Strategies Training

Experience:

2007 - 2008 - Eskom Consulting, Istanbul, Turkey - Software Engineer

2008 - Present - ILG Bilisim Teknolojileri, Ankara, Turkey - Senior Software Engineer

Staff Person's Name:

Clement Meunier - Senior Engineer

Qualifications:

8 years of experience in developing software applications

5 years of experience in Linux/Tomcat architecture

Expertise in developing applications for the Android and iOS platforms

Education: M.S.: University of La Rochelle, La Rochelle, France

B.S.: Institute of Technology Tralee, Kerry, Ireland

Experience: 2007 - 2008 - Altobridge, Kerry, Ireland - Software Engineer

2008 - 2011 - Logica, Paris, France - Software Engineer

2011 - 2012 - TTG International, Istanbul, Turkey - Software Engineer

2012 – Present - ILG Technologies, LLC, Ankara, Turkey - Senior Software Engineer

Staff Person's Name: Can Kılıç - Designer

Qualifications: Over 10 years of experience in graphic design for web and for desktop software applications

In depth knowledge of front-end development for building modern (web 2.0) applications

User-friendly Interface Design for Web & Mobile Devices,

Excellent at responsive HTML5 & CSS3

Education: B.S.: Hacettepe University, Ankara, Turkey

Training: User Experience (UX) Design Certification Training

Experience: 2003 - 2007 - Siemens Business Services, Ankara, Turkey - Graphic Designer

2007 - Present - ILG Technologies, LLC, Ankara, Turkey - Graphic/UX Designer - Front-end Developer

Staff Person's Name: Cenk AKIN - Technical / Customer Support Personnel & Engineer

Qualifications: Unix based server system, responsible for installation, upgrading, recovering, performance tuning.

Provided customer support on Unix-based servers. Established and maintained web-based automation systems.

Working with web based automation archive system. Responsible for storing large amount of data by using different databases such as MongoDB, Sphinx, PostgreSQL and MySQL.

HTML5 technology and JQuery. Experience in developing jQuery plugins with support for accessibility. Knowledge in ImageMagick and ffmpeg libraries to make web content data more usable.

Knowledge with full text search engines such as Sphinx and MongoDB to support large amount of data.

Responsible for troubleshoot & tune and recode XML and JSON to maintain customer's web automation systems.

Excellent at Java, Javascript, JQuery, Ajax, XML, CSS, Json

Education:

B.S. Bilkent University, Ankara, Turkey

Training:

Cisco CCNA -1 Security Certification Training
Cisco CCNA - 2 Security Certification Training
Web Security Certification Training
Robotics and Embedded Computing Certification Training
Net Software Developer Certification Training

Experience:

2008 - 2009 - MetuNet Software, Ankara, Turkey - Software Engineer

2010-2013 - Mikrobeta Software, Ankara, Turkey - Software Engineer

2013 - Current - ILG Technologies, LLC, Ankara, Turkey - Software Engineer

Techniques, Approaches and Methods for Project Completion

ILG Technologies employs a balanced approach to implementing our solution to bar admission offices. ILG Technologies utilizes both a sequential implementation process, also known as the “waterfall” method and the agile method. The waterfall method allows us set the basic framework of the software including the configuration and customization. Once the basic framework is in place, there are some processes that require an agile approach such as setting up reports, fine tuning correspondence letters, etc. ILG Technologies finds that once the bar admission office becomes familiar with the software, changes are requested in order to take advantage of additional efficiencies. During these additional changes, all of which are covered under the annual maintenance agreement, ILG Technologies will continue to use both the waterfall and agile methods. Our most recent project with the Texas Board of Law Examiners took 7 months to complete. The project included conversion of existing data and configuration, customization and implementation of the EBAS.

ILG Technologies’ EBAS can be configured and customized to meet all of the requirements outlined in the Concept of Operation. The basic system will be brought online by means of configuration of existing modules and creating custom letters and application forms. Additional components such as the Contract Management, File Room Management and Question Preparation and Drafting will be developed using the waterfall method in parallel.

Most of our projects start with a target launch date that is determined by an upcoming examination. Based on the award date of August 2017, it would be realistic to set the February 2019 exam as the target launch for examination applications. Jurisdictions usually prefer to launch on a February examination so that staff has a smaller workload and more time to master the new environment prior to July examination processing. Launching for the February examination will require the application forms be available to the applicants beginning on October 1 pursuant to Rule 4.61(A). This would provide 14 months for the project duration.

Our approach would be to start with some of the applications that have fewer applicants and open deadlines, such as Foreign Legal Consultants or Law School Registrations, while developing the examination application in parallel. Rolling out application categories with smaller numbers in EBAS first, will provide for a better overall training experience for staff. This method will allow for ongoing training as different application types are finalized for different departments. The second rollout would include the entire legal specialization processes. During this time period, we would also utilize the agile method to further configure and customize specific workflow processes. The third rollout would include the bar examination application and related tasks.

Even after the launch of all applications on the EBAS, some of the exam related tasks will be completed in conjunction with the first examination using the agile method. ILG Technologies has developed a unique issue tracking/ticketing system that is part of the EBAS. This internal system is used by both the admission office and ILG Technologies' staff to collaborate on further configuration and resolution of software related issues.

ILG Technologies expects that overall configuration and customization will continue once the initial release of the project is completed. ILG Technologies finds that after most jurisdictions become comfortable working in the EBAS additional changes will be requested so that the system can be fully customized to their needs. With that in mind some jurisdictions take up to two years before having the software completely tailored and all aspects of office procedures streamlined and maximum efficiency obtained beyond expectations. The advantage of ILG Technologies is that we have a combined 75 years of experience of working in and with bar admissions. Our experienced team realizes that the world of bar admissions is constantly evolving and is rarely stagnant. What is constant is our dedication to the partnerships we forge with our clients.

ILG Technologies' EBAS has an array of features that are shared across all jurisdictions such as:

- Application Processing
 - Applicant portal
 - Character & Fitness letters
 - Formal applicant letters
 - Informal applicant requests
 - Applicant messaging capabilities
 - Digital document uploads
 - Document scanning
 - Batch document uploading
 - Exam Management
 - Seat assignments
 - Online exam ticket letters
 - Online grade release letters
 - Exam score functions
- Post-Exam Operations
 - External stakeholder reports (NCBE Statistic Report, Attorney Discipline Export, etc.)
 - Public statistic reports
 - Law school statistic reports
- Committee Member Portal
- Law School Portal
- Digital Grading Management
- Secure Laptop Exam Management (ILG Exam360 - separate module)

All of the existing features of ILG Technologies' EBAS can be configured and customized for The State Bar of California (SBC). New features can be added as part of the initial customization and integration as explained in this response document.

Chronology of Completion of Work

ILG Technologies proposes breaking up the processes and functions into three distinct rollouts. Completion of the entire project will take 14 months overall. Completion of the work for all rollouts will be undertaken in parallel as some rollouts will take longer than others or because of the examination application periods.

Rollout One

The first rollout would include the following tasks with a target completion of 210 days:

- Website (D-15.1)
- Applicant Portal (D-1)
- Registration (D-2)
- First Year Law Student Exam (D-10)
- Education Verifications (D-3)
- Law School List Management (D-13)
- Master Calendar (D-15.3)
- Document Management for items listed above (D-15.2)
- First Year Law Student Exam Test Accommodations
- Conversion of related static data for items listed above
- Conversion of existing database to ILG database for items listed above
- Payment system integration
- Staff training

Rollout Two

The second rollout would include the following tasks with a target completion of 300 days:

- Legal Specialization Portal (D-14.1)
- Legal Specialization Registration Qualifications Tracking (D-14.2)
- Legal Specialization Exam (D-14.3, 14.4)
- Legal Specialization Certification (D-14.5)
- Document Management for items listed above (D-15.2)
- Legal Specialization Test Accommodations
- Conversion of related static data for items listed above
- Conversion of existing database to ILG database for items listed above
- Staff training including supplemental training for previous rollout if necessary

Rollout Three

The third rollout would include the following tasks with the target completion of 420 days:

- Moral Character and Fitness (D-9)
- California Bar Exam (D4, 5, 6, 7, 8)
- Motion for Bar Entry (D-11)
- Contract Management (D-15.4)
- Start Legal Education Over Process (D-17)
- Special Admission (D-18)
- Document Management for items listed above (D-15.2)
- Conversion of related static data for items listed above
- Conversion of existing database to ILG database for items listed above
- Staff training including supplemental training for previous rollout if necessary

During the completion of each rollout, ILG Technologies will complete each phase as described in the Request for Proposal Definition of Phases document.

Detailed Cost Proposal

One-time Costs

ILG Technologies' proposal includes one-time costs totaling \$630,000 that includes \$320,000 for initial costs, \$180,000 for the first year of support costs, \$94,000 for the approximate cost of the first year of electronic examination grading and \$36,000 for platform hosting. \$160,000 of the initial costs will be required within 15 days of execution of an agreement with the remaining \$160,000 due within 15 days of the last rollout. The \$180,000 for the first year of support costs will be divided into 12 monthly payments of \$15,000 beginning upon release of the last rollout (see "Annual Costs" below for support details). Annual platform hosting of \$36,000 will be divided into 12 monthly payments of \$3,000 beginning upon the first rollout. Annual support includes Admission Office Support, Applicant Support, Server Maintenance and Software Maintenance. The cost of electronic grading would be due 30 days subsequent to the completion of grading. One-time costs are outlined in the Itemized Costs Proposal. See Attachment A.

NOTE: The cost of electronic grading is calculated at \$5 per applicant based upon the number of applicants provided in the Request for Proposal as well as follow up questions and answers. This per applicant fee can be waived in the future if SBC utilizes ILG Technologies' Exam360 software for laptop testing at the bar examination.

Annual Costs

ILG Technologies proposes annual support costs totaling \$310,000 each year for years two and three. The annual costs include \$180,000 for annual support and \$36,000 for platform hosting, payable monthly at \$18,000 per month. The remaining \$94,000 is for estimated electronic grading costs for years two and three. The cost of electronic grading would be due 30 days subsequent to the completion of grading. Annual support includes Admission Office Support, Applicant Support, Server Maintenance and Software Maintenance. ILG Technologies reserves the right to adjust the annual support costs for any renewal period based on US inflation. Annual costs are outlined in the Itemized Costs Proposal. See Attachment A.

Admission Office Support

Admission office support includes any additional training throughout the term of the contract on new components in addition to technical support via email, telephone and ticket support.

Applicant Support

Applicant support is solely related to any technical issues that might arise. Support is provided via email, telephone and ticket support.

Server Maintenance

Server maintenance includes maintenance of the EBAS servers for both production and staging as well as daily (incremental) and weekly (full) backups and any necessary data recovery and server restoration.

Software Maintenance

Software maintenance includes, but is not limited to, troubleshooting, resolving programming problems, implementing application and rule changes, providing improvements and upgrades to existing components and modules and creating new reports and views. Software maintenance also includes website maintenance and updates.

Grading Costs

Grading costs are calculated at a rate of \$5 per essay. The \$94,000 annual amount for years two and three is based on the application numbers provided in the RFP and clarifications requested during the question period. It is important to note that if at any point in the future, SBC decides to utilize ILG Technologies' Exam360 software for laptop testing at the bar examination, the costs would be waived.

Additional Consultation Costs

Additional services or application development requested by the SBC beyond those covered under the software maintenance will be evaluated separately on a per project rate. However, changes or expansions to existing modules are generally covered under software maintenance.

Contract Acceptance

ILG Technologies accepts the terms of the contract as outlined in Section IV. Contracting Requirements of the RFP including any terms specifically reserved in the proposal for future negotiation with the understanding that a definitive agreement may contain any such additional covenants and other provisions as may be mutually acceptable.

Reseller Certification

ILG Technologies is the one and only developer of the proposed system. There are no additional licenses required to be purchased by SBC. All training, maintenance and future work will be performed by ILG Technologies.

Security Audit

ILG Technologies contracts with Acunetix for security audits. Acunetix conducted a third-party security audit of each component of EBAS as well as ILG Technologies' standard network configuration. The results of the third-party security audit show that there are no severe/critical security defects using the Open Source Web Application Security Project standard for common application security problems in any of the components or network. See Attachment I.

Description of Proposed Platform

The EBAS is a suite of web-based applications. The applications are built using industry standard frameworks and software components.

The EBAS runs on standard Java Virtual Machines (VMs) and can be hosted on Linux or Windows servers. The two main components of the EBAS are:

- Electronic Bar Application (E-Bar)
- Admission Manager

Alabama, Illinois, and New Jersey prefer ILG Technologies host both production and staging environments. Georgia and Missouri prefer to host Admission Manager using their state infrastructure and have ILG Technologies host E-Bar. Alaska, Indiana and Texas prefer to use state infrastructure to host both components.

We will work with the SBC IT to provide the best and most cost-effective solution for hosting our software. It's understood that the SBC's data size and application pool are larger than the jurisdictions we currently work with; however, our software has been used in production environments for 10 years and has been proven to handle hundreds of simultaneous connections.

The proposed solution consists of:

- 1 Cisco Firewall - VPN licenses up to 100 clients
- 1 Dedicated Server - Running Hypervisor Software (VMWare®)
- 1 Load Balancer
- 1 San Disk Storage (Raid 6 configuration)

Proposed Platform Configuration

- Segment Support: Managed Linux Support Segment QTY: 1
 - 1 Hour Hardware Replacement Guarantee
 - Dedicated Account Management and Business Development Team
 - Rackwatch Port Monitoring Service
 - The Rackspace Zero-Downtime Network
- Firewall: Cisco ASA 5508 X QTY: 1
 - 1000 Mbps Connectivity
 - 500 Mbps Aggregate, 100,000 Concurrent Connections and 10,000 Connections/Second
 - Stateful packet inspection
 - Includes 24x7 Monitoring, Rule Changes and 1 Hour Replacement Guarantee
 - Cisco VPN Access - Client to Site: Five (5) included
- Support: Cisco ASA 5508 X Support QTY: 1

- AnyConnect SSL VPN License: AnyConnect Plus SSL VPN License - ASA 5508 QTY: 100
- Rackspace Monitoring: Rackspace Monitoring QTY: 1
 - Automated Customer Notification
 - General server availability tested every one (1) minute via Ping under default setting
 - Choice of 6 Additional Ports to be Monitored (eg. FTP, SSH, DNS, POP3, MS SQL, HTTP, HTTPS)
 - Option to customize general server availability settings
- Intrusion Detection System -- Rackspace
- Security Review -- Rackspace

VMware® Server Virtualization Hypervisor

- Server Platform: Dual Processor Dedicated Server Haswell QTY: 1
- Processor: Intel® Xeon® Processor E5-2630, v3 20M Cache, 2.40 GHz, Octo Core QTY: 2
- Random Access Memory: 128GB - HP QTY: 1
- RAID, Set 1: RAID 1 QTY: 1
- Drive Selection, Set 1: HP 300GB 12G SAS 15K 3.5inch SCC HDD QTY: 2
- RAID, Set 2: RAID 5 QTY: 1
- Drive Selection, Set 2: HP 1.92TB 6G SATA MU 3.5inch SCC SSD QTY: 10
- Drive Partitioning: Rackspace Suggested Partitioning QTY: 1
- Operating System: ESXi - 64Bit QTY: 128
- Managed Infrastructure Support: Managed Infrastructure Support - VMware® Server Virtualization QTY: 1
 - Support for all VMware® Hypervisors and Virtual Infrastructure
- Virtualization Support: Virtualization Support - VMware® Server Virtualization QTY: 1
 - Support for all Virtual Machines running Rackspace Supported Guest OS
- VMware® 10Gb Hypervisor Pod: HP 561-T Dual Port PCIe 10Gbase-T NIC (RJ-45) QTY: 1

Production Platform

VMware® Server Virtualization VM Linux (E-Bar - Production Application Server) x 2

- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 16384
- vCPUs: vCPU - Single Core QTY: 4
- Backup Agent: Base Backup Agent + VM Recovery Agent - Virtual Machine QTY: 1
- MBU Schedule: Weekly Full + Daily Incremental QTY: 1

VMware® Server Virtualization VM Linux (E-Bar - Production Database Server) x 2

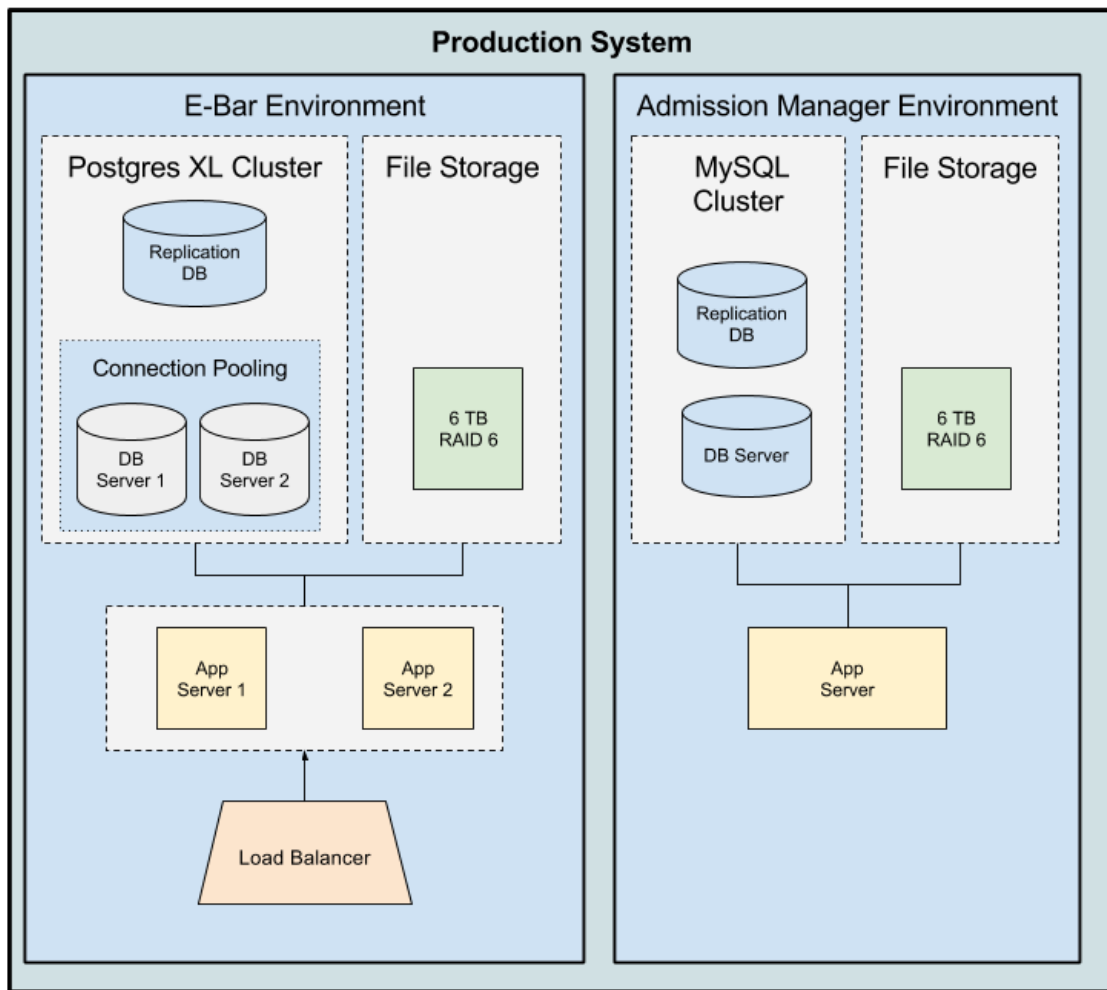
- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 8192
- vCPUs: vCPU - Single Core QTY: 4
- Backup Agent: Base Backup Agent + VM Recovery Agent - Virtual Machine QTY: 1
- MBU Schedule: Weekly Full + Daily Incremental QTY: 1

VMware® Server Virtualization VM Linux (Admission Manager - Production Application Server)

- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 16384
- vCPUs: vCPU - Single Core QTY: 6
- Backup Agent: Base Backup Agent + VM Recovery Agent - Virtual Machine QTY: 1
- MBU Schedule: Weekly Full + Daily Incremental QTY: 1

VMware® Server Virtualization VM Linux (Admission Manager - Production Database Server) x 2

- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 8192
- vCPUs: vCPU - Single Core QTY: 6
- Backup Agent: Base Backup Agent + VM Recovery Agent - Virtual Machine QTY: 1
- MBU Schedule: Weekly Full + Daily Incremental QTY: 1



Staging Platform

VMware® Server Virtualization VM Linux (E-Bar - Staging Application Server)

- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 16384
- vCPUs: vCPU - Single Core QTY: 6

VMware® Server Virtualization VM Linux (Admission Manager - Staging Application Server)

- Operating System: Ubuntu 14.04 LTS
- vRam: vRAM (MB) QTY: 16384
- vCPUs: vCPU - Single Core QTY: 6

Staging System

E-Bar Environment

Single Server:

- 2 vCPU
- 4 GB Ram
- 6 TB Disk Space
- PostgreSQL DB
- Tomcat 8

Admission Manager Environment

Single Server:

- 2 vCPU
- 4 GB Ram
- 6 TB Disk Space
- MySQL 5.6
- Tomcat 8

Description of Approach to Selecting Platform

ILG Technologies operates under a private cloud with dedicated hardware for all jurisdictions that are hosted. ILG Technologies partners with Rackspace, which is considered to be one of the top cloud hosting companies in the United States. You can access information about Rackspace and their global data centers at <https://www.rackspace.com>.

The proposed solution will give the AIMS a secure, flexible and reliable environment. The dedicated server will run Hypervisor software that can create and manage VMs with any configuration, which allows for agile operations when needed without the expense of additional hardware costs. ILG Technologies can immediately increase or decrease system resources as needed. For the applicant portal, our solution consists of a physical load balancer, complimented by two VMs and database connection pooling with two database servers. The number of VMs can be increased on demand for peak load times such as exam result releases, especially helpful for the July examination. At the software level ILG Technologies' EBAS is designed specifically for the bar admission process and is currently used by eight jurisdictions serving more than 16,000 applicants annually and more than 100 admission office staff on a daily basis.

ILG Technologies' larger jurisdictions run on similar VM configurations but on a single machine running both the Application Server and Database Server. By distributing the load on two application servers and two database servers, the proposed configuration will handle the load for the increased demand of the AIMS applicant and staff pools. ILG Technologies can also easily increase the server capacity both on a single server level or simply add more VMs behind the load balancer.

The proposed solution will have data redundancy both at the hardware (RAID 6) and middleware level (Data Replication). The RAID 6 configuration is tolerable up to two simultaneous disk failures. The system is able to rebuild itself automatically upon disk failures.

Aside from scheduled network and hardware maintenance, which would be scheduled during non-SBC working hours, Rackspace guarantees 100% availability for the proposed hardware platform.

Below is a list of benefits of our proposed platform:

- Physical hardware for HIPAA Compliance
- Ability to have full server control remotely
- Ability to take advantage of unmetered back-ups
- Ability to take daily server images
- Ability to have file/folder level backups that are stored on off-site tape drives

- Ability to hot-swap disks, in case of disk failure (Raid 6 configuration)
- Ability to offer ram and vCPU increases on demand
- Ability to offer scheduled downtime for hardware upgrades
- Ability to offer SSL based VPN Access (Cisco AnyConnect Client)
- Ability to offer Operating System Management
- Ability to offer Server Monitoring and Intrusion Detection

Requirements for Network Access

ILG Technologies' EBAS is very flexible in terms of both connectivity and infrastructure requirements. Having two distinct web applications makes the EBAS desirable by bar admission offices because it provides for the following possible scenarios:

Option 1: Private Cloud Hosted Solution at Rackspace

Applicant Portal - Public Access

<https://www.calbarxap.com/>

- User account is required for all applications
- Committee Member Portal
- Law School Portal

Private Access

<https://www.calbarxap.com/admin/> (Admin URL can be ported to a subdomain)

<https://california.admission-manager.com/>

- IP Filtering
- Outside access via VPN only

Staging Sites - Private Access

<http://staging.calbarxap.com>

<http://staging.california.admission-manager.com/>

- IP Filtering
- No outside connection provided

Option 2: Hybrid Hosting Solution with E-Bar Hosted at Rackspace and Admission Manager Hosted by SBC

Hosted at Rackspace

Applicant Portal - Public Access

<https://www.calbarxap.com/>

- Committee Member Portal
- Law School Portal
- User account is required for all applications

Staging Site - Private Access

<http://staging.calbarxap.com>

- IP Filtering
- No outside connection provided

Hosted by SBC

Admission Manager - Private

<https://california.admission-manager.com/>

<http://staging.california.admission-manager.com/>

Note: In this scenario, the Admission Manager server needs to access the E-Bar server on port 443 and the Admission Manager Staging server needs to access the Staging E-Bar server on port 80. All connections are SOAP based web service calls. ILG Technologies does not use Rest APIs or any other direct connection types.

Option 3: All Servers Hosted on SBC Infrastructure

ILG Technologies will work with the SBC IT to select a hardware configuration in order to achieve the most cost effective and reliable configuration for running ILG Technologies' services.

At a minimum ILG will required the following:

- 4 Linux servers, preferably Ubuntu flavor for running:
 - Production E-Bar Application
 - Production Admission Manager Application
 - Staging E-Bar Application
 - Staging Admission Manager Application
 - SSH access to all servers with superuser permissions
- VPN access
- Ability to integrate with State Provided Backup Solution

EBAS has the following minimum requirements:

- Any modern browser - javascript engine enabled:
 - Google Chrome - version 50 or higher (preferred)
 - Apple Safari - version 10 or higher
 - Microsoft Edge - version 35 or higher
 - Mozilla Firefox - version 50 or higher
- Minimum monitor resolution: 1280 x 1024
- Ability to install the Dynamsoft scanner plugin, for more information visit:
<http://www.dynamsoft.com> - Admission Manager only.

Note 1: ILG Technologies' EBAS does not require any other desktop application such as Microsoft Office.

Note 2: External users of AIMS accessing from the web do not have any additional requirements.

Documented Product Life Cycle Plan

ILG Technologies' core business has been developing and maintaining the EBAS for the past 11 years.

- 2006 Initial contract with Illinois Board of Admissions to the Bar
- February 2007 Launch of the EBAS
- Future Operational Phase

ILG Technologies does not have an end date expectation for the EBAS as ILG Technologies' core business has been providing the EBAS to state bar admission organizations.

The operational phase includes managing the product, tracking and resolving EBAS issues, and evolving the EBAS to continue to meet the needs of our clients. At this time there are no plans for a new version release aside from incremental changes related to the items discussed above.

Since ILG Technologies has been working solely for state bar admission organizations, our platform is constantly evolving with demands from our clients. Often times new features developed by ILG Technologies for one jurisdiction are generally beneficial to all other jurisdictions.

ILG Technologies - Attachments

<u>Itemized Cost Proposal</u>	A
<u>Vendor History Questionnaire and Financials</u>	B
<u>Accessibility Standards Compliance Matrix</u>	C
<u>ILG Technologies Business Documents</u>	D
<u>Concept of Operations Matrix</u>	E
<u>Requirements Gaps and Exceptions</u>	F
<u>Service Requirements</u>	G
<u>Functional Guidelines</u>	H
<u>Security Audit Reports</u>	I
<u>Technical Requirements Compliance Matrix</u>	J

Attachment A: Itemized Cost Proposal

One-Time Costs

Initial costs associated with the configuration, installation and implementation of the proposed Trial/Court/Probation Case management system.

Vendor Name: **ILG Technologies**

SOLUTION TYPE
Hosted

INSTRUCTIONS: Enter brief description of component and itemized cost for each section below. You may summarize component and attach additional detail on a separate sheet if necessary. Yellow cells represent ALL components for Trial, Court and Probation Case Management system. Enter \$0 if service provide at no cost or included in another line. Continue to tabs 2 and 3 below. Total Not-to-exceed cost will tally on tab 3 and used for proposal scoring.

ITEMIZED COST

ITEMIZED COST

1 Software license/subscription: Itemize all one-time costs associated with acquiring a license or subscription for the proposed system (short description below w/NTE cost to right).

Software License	\$ 60,000.00

6 Process Improvement: Identify all one-time costs associated with professional services for process improvement.

2 Third-Party Infrastructure Licenses: Itemize all costs associated with underlying software needed to run the proposed application (such as database mgt system, operating system, etc.)

7 Software Configuration: Itemize all one-time costs for configuration of the proposed software to meet our needs as defined in this RFP.

Software configuration in order to meet the needs of SBC	\$ 220,000.00

3 Other Third-Party Licenses: Itemize all one-time costs associated with report writers, statistical packages or other tools required to fully utilize the proposed application software.

8 Training: Itemize one-time costs associated with each proposed training class (assume instructor for full-day classes -LA office, 12 students/class, including travel expense).

Three separate training sessions as outlined in Response to Request for Proposal including any necessary follow up training	\$ 25,000.00

4 Project Management: Itemize all one-time costs associated with implementation project management services.

9 Implementation Expenses: Itemize all one-time out-of-pocket expenses associated with providing the proposed products & services (e.g., per diem, travel, hotel, meals, copying, telephone).

5 Installation: Itemize all initial proposed system costs, by software product or expense category (e.g., sales tax, installation, check-out).

Server Software Installation	\$ 15,000.00

10 Other: Itemize all other one-time costs associated with the proposed system. If local server install solution, summarize server hardware cost.

First year of system maintenance	\$ 180,000.00
Platform hosting (If purchased by ILG Technologies)	\$ 36,000.00
Essay grading (\$5 per applicant per exam - First Year Law Student Examination @ 1,100; CA Bar Examination @ 17,000; Legal Specialization Examination @ 700)	\$ 94,000.00

	Original
primary license	\$ 60,000.00
third-party licenses	\$ -
implementation	\$ 235,000.00

	Original
training	\$ 25,000.00
travel expense	\$ -
other	\$ 310,000.00

Attachment A: Itemized Cost Proposal

Vendor Name: **ILG Technologies**

Solution Type: **Hosted**

Annual Costs

Recurring costs associated with support and maintenance of the proposed system.

Enter brief description of component and yearly cost for each. Enter \$0 if service provide at no cost or included in another line. Overwrite answer for year one if not applicable. Continue to tab 5 below.

Initial Term			Renewal Option	
Year 1	Year 2	Year 3	Year 4	Year 5

1 Recurring Software Support: *Itemize all costs for the proposed application software.*

Annual Support (Admission Office Support, Applicant Support, Server Hosting/Maintenance and Software Maintenance)

Itemized Cost

<i>included in initial implementation</i>	\$ 180,000.00	\$ 180,000.00		
<i>included in initial license</i>				

2 Recurring Electronic Support: *Itemize all ongoing cost (e.g., Internet news groups, instant messaging, support webs sites, e-mail).*

--

Itemized Cost

<i>included in initial license</i>				
------------------------------------	--	--	--	--

3 Recurring Third-Party Software Support: *Itemize all ongoing costs required to fully utilize the proposed system (e.g., report writer, statistical package, other tools).*

Itemized Cost

<i>included in initial license</i>				
<i>included in initial license</i>				
<i>included in initial license</i>				

4 Other: *Itemize all other ongoing costs not itemized above.*

Platform Hosting
Essay grading (\$5 per applicant per exam - First Year Law Student Examination @ 1,100; CA Bar Examinatinon @ 17,000; Legal Specialization Examination @ 700)

Itemized Cost

<i>included in initial license</i>	\$ 36,000.00	\$ 36,000.00		
<i>included in initial license</i>	\$ 94,000.00	\$ 94,000.00		
<i>included in initial license</i>				

SUBTOTALS	\$ 310,000.00	\$ 310,000.00	\$ -	\$ -
------------------	---------------	---------------	------	------

Attachment A: Itemized Cost Proposal

Vendor Name:

ILG Technologies

Enter titles, billing rates and home office location(s) below. Project costs from worksheets 1 & 2 will total below. Optional component for Probation is now included in base system. Optional Component for Membership has been removed from scope.

Additional Consulting

Additional consulting services as needed and not included in initial implementation and/or annual recurring maintenance above.

Solution Type: Hosted

Position Classification Group

Classification Title Bid *(your equivalent, if different from above)*

Home Office *(location: city, ST)*

Hourly Bill Rate

	Project Manager	Sr Application Consultant	Application Consultant	Other (specify)	Other (specify)

Projected Project Costs

Summary does not include optional components

	Initial Term			Renewal Option	
	Year 1	Year 2	Year 3	Year 4	Year 5
Primary (core) software licensing	\$ 60,000				
Third-party software licensing	\$ -				
Initial implementation	\$ 235,000				
Initial training	\$ 25,000				
Estimated travel Expense	\$ -				
Other One-time (includes hardware for local install)	\$ 310,000				
Recurring software maintenance	\$	\$ 310,000	\$ 310,000	\$ -	\$ -
Additional consulting blended rate: 80 hrs per yr (included for cost scoring only--actual unknown)	\$	\$ -	\$ -	\$ -	\$ -
Annual Estimates	\$ 630,000	\$ 310,000	\$ 310,000	\$ -	\$ -
TOTAL PROJECTED COST:				\$	1,250,000

Attachment B: Vendor History Questionnaire

Enter relevant information in all yellow cells below, choosing from menu as applicable. Enter n/a if not applicable to your organization.

Business Details		Complete fields below		
Legal Name of Business or Full Name of Individual	IG Technologies, LLC			
Name of Ultimate Holding Entity <i>if applicable</i>				
Registered Business or Trading Name <i>if applicable</i>				
Registered Business Address--Street	800 W. El Camino Real, Suite 180			
Registered Business Address--City, ST Zip	Mountain View, CA 94040			
Business URL	www.ilgtechnologies.com			
Business Type	Other	State of Registration / Incorporation CA		
Taxpayer Identification Number <i>TIN or SSN</i>	47-1218024	Number of Years in Business	10	
Publicly traded?	no	Trading Symbol		
Number of Full-Time Employees	12	Part-Time Employees 3		
Former Business Name <i>if applicable</i>	ILG Studios, LLC			
RFP Point of Contact Name / Title	Baris Misman / President			
RFP Point of Contact Email Address	baris.misman@ilgtechnologies.com			
Subcontractor Use: Vendor is solely responsible for all deliverables?	Vendor above solely responsible for all requirements & deliverables			
Financial Details		Summarize financials below. Enter n/a or zero as applicable.		
		2015	2016	
Revenue/Sales	\$	518,466	\$	554,711
Cash	\$	28,249	\$	49,570
Accounts Receivable		-		-
Short Term Investment		-		-
Current Assets	\$	28,249	\$	49,570
Total Assets	\$	28,249	\$	138,987
Current Liabilities		-	\$	25,077
Total Liabilities		-	\$	285,365
Cash From Operations	\$	28,249	\$	21,321
Current D&B Rating			Audited Financials Included?	no
Explanation for Any Missing Financial Information Above:				
Conflict of Interest		Attach detailed explanation for any item(s) marked yes.		
Are there any known business or financial relationships between your firm and members of the State Bar's Trustees?	Current Board of Trustees Roster			no
Are there any known business or financial relationships between your firm and the following State Bar staff:				
	EMPLOYEE NAME	DEPT / ROLE	Y / N	
	Gayle Murphy	Office of Admissions	no	
	Resty Buenavidez	Office of Information Technology	no	
	Lisa Cummins	Office of Admissions	no	
	Natalie Leonard	Office of Admissions	no	
	Greg Shinn	Office of Admissions	no	
	Murat Avsar	Office of Information Technology	no	
Principal Officers / Account Management		Attach detailed explanation for any item(s) marked yes.		
Principal 1 Name / Title	Baris Misman	President		
Principal 1 Primary Office Address / Direct Email Address	Cyberpark B Block No: Z-05, Bilkent ANKARA, OK 06800	baris.misman@ilgtechnologies.com		
Principal 2 Name / Title				
Principal 2 Primary Office Address / Direct Email Address				
Principal 3 Name / Title				
Principal 3 Primary Office Address / Direct Email Address				
Account Manager name, phone	Joseph J. Figo	Executive Vice President		
Account Manager primary office address, direct e-mail address	14963 Hubbard Lake Road, Hubbard Lake, MI 49747	joseph.figo@ilgtechnologies.com		

Supplementary Information*Explain any item(s) marked yes below.*

Has any current office bearer above been involved with a business failure?	no	ILG Technologies, LLC is currently party to litigation in Bryan County State Court, GA, case number STSV2016000081.
Has any current office bearer declared bankruptcy?	no	
Has any current office bearer been involved in a government investigation?	no	
Is there any current, pending, or finalized litigation against your organization during the past 5 years?	yes	
Any debt collections by debt collection agency on behalf of creditors of your organization or current office bearers?	no	
Are there any other contingent liabilities not reported in the financial statements, that are likely to impact your financial position?	no	

FABRICANT & COMPANY, PA

CERTIFIED PUBLIC ACCOUNTANTS

April 24, 2017

ILG Technologies
800 West El Camino Real, Suite 180
Mountain View, CA 94040

Management is responsible for the accompanying financial statements of ILG Technologies, which comprise a statement of assets, liabilities, and equity – cash basis as of December 31, 2016, and the related statements of revenues, expenses, and retained earnings-cash basis and cash flows-cash basis for the twelve months then ended in accordance with the cash basis of accounting, and for determining that the cash basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the financial statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on these financial statements. The financial statements are prepared in accordance with the cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America.

Management has elected to omit substantially all the disclosures ordinarily included in financial statements prepared in accordance with the cash basis of accounting. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Company's assets, liabilities, equity, revenues, expenses, and cash flows. Accordingly, the financial statements are not designed for those who are not informed about such matters.

Sincerely,



Fabricant & Company, PA

Attachment C: Accessibility Standards Compliance Matrix

Vendor Name: ILG Technologies

In order for individuals with disabilities to have equally effective access to the products must be designed in compliance with accessible design standards. For this reason, the State Bar has chosen to require products that comply with the WCAG 2.0, Level AA accessibility guidelines, chosen because the W3C is a long-standing, international collaborative with extensive expertise in the development of design protocols for the World Wide Web. When completed, the revised Section 508 standards of the Rehabilitation Act will be primarily based upon WCAG 2.0, level AA.

Vendors interested in selling products to the State Bar must complete the checklist below, based on the WCAG 2.0 Guidelines. Please select compliance in yellow input field from menu and additional information/comments as prompted.

Content must be Perceivable, Operable, Understandable, and Robust for all users:

		Level	Software Supports Guideline?	Exception Detail / Comments	Future Support
Guidelines for “Perceivable” Content		<i>Perceivable</i> - Information and user interface components must be presentable to users in ways they can perceive, including ability to provide text alternatives for non-text content, provide captions and other alternatives for multimedia, create content that can be presented in different ways, including by assistive technologies, without losing meaning and make it easier for users to see and hear content.			
1.1.1	Text Alternatives: Provide text alternatives for any non-text content so that it can be changed into other forms people need, such as large print, braille, speech, symbols or simpler language. (Text Alternatives)	A	supports		
1.2.1	An alternative for time-based, pre-recorded audio and/or pre-recorded video is provided that presents equivalent information. (Time-based Media)	A	guideline not applicable		
1.2.2	Synchronized captions are provided in pre-recorded audio, except when a text version of the media is available. (Time-based Media)	A	guideline not applicable		
1.2.3	Synchronized audio descriptions or a media alternative are provided for pre-recorded, time-based video. (Time-based Media)	A	guideline not applicable		
1.2.4	Synchronized captions are provided for all live audio content. (Time-based Media)	AA	guideline not applicable		
1.2.5	Synchronized audio descriptions are provided for all prerecorded video (Time-based Media)	AA	guideline not applicable		
1.3.1	Info and Relationships: Information, structure, and relationships that are conveyed through presentation can be interpreted by technology and communicated to different types of users, or are available in text. (Adaptable)	A	guideline not applicable		

1.3.2	Meaningful Sequence: When the sequence in which content is presented affects its meaning, a correct reading sequence can be interpreted by technology and communicated to different types of users. (Adaptable)	A	supports			
1.3.3	Sensory Characteristics: Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. (Adaptable)	A	supports			
1.4.1	Use of Color: Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. (Distinguishable)	A	supports			
1.4.2	<u>Audio Control: If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level. (Distinguishable)</u>	A	supports			
1.4.3	<u>Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1; see guidelines for exceptions: (Distinguishable)</u>	AA	supports			
1.4.4	Resize text: Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality.	AA	supports			
1.4.5	<u>Images of Text: If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text; see guidelines for exceptions; (Distinguishable)</u>	AA	supports			

Guidelines for “Operable” Content

Operable - User interface components and navigation must be operable, including ability to make all functionality available from a keyboard, give users enough time to read and use content, not use content that causes seizures and help users navigate and find content.

2.1.1	Keyboard: All functionality of the content is operable through a keyboard interface without requiring specific timings for individual keystrokes, except where the underlying function requires input that depends on the path of the user's movement and not just the endpoints. (Keyboard Accessible)	A	supports		
2.1.2	<u>No Keyboard Trap: If keyboard focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it requires more than unmodified arrow or tab keys or other standard exit methods, the user is advised of the method for moving focus away.</u> (Keyboard Accessible)	A	supports		
2.2.1	Timing Adjustable: For each time limit that is set by the content, at least one of the following is true--select any/all that apply: (Enough Time)	A			
	Turn off: The user is allowed to turn off the time limit before encountering it; or		guideline not applicable		
	Adjust: The user is allowed to adjust the time limit before encountering it over a wide range that is at least ten times the length of the default setting; or		guideline not applicable		
	Extend: The user is warned before time expires and given at least 20 seconds to extend the time limit with a simple action (for example, "press the space bar"), and the user is allowed to extend the time limit at least ten times; or		guideline not applicable		
	Real-time Exception: The time limit is a required part of a real-time event (for example, an auction), and no alternative to the time limit is possible; or		guideline not applicable		
	<u>Essential Exception: The time limit is essential and extending it would invalidate the activity;</u> or		guideline not applicable		
	20 Hour Exception: The time limit is longer than 20 hours.		guideline not applicable		
2.2.2	<u>Pause, Stop, Hide: For moving, blinking, scrolling, or auto-updating information, all of the following are true:</u> (Enough Time)	A			

	Moving, blinking, scrolling: For any moving, blinking or scrolling information that (1) starts automatically, (2) lasts more than five seconds, and (3) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it unless the movement, blinking, or scrolling is part of an activity where it is essential; and		guideline not applicable		
	Auto-updating: For any auto-updating information that (1) starts automatically and (2) is presented in parallel with other content, there is a mechanism for the user to pause, stop, or hide it or to control the frequency of the update unless the auto-updating is part of an activity where it is essential.		guideline not applicable		
2.3.1	Three Flashes or Below Threshold: Web pages do not contain anything that flashes more than three times in any one second period, or the flash is below the general flash and red flash thresholds. (Seizures)	A	guideline not applicable		
2.4.1	Bypass Blocks: A mechanism is available to bypass blocks of content that are repeated on multiple Web pages. (Navigable)	A	guideline not applicable		
2.4.2	<u>Page Titled: Web pages have titles that describe topic or purpose.</u> (Navigable)	A	supports		
2.4.3	Focus Order: If a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components receive focus in an order that preserves meaning and operability. (Navigable)	A	supports		
2.4.4	Link Purpose (In Context): The purpose of each link can be determined from the link text alone or from the link text together with its programmatically determined link context, except where the purpose of the link would be ambiguous to users in general. (Navigable)	A	supports		
2.4.5	Multiple Ways: More than one way is available to locate a Web page within a set of Web pages except where the Web Page is the result of, or a step in, a process. (Navigable)	AA	supports		
2.4.6	<u>Headings and Labels: Headings and labels describe topic or purpose.</u> (Navigable)	AA	supports		
2.4.7	Focus Visible: Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible. (Navigable)	AA	supports		

Guidelines for “Understandable” Content

Understandable - Information and the operation of user interface must be understandable, including ability to make text readable and understandable, make content appear and operate in predictable ways and help users avoid and correct mistakes.

3.1.1	Language of Page: The default human language of each Web page can be programmatically determined. (Readable)	A	supports		
3.1.2	Language of Parts: The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text. (Readable – Level AA)	AA	supports		
3.2.1	<u>On Focus: When any component receives focus, it does not initiate a change of context. (Predictable)</u>	A	supports		
3.2.2	<u>On Input: Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component. (Predictable)</u>	A	supports		
3.2.3	<u>Consistent Navigation: Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user. (Predictable)</u>	AA	supports		
3.2.4	<u>Consistent Identification: Components that have the same functionality within a set of Web pages are identified consistently. (Predictable)</u>	AA	supports		
3.3.1	<u>Error Identification: If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text. (Input Assistance)</u>	A	guideline not applicable		
3.3.2	<u>Labels or Instructions: Labels or instructions are provided when content requires user input. (Input Assistance)</u>	A	supports		
3.3.3	<u>Error Suggestion: If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content. (Input Assistance)</u>	AA	guideline not applicable		
3.3.4	<u>Error Prevention (Legal, Financial, Data): For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, at least one of the following is true--select any/all that apply: (Input Assistance)</u>	AA			

	Reversible: Submissions are reversible; or		supports		
	<u>Checked: Data entered by the user is checked for input errors and the user is provided an opportunity to correct them; or</u>		supports		
	<u>Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.</u>		supports		

Guidelines for “Robust” Content	Robust - Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies and ability to maximize compatibility with current and future user tools.
--	--

4.1.1	Parsing: In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features. (Compatible)	A	supports		
4.1.2	Name, Role, Value: For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies. (Compatible)	A	supports		

State of California
Secretary of State

CERTIFICATE OF STATUS

ENTITY NAME: ILG TECHNOLOGIES, LLC

FILE NUMBER: 201416210145
FORMATION DATE: 06/10/2014
TYPE: DOMESTIC LIMITED LIABILITY COMPANY
JURISDICTION: CALIFORNIA
STATUS: ACTIVE (GOOD STANDING)

I, ALEX PADILLA, Secretary of State of the State of California, hereby certify:

The records of this office indicate the entity is authorized to exercise all of its powers, rights and privileges in the State of California.

No information is available from this office regarding the financial condition, business activities or practices of the entity.



IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this day of April 4, 2016.

A handwritten signature in black ink, appearing to read "Alex Padilla".

ALEX PADILLA
Secretary of State

Attachment E - Concept of Operations Requirements Compliance AIMS

Vendor Name:

ILG Technologies LLC.

Refer to Attachment D. Concept of Operations PDF and select your level of compliance from the drop down for each element below. Write notes as applicable.

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
1.1	Account Setup	Can Be Integrated	This is the creation of an account that the applicant will use to submit all Admissions-related applications.	ILG's Current Electronic Bar Admission Solution has integrated Account Setup for Applicants for online-access to all applications and application forms. Current applicant data needs to be imported for existing applicants to claim their accounts via processes similar to a reset password procedure.
1.2	Social Security Number Waiver	Can Be Integrated	This is the form for foreign applicants to indicate they do not have a US Social Security Number	In addition to Social Security Number, ILG uses NCBE number for applicants who require to have a NCBE number. NCBE numbers can be verified for each applicant by using web services provided by the NCBE.
1.3	Application Access Portal	Standard Product	This is the web-portal that provides access to external AIMS users	All applications and application forms along with submission dates, timely and late fees can be set up using the administrative modules of the ILG's Electronic Bar Admission Solution. After initial setup, applicants are presented with all available applications and they are also able to browse application forms before applying to any particular application.
1.4	Social Security/Registration Number Correction	Custom Development	This enables the correction of Social Security Numbers	
2.1	Registration - On-line	Standard Product	This is the initial State Bar Registration Application Process. The new requirement being to apply on-line.	All applications and application forms are customized per their requirements. ILG has a very flexible and robust application form technology built specifically for the State Bar Admission Applications.
2.2	Manual Entry of Registration	Can Be Integrated	This addressed the current manual registration process. In future when manual is allowed State Bar staff will enter using standard application form.	ILG is working with 8 other State Bar Admission Offices and all offices switched to using online-only applications. Paper forms can be entered by the office staff using the online application but applicants need to access their accounts to retain future communication with the Admission Offices.

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
2.3	Registration Outcome	Standard Product	This addresses the types of outcome for the registration process and determines an applicants next allowed step.	ILG's EBAS system makes sure all applications are complete and they do not have any missing information such as employment gaps or missing the minimum number of required references. The system also makes sure the applicants upload all the required documents along with their application and the proper payment is submitted.
2.4	Upload of Registration	Standard Product	This applies to the current third party process that will be replaced by a transfer to State Bar process as soon as a correct submittal is completed.	Only complete and paid applications can be submitted using the ILGs EBAS Application Portal. All submitted applications are queued in Admission Manager for further processing by the Admission Office. Queued applications can be further categorized by the Admission Office business rules. EBAS also can automatically categorize applications by their complexity based on Yes/No answers to select questions.
2.5	MJP Registered In-House Counsel	Standard Product	This is related to registration for lawyers requesting specific rights in the State of California.	
2.6	MJP Registered Legal Services Attorney	Standard Product	This is related to registration for lawyers requesting specific rights in the State of California.	
2.7	Disciplined Attorneys	Standard Product	This is the application process for Lawyers being allowed to restore rights as a registered lawyer.	
2.8	Register for Law Office Study	Standard Product	This is the form for indicating specialized legal training.	
2.9	Apply as Foreign Legal Consultant	Standard Product	This is the application for enabling a foreign lawyer consulting rights in California	
3.1	Evaluation of Pre-Legal Education	Can Be Integrated	This is the process for evaluation of pre-legal education based upon registration and transcript information.	
3.2	Evaluate Legal Education	Can Be Integrated	This is the process to evaluate legal education and a determination if the first year law student examination is required.	

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
3.3	Law Office Study Evaluation	Can Be Integrated	This is the process to evaluate that quality of specialized law office legal study	
4.1	Bar Examination Application (Paper)	Can Be Integrated	This is the base for California Bar Examination application per the current manual process. To be enforced in future as an on-line process.	
4.2	Bar Examination Application (Online)	Standard Product	This is the base for California Bar Examination on-line application, which will be the core process with AIMS.	
4.3	Eligibility Verification	Standard Product	This is the State Bar process to determine eligibility to take the California Bar Examination from application and submittal information.	
5.1	Examination Question Preparation	Cusom Development	This deals with the process to create questions for the California Bar Examination. It is not part of the AIMS automation.	
5.2	Performance Test Drafting	Cusom Development	This deals with the process to create the performance test for the California Bar Examination. It is not part of the AIMS automation	
6.1	Event Contracts	Cusom Development	This is the process to link contracts for examination locations to the examination logistics processes.	
6.2	Test Materials Preparation & Delivery	Cusom Development	This is a logistics process to determine the materials for each test site and get the materials delivered and tracked.	
6.3	Test Materials Return	Cusom Development	This is a logistics process to make sure examination materials are correctly returned to State Bar offices.	
6.4	Proctor Management	Cusom Development	This illustrates the process for assigning and tracking examination proctors. It feeds into the automated process to for proctor profile and activity history.	
7.1	Grader Selection	Can Be Integrated	This is how graders are selected and provides information about how grader information should be brought into an automated tracking process by individual.	ILG recently built a fully integrated digital grading solution to complement its Bar Exam application. Grading application has built in administrative panels for grading selection, splitting questions into multiple graders, rubric scale assignments and conversion tables.

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
7.2	Essay Answers Packaging for Grading	Can Be Integrated	This is both logistics and examination management process to provide essay questions for grading. The actual grading process is not part of the Grade Reporting process.	
7.3	MBE Answers Packaging for Grading	Can Be Integrated	This is the process of collecting MBE answer sheets from exam sites and sending them to the National Committee of Bar Examiners.	
7.4	Grading & Reporting	Can Be Integrated	This is the process of collecting and grading exams and reporting the pass/fail status to examinees.	ILG's digital grading application also has the capacity for reading essays within the application. Essays can be retrieved from ILG's own Exam Application or from Exam Soft's PDF essay files. Hand-written essays are converted to PDFs and imported to the system to be downloaded by the Grading Application based on grader assignments prior to grading. Scored essays are automatically uploaded to servers for scaling and scoring which can be done on ILG's EBAS system or by a third party vendor. Failed applicants can request to view their answers from their online user accounts.
8.1	Request New Test Accommodations & Review	Standard Product	This includes the application for accommodations by the applicant, the Bar's review and decision process, and collaboration between both offices to ensure correct preparation.	
8.2	Test Accommodation Appeal	Can Be Integrated	This is when an applicant who's been denied accommodations appeals the decision to the Sr. Director and the Committee.	
8.3	Application for Same Test Accommodation	Standard Product	This is the process of requesting a previously granted accommodation should the applicant still be eligible for it.	
8.4	Prepare Test Accommodation for Examinations	Standard Product	This is the process of ensuring all accommodation materials are ready to be used during exams.	
9.1	Moral Character Application	Standard Product	This is the process by which the applicant will apply for determination of their moral character.	
9.2	Moral Character Investigation (Coordinators)	Standard Product	This is the process by which Moral Character Coordinators in the LA office process applications.	

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
9.3	Moral Character Investigation (Analysts)	Standard Product	This is the process by which Moral Character Analysts in the SF office process applications.	
9.4	Moral Character Decision and Reporting	Standard Product	This is the process by which Moral Character determinations are relayed to applicants.	
9.5	Moral Character Appeal	Standard Product	This is the process by which negative Moral Character determinations are appealed by applicants.	
10.1	First Year Law Student Exam Application (Paper)	Standard Product	This is the process by which applicants will submit a hard copy application to take the FYLSX.	
10.2	First Year Law Student Exam Application (Online)	Standard Product	This is the process by which applicants will submit an online application to take the FYLSX.	
10.3	Eligibility Verification	Standard Product	This is the process by which the Eligibility department will verify the applicant's eligibility to take the FYLSX.	
10.4	Examination Question Preparation & Pool	Cusom Development	This is the process by which the FYLSX is developed.	
10.5	Examination Grading & Reporting	Standard Product	This is the process of grading the FYLSX and reporting results to applicants.	Once the pass fail information is populated by calculating the final grades. Administrators can use ILG's EBAS to create Pass / Fail letters for all the applicants to be delivered to each applicants' user home page. There may be more than one Pass letter based on application eligiblity. Applicants are notified via email when letters are generated.
11.1	Group Motions	Standard Product	This is the process of producing group motions after each exam.	
11.2	Weekly Motions	Standard Product	This is the process of producing weekly motions, taking into account issues that prevented an applicant from appearing on the group motion.	
11.3	Notification of Approved Motion	Standard Product	This is the process of notifying applicants that the Supreme Court of California has approved the motion they appear on.	

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
12.1	Order Certificate	Standard Product	This is the process an attorney will take after being sworn in.	
13.1	List of Schools	Standard Product	This is the process of ensuring that the list of law schools has up-to-date information.	
13.2	School Regulation	Can Be Integrated	This is the process of enforcing rules set by the Committee relating to accreditation and registration of schools.	
14.1	Legal Specialization Interest Tracking	Can Be Integrated	This is the tool that LS will use to keep a list of attorneys who would like to receive information about specializations.	
14.2	Legal Specialization Qualification Tracking	Can Be Integrated	This is the tool that attorneys will use to track their progress toward being qualified to receive a certification.	
14.3	Legal Specialization Exam Writing & Grading	Can Be Integrated	This is the process of developing the LS exam and grading completed exams.	The question writing portion can be integrated. The exam taking and grading portion is a standard product.
14.4	Legal Specialization Exam Application	Standard Product	This is when an attorney applies to take one of the 13 LS exams.	
14.5	Legal Specialization Certification Application	Standard Product	This is when an attorney applies to receive a LS certification once all requirements have been met.	
14.6	Legal Specialization Re-Certification	Standard Product	This is when an attorney applies to be re-certified by the LS Office.	
15.1	SBC Website	Standard Product	This explains the relationships between the website, portals, and potential user portals.	
15.2	Document Management	Standard Product	This explains the uses of the Document Management function.	
15.3	Master Calendar	Standard Product	This explains possible uses of the Master Calendar function.	

Element No.	Element Title	Statement of Compliance	Implementation Approach	Notes
15.4	Contract Management	Cusom Development	This explains the use of the Contract Management function.	
16.1	SBC User Access	Standard Product	This is the roles based secure access to AIMS applications by State Bar (SBC) employees.	
16.2	External-Applicant User Access	Standard Product	This is the role based secure access to State Bar applicants. This is linked to the applicant portal and to Account (Profile) establishment.	
16.3	External User Access	Standard Product	This explains possible external users of the system and their need to access it.	
17.1	Start Legal Education Over Notification	Cusom Development	This explains the process of an applicant requesting to start their legal education over, and of the State Bar's management of previously entered data.	
18.1	Out-Of-State Attorney Arbitration Counsel and Pro Hac Vice	Cusom Development	This is the process of applying for the OSAAC and PHV programs with the Bar.	
18.2	Practical Training of Law Students	Standard Product	This is the process of applying for PTLs.	
19.1	File Room	Cusom Development	This explains the structure that dictates which files are stored and in what order.	

Attachment F: Requirements Gaps and Exceptions

Based upon the compliance information provided in Attachment E the proposer shall indicate gaps in information required for system delivery or exceptions to requirements.

1. Describe requirements gaps with identification of the Concept of Operations Element number or identifier used in Attachment E.
2. With each gap describe approach for resolution.
3. The proposer shall identify their exceptions to requirements or functionality associated with their proposed solution.
4. The proposer shall indicate if their solution has an alternative that addresses the exception topic.

Response:

Proposer does not have any requirement gaps based upon the Concept of Operations Requirements Compliance information.

Attachment G - Service Requirements AIMS

Vendor Name: ILG Technologies

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-001	<p>Project Management: Requirements in this category outline specific management and control services associated with the implementation of the System. Meeting these requirements will help ensure that the Vendor conducts proper project planning, execution, and monitoring and controlling of project activities. Required deliverables are described below.</p>	Agrees to Perform	
SVC-001.01	<p>Prepare Project Management Plan: Based on the agreed-upon scope of work and other agreements in contract negotiation, the Vendor, working with State Bar project manager is required to develop a comprehensive and detailed project management plan. The project management plan should reflect best practices in project management applied to the unique needs of the project. The project management plan must include the following elements:</p> <ul style="list-style-type: none"> • Project organization, including structure, roles, responsibilities, and human resource management. • Project work breakdown structure and schedule, fully loaded with dependencies and resource requirements. • Approach to managing scope, budget, and schedule. • Approach to ensuring effective project communication. • Approach for identifying, tracking, and resolving issues and risks, including roles, responsibilities, escalation process, and tools for reporting issues and risks to the State Bar project manager. • Approach to configuration management for reviewing, accepting, and maintaining version control on all project deliverables. <p>The Vendor is required to submit the draft project management plan to the State Bar IT project manager 10 business days after the finalization of the project contract. Upon review and acceptance, the final project management plan will serve as the basis for controlling all project management activities.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-001.02	<p>Provide Project Management: Under the direction of state bar Sr IT Management and IT Program management The Vendor will be responsible for the ongoing planning, monitoring, controlling, and reporting of project performance across projects within the scope of this engagement. The Vendor shall coordinate its project management efforts and reporting with the efforts of the State Bar. In addition, the Vendor will coordinate its efforts and reporting with the State Bar. All of these efforts are under the direction of the State Bar IT project manager.</p> <p>The Vendor will provide effective project management for all of the contracted services and product delivery. The Vendor shall provide sufficient project management services to:</p> <ul style="list-style-type: none"> • Ensure that all deliverables are produced according to contract schedule. • Respond to reasonable inquiries about project status and risks in a timely manner. • Identify issues, risks, and alternative solutions and notify the State Bar with sufficient time for the State Bar to effectively address these matters. 	Agrees to Perform	
SVC-001.03	<p>Produce Written Status Report: The Vendor will be required to deliver project status reports at a later determined frequency to the State Bar IT project manager and the project sponsor throughout the duration of the project. Project status reports are intended to be relatively brief snapshots of the project's status and should consist of the following information:</p> <ul style="list-style-type: none"> • Updated project work plan, schedule, staff plan, and budget. • Report of project status and performance against all plans. • Progress against the project work plan completed in the reporting period. • Variance in schedule between actual and planned activities. • Planned activities for the subsequent reporting period. • Report of issues and issue resolution efforts and progress. • Report of risks and risk mitigation efforts and progress. 	Agrees to Perform	
SVC-001.04	<p>Attend Status Meetings and Steering Committee Meetings: In conjunction with status reports, the Vendor will be required to attend status meetings later determined frequency to be held between key project team members. Additionally, The Vendor may be required to provide a brief in-person presentation to the Steering Committee regarding the status of the project.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-002	<p>System Design, Configuration, and Construction: Requirements in this category include all activities necessary to develop, assemble, and otherwise prepare the proposed system for implementation. The nature of the proposed system may determine to some degree the activities necessary to complete this phase of work. However, it is anticipated that these activities will include, at a minimum:</p>	Agrees to Perform	
SVC-002.01	<p>Prepare system Design, Configuration, and Construction Plan: The Vendor will be required to submit its plan for assembling the proposed components into a single system for deployment to the State Bar. The Vendor's plan should include the Admissions Information Management System (AIMS), the Legal Specialization Application, the Examination Grading Applications and supporting functionality and modes that has been documented and approved for the State Bar of California. The schedule and resources required for system design, configuration, and construction should be reflected in the project management plan. This plan must include, at a minimum:</p> <ul style="list-style-type: none"> • Approach to design, configuration, and configuration/construction. • Design, configuration, and configuration/construction schedule. • Resources required (State Bar Subject Matter Experts (SMEs), State Bar IT, and Vendor) for each step in configuration/construction. 	Agrees to Perform	
SVC-002.02	<p>Conduct Requirements Gap Analysis: The Vendor must (working with a representative group of SMEs selected by the State Bar) conduct and complete business and technical analysis to determine the gaps between the needs of the affected departments as reflected in the Concept of Operations and what the Vendor's system provides. This analysis must incorporate the Vendor's response to requirements as presented in the Vendor's proposal (and modified in contract negotiations), as well as the approved system requirements and design. Major gaps that are identified must be accompanied by a plan for resolving each gap through system configuration, additional development, or additional component incorporation. This analysis must result in a detailed inventory of system customizations or other modifications required meeting the needs of the State Bar.</p>	Agrees to Perform	
SVC-002.03	<p>Track Requirements to Implementation: The Vendor must provide a mechanism for tracking adherence to the requirements identified in this RFP, including the Concept of Operations, as well as additional requirements identified in gap analysis and system design activities. This mechanism must support change management and system testing, including user acceptance testing. The Vendor must populate, maintain, and provide State Bar with access on demand to this tool and the information it maintains.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-002.04	<p>Design the System: The Vendor must provide functional and technical design documentation for AIMS and supporting applications along with the libraries, tools, and facilities to maintain this documentation. This documentation shall include:</p> <ul style="list-style-type: none"> • Use case documentation. • Data dictionary. • Information Exchange Packet documentation. • Network design, inventory, protocols, and configuration. • Security design. • Hardware design, configuration, and inventory. • Application design and inventory. • Change control documentation for all aspects of the design. 	Agrees to Perform	
SVC-003	<p>Perform System Testing: Requirements in this category will include activities necessary to assure that system is delivered into production with a minimum number of defects. Requirements will include planning, preparation and testing activities:</p>	Agrees to Perform	
SVC-003.01	<p>The Vendor must provide a detailed test plan for testing every aspect of the system in accordance with agreed upon project delivery methodology. The Vendor must also provide a test environment if Vendor is proposing a hosted solution. The test plan and environments must support the testing of all planned major and minor releases by both the Vendor and State Bar IT teams. Final overall test plan must be approved by State Bar. In addition, test plans and environment structure must describe and support testing of:</p> <ul style="list-style-type: none"> • All functional requirements defined in the requirements traceability deliverable. • All performance requirements. 	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-003.02	<p>Upon completion of any release, major or minor, the Vendor shall provide a workable version containing the release, for testing by the State Bar. Every release should contain all tested prior releases and should be available for the State Bar to retest as part of the testing cycle. It is expected that the following test cycles will be implemented prior to the completion of this project:</p> <ul style="list-style-type: none"> • Smoke Testing: All high-level or core functionality will be tested. Smoke tests will be run with every deployment to assist in identifying significant defects. • Functional Testing: Detailed functional testing will be conducted to evaluate the compliance of the system or component with specified functional requirements. • Regression Testing: To ensure that the existing functionality is not affected by the new released features, enhancements, or prior defect corrections. • Performance & Stress Testing: To ensure the stability, scalability, and performance of the system and its underlying architecture. • Security Testing: The Vendor is expected to system satisfies the State Bar's security requirements and user access controls. • Automated test tools supporting all prototype, release, and deployment testing. • Automated test scripts, test data, and other testing tools/materials. • Documented test results, to be provided to the State Bar IT project manager. <p>This deliverable must provide the State Bar with the infrastructure, licenses, and training to efficiently test new releases and deployments of the system and its interaction with other State Bar applications. It is also expected that the Vendor will support all the agreed upon test cycles throughout the implementation process.</p>	Agrees to Perform	
SVC-003.03	<p>Vendor must support testing activities performed by the State Bar IT and business SME's. Support shall include the following components:</p> <ul style="list-style-type: none"> • Daily defect review meetings conducted jointly with the Vendor testing and development leads and State Bar IT team • Defect resolution • Defect tracking tool, communicating at minimum defect analysis outcomes and resolution timeline commitment. Tool shall have a reporting capability providing a concise view of all defects in all states of resolution. Tool shall be accessible by the State Bar IT team. 	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-003.04	<p>User Acceptance Testing: Once the configured system is released to the UAT site, the Vendor will support the State Bar staff in conducting the User Acceptance Testing in accordance with the User Acceptance Test Plan, which will include all developed test cases/scenarios, to verify that the system operates in the manner expected, and that all configurations are suitable for intended business processes.</p>	Agrees to Perform	
SVC-004	<p>System Delivery: It is required that depending on the delivery approach the Vendor will provide and assist with the implementation of multiple production releases, until full functionality requested in this RFP is fully operational and with agreed upon number of remaining defects. The Vendor shall work closely with the State Bar Project Team to determine the best deployment and system implementation approach for the four departments that are included in this implementation.</p>	Agrees to Perform	
SVC-004.01	<p>Produce Pilot Release(s) For a Subset of Users: These releases shall include and implement facilities and procedures for software promotion from construction through testing and into production (along with rollback facilities and procedures). This deliverable will include all software required for system operation. This shall include both technical and functional configurations. Depending on the delivery approach this deliverable will include one or more releases.</p>	Agrees to Perform	
SVC-004.02	<p>Produce Production Release(s): These releases shall include and implement facilities and procedures for software promotion from construction through testing and into production (along with rollback facilities and procedures). This deliverable will include all software required for system operation. This shall include both technical and functional configurations. Depending on the delivery approach this deliverable will include one or more releases.</p>	Agrees to Perform	
SVC-004.03	<p>Produce Hot Fix Release(s): Within 1 week of each Production Release if any critical or major defects are identified, vendor shall delivery a Hot Fix release(s) to resolve such defects. Vendor shall develop an expedited delivery cycle which will include all activities performed during the Production Release cycle.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-004.04	<p>Prepare Plan for Additional Releases: It is anticipated that once the final Production Release of the system has been in operation for 3 months, modifications to the system based upon the lessons learned from initial production operations will be identified. In addition, it is anticipated that the Vendor will have updated plans for the evolution and releases of the underlying COTS application. The Vendor shall prepare a plan for the design, development, and testing of what will be the final major release of the production system. In addition, the Vendor will outline the plans for the next two versions of the System.</p>	Agrees to Perform	
SVC-005	<p>System Implementation: Services and deliverables include all of the activities necessary to configure and deploy the system assembled in the previous subsection. Services associated with this phase of work are required to be:</p>	Agrees to Perform	
SVC-005.01	<p>Prepare Deployment Plan: The Vendor shall develop a comprehensive deployment plan that provides details on the schedule, approach, and resources necessary to deploy Production Release(s) of the System . The plan will include:</p> <ul style="list-style-type: none"> • Location(s). • Schedule. • Scope and objectives of all Production Release(s) with effort estimation for each activity • Steps required to roll back the Production Release(s) implementation to pre-implementation operations. • Communication plan • Tasks, human resources, and other resources required for implementation, including: <ul style="list-style-type: none"> o State Bar IT Staff. o State Bar Business Staff o Vendor <p>It must effectively factor in lead time for resource ordering, data conversion, and deployment. It must also address parallel processing procedures if appropriate. Final overall Deployment Plan must be approved by State Bar.</p>	Agrees to Perform	
SVC-005.02	<p>Assist Configuration: It is anticipated that the system will be configured to meet the needs of the State Bar. The Vendor will train the designated management and technology support staff to make optimal configuration decisions and assist them in implementing and testing system configuration.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-005.03	<p>Perform Data Conversion: It is expected that the Vendor will begin conversion efforts upon contract completion. The Vendor must perform an in-depth analysis of current data structures and values and develop a plan for converting data and procedures for migrating and validating data. It is anticipated that this will include three or more tests of the conversion to ensure that conversion expectations are met. After receiving State Bar approval, the Vendor must convert existing data based on the combined efforts of State Bar IT and business staff and the Vendor.</p>	Agrees to Perform	
SVC-005.04	<p>Assist Testing: The Vendor will assist the management and staff in pre-production testing of the configured application and converted data. The Vendor shall work with State Bar and design a structured and repeatable testing protocol that:</p> <ul style="list-style-type: none"> • Supports the implementation schedule. • Employs automated testing tools to minimize the staff required to fully test the implementation of the system. • Enables testing of parallel processes as appropriate. <p>State Bar staff will lead and perform testing. The Vendor will be responsible for:</p> <ul style="list-style-type: none"> • Implementation of the testing environments, data, and tools required. • Development of the repeatable testing protocols and scripts. • Component and business analysis support. • Troubleshooting. <p>The Vendor shall resolve all defects discovered in this testing in a timely manner and prior to production operations.</p>	Agrees to Perform	
SVC-005.05	<p>External User Migration: The Vendor must provide a plan to migrate external users from using the third party application process to the AIMS application process in a fashion that has a period of parallel operation. The Vendor must also provide a plan for introducing the use of the Legal Specialization Application to external users and providing a web-access to the those functions. The migration of State Bar staff requires a migration plan with State Bar approval.</p>	Agrees to Perform	
SVC-005.06	<p>Support Production System Deployment: The Vendor will provide on-site support of management and technology support staff for all technical activities in locations specified in the Deployment Plan.</p>	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-006	<p>Training: Implementing a new system will require specific training services for all software and its components. These services will include planning and coordination, development of training materials and tools, and delivery of training to State Bar IT, the management and staff.</p>	Agrees to Perform	
SVC-006.01	<p>Plan for Training: The Vendor must provide a training plan that details the approach to training and how training for the users and administrators of the system will be delivered. The plan should detail how training will be tailored to specific roles within the State Bar. Training deliverables must include classroom sessions. All training materials shall be effectively cataloged, reusable, and modifiable by the State Bar.</p>	Agrees to Perform	
SVC-006.02	<p>Provide Predesign Training of Personnel: It is anticipated that the project staff and management will need to make well-informed design decisions throughout this engagement. The Vendor will provide training on all software components to the project staff and management upon contract completion. This should include training on the technical and functional features and controls of all of the components that make up the system. This training should identify the design decisions that will be made in preparing the system for implementation.</p>	Agrees to Perform	
SVC-006.03	<p>Provide system User and Administrator Training: The Vendor will be required to provide training on all system software components. The training approach should be tailored to the various roles within the State Bar. The training approach should:</p> <ul style="list-style-type: none"> • Account for specific roles, such as various levels of users, business administrator, technical administrator and developer • Focus training to develop the knowledge and skills needed to effectively use and configure (including development) new system components according to the activities of each role. • Assist the State Bar in managing, changing, and improving business processes using the new system. • Employ a train-the-trainer approach at a minimum. • Employ in-application help. • Deliver on-site training at both State Bar sites. • Consider the limitations of training facilities in each site. 	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-006.04	<p>Produce Training Documentation: The Vendor will be required to provide training and technical documentation for all system software components. Documentation should include, but is not limited to:</p> <ul style="list-style-type: none"> • Step-by-step process instructions. • Standard operating procedures. • General system administration. • Technical configuration. • System maintenance. • Troubleshooting procedures • Technical documentation, including DataBase schema and entity relationship diagram. <p>All training documentation should be provided in electronic form.</p>	Agrees to Perform	
SVC-007	<p>System Support: System support services include all of the activities necessary to maintain, efficiently update, and generally support the system in the event of technical or other issues. At a minimum, the Vendor will be expected to provide the following services:</p>	Proposing Alternative	
SVC-007.01	<p>Version and Patch Release Management: The Vendor must provide a plan and structure for managing requests for system modifications and bug fixes. This structure shall be designed to operate under the direction of the State Bar IT project manager. Any issue that requires a system-wide change must be tracked and included in either a patch for critical issues or a future release for functionality expansions or noncritical issues.</p> <p>Given the component-based nature of the system, a critical element of release management will be the methods used to ensure that a version update to a single system component does not “break” the interactions that the component has with other system components by altering data structures or processing models. Releases must be well documented, identifying the nature of the changes made, configuration issues, and changes in business processes. The Vendor must provide a plan and protocol for planning, announcing, developing, testing, and deploying releases to ensure that software updates do not interrupt critical business processes.</p>	Proposing Alternative	<p>ILG uses its built in bug/issue tracking and ticket managements system that is part of EBAS.</p> <p>All issues including system modification requests are communicated with the SBC office via our internal ticketing system. Once the changes are developed and implemented, they are tested internally and deployed to staging servers and approved by SBC prior to being deployed on the production servers.</p>
SVC-007.02	<p>Backup and Recovery Procedures and Tools: The Vendor must provide procedures and tools for system and data backup and recovery to support the system availability performance requirements. Backup and recovery practices and procedures must be consistent with State Bar IT standards. They should leverage State Bar IT backup and recovery facilities and procedures.</p>	Proposing Alternative	<p>ILG's EBAS has built in backup scripts for both database and filesystem daily and weekly backups. If hosted by Rackspace, ILG will also utilize un-metered Rackspace filesystem backups and daily server images. ILG will also integrate with the SBC IT backup and recovery facilities to ensure that the user generated content is backed-up on a daily basis.</p>

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-007.03	<p>On-Site Support: The Vendor shall provide on-site technical support for activities associated with implementation of the system. This will be provided throughout the course of implementation. This support must be provided for a period of 3 months after the system is in production operation.</p>	Proposing Alternative	Vendor will have an on-site technician available for each rollout (1-3) for a period of two weeks. Subsequent to the rollout the vendor will be available via normal support services including ticketing system, email and telephone.
SVC-007.04	<p>Level 1 Help Desk Support (Internal State Bar Help Desk): The Vendor must assist the State Bar in establishing a Level 1 help desk support structure and staff the help desk until such time as the State Bar IT is fully capable of operating the help desk using its own staff. This Level 1 help desk support must meet the State Bar response and problem resolution time requirements for all applications in scope. It will apply to all Vendor-provided hardware, software, infrastructure, and services. It shall provide complete, accurate, and timely information about each request for service in the State Bar IT incident tracking application. The Vendor shall provide documentation and training to State Bar IT help desk staff and management. This should establish full help desk capability (at the level required for long-term system maintenance) within 6 months of the successful completion of the system implementation. The Vendor shall augment State Bar IT help desk staff until the State Bar IT has realized full help desk capability and shall provide additional resources sufficient to meet the additional short-term demand resulting from the implementation of the system.</p>	Proposing Alternative	<p>ILG provides Level 1 and 2 help desk support to all jurisdictions we work with. We have a dedicated Support Office in Hubbard Lake, Michigan and we have several personnel available at all times during US Business Hours to help with technical issues for both applicants and jurisdiction staff. We have a built in technical support portal that is transparent to admission office, which also has built in performance reports. Using the performance reports, admission offices will be able to retrieve ILG's support performance values, such as average initial response times, average number of responses to resolve a ticket and average duration to resolve a ticket. ILG can provide the necessary documentation and training to the SBC IT help desk staff to assume responsibility of Level 1 help desk support if required; however, we feel it is unnecessary under the proposal.</p>
SVC-007.05	<p>Ongoing Level 2 Support and Problem Resolution: The Vendor shall provide Level 2 help desk support that meets response and problem resolution time requirements. It will apply to all Vendor-provided hardware, software, infrastructure, and services. It will be coordinated through up to three designated State Bar IT points of contact. In addition, it shall provide complete, accurate, and timely information about each request for service in the State Bar IT incident tracking application. The Vendor shall provide support by a variety of channels, including telephone, e-mail, and Web application.</p>	Proposing Alternative	Please see comment above. ILG provides both Level 1 and Level 2 help desk support for all jurisdictions. Our custom built help desk ticketing system is email based but we also provide telephone support via our dedicated 800 number and through the applicant portal.
SVC-008	<p>Problem resolution protocol: Vendor will use criteria listed below to develop a response plan for each Severity level.</p>	Agrees to Perform	
SVC-008.01	<p>For a Severity Level 1 event, the Vendor:</p> <ul style="list-style-type: none"> • Responds to call for service in 30 minutes or less. • Reports recommended resolution and estimated fix date/time for all affected System components in 2 hours or less. • Resolves the deficiency within 24 hours. 	Agrees to Perform	

ID	Requirement Title	Response Code	Assumptions/ Approach/Comments
SVC-008.02	<p>For a Severity Level 2 event, the Vendor:</p> <ul style="list-style-type: none"> • Responds to call for service in 30 minutes or less. • Reports recommended resolution and estimated fix date/time for all affected System components in 2 hours or less. • Resolves the deficiency within 24 hours if the affected System component is on the Vendor site. • Resolves the deficiency within 48 hours if the affected System component is on the State Bar site. 	Agrees to Perform	
SVC-008.03	<p>For a Severity Level 3 event (A business function or System component does not work as required, but a work-around that is acceptable to the State Bar is available.) the Vendor:</p> <ul style="list-style-type: none"> • Responds to call for service in 30 minutes or less. • Reports recommended resolution and estimated fix date/time for all affected System components in 2 hours or less. • Resolves the deficiency within 72 hours if the affected System component is on the Vendor site. • Resolves the deficiency within 96 hours if the affected System component is on the State Bar site. 	Agrees to Perform	
SVC-008.04	<p>For a Severity Level 4 event (A cosmetic deficiency is discovered that is noncritical but effects business function or a System component.) the Vendor:</p> <ul style="list-style-type: none"> • Responds to call for service in 30 minutes or less. • Reports recommended resolution and estimated fix date/time for all affected System components in 4 hours or less. • Resolves the deficiency within 10 business days. 	Agrees to Perform	
SVC-008.05	<p>Other Software and Hardware Maintenance: The Vendor shall provide the following support and maintenance services for the products delivered and/or licensed to the State Bar IT as a part of this engagement:</p> <ul style="list-style-type: none"> • Provision of known error corrections by delivery of available patches via electronic communication and for download via the Internet. • Provision of available minor updates (bundling of several error corrections in one version) for download via the Internet. • Provision of available medium upgrades (version with additional/enhanced functions) for download via the Internet. • Provision of available major upgrades (version with substantially enhanced volume of functions). • Provision of information via electronic communication (e-mail) when new minor/medium/major updates are available. • Extension of hardware manufacturer and third-party software provider warranties. <p>The granting of rights of use and the delivery of the relevant license files for all minor, medium, and major upgrades shall be limited to the number and type of products provided by the Vendor in this engagement.</p>	Agrees to Perform	

Attachment H: Functional Guidelines

This attachment serves to describe general functional requirements that must be used across all applications. It also details disaster recovery requirements that the proposer must comply with. The proposer must respond to all three questions to both sections and use as much space as is necessary.

Application Requirements

External applicants for admission and for legal specialization have multiple applications to complete during their overall progress to reach their objective.

There shall be common application completion processes that shall be followed to provide applicants with application flexibility and quality application submittal. The application requirements are:

1. An applicant may suspend completion of an application with a process that saves the work done to that point and allows the applicant to exit the portal and later re-enter to continue work on the application.
2. An applicant can't proceed to the next application page or section if there are incomplete fields.
3. Common information fields such as address, phone number, etc. will be automatically filled in from the applicant profile, and the applicant may update the information. Application updates will update the application and the applicant profile information.
4. Applications shall make use of pull down for tabular information that is held in AIMS information fields (such as lists of Law Schools).
5. Upon submittal of an application a status condition shall be set that prevents an applicant from completing the same application again and resubmitting unless there has been a denial or abandonment, or equivalent for the specific application.
6. Some applications will have a period of time that controls when those applications can be completed and submitted. This is in addition to applicant status with regard to application submittals.
7. For applications that have application fees submittal shall not be completed until there is a payment acceptance indication from the credit card process. Credit card processing shall be a link to the third party process outside of AIMS.
8. Until submitted applications are held in a working database that is not the applicant database that is used by SBC for applicant information and status. The submittal process transfers the working applicant application information to the core database.

Compliance:

- A. Does the proposed solution comply with the requirements identified?
- B. What is the proposed approach to make sure that applications do comply with the requirements?
- C. Are there application process features in the proposed solution that are unique or make the process more effective?

Response:

A. No, the proposed solution does not comply with all requirements identified in the Application Requirements.

B.

1. Yes, the solution complies with this specific requirement as listed. The solution allows an applicant to save the data entered into the electronic application at each page. The applicant can either chose to save, save and continue and save and close. And the applicant can exit the portal to come back at a later time to continue their application.
2. No, the solution does not comply with this specific requirement as listed. The solution allows applicants to leave fields incomplete prior to moving to the next screen or question. However, the applicant must have all required fields completed prior to being allowed to the submit the final application.
3. Yes, the solution complies with this specific requirement as listed. The solution auto-fills informational data previously provided by the applicant during the registration process.
4. Yes, the solution complies with this specific requirement as listed. The application contains some list fields that applicants can access via dropdown menus.
5. Yes, the solution complies with this specific requirement as listed. An applicant cannot remove an application once submitted; only prior to submission. During the registration process the solution verifies that any most recent application is completed prior to allowing a submission of a second application.
6. Yes, the solution complies with this specific requirement as listed. The solution uses examination period established by the jurisdiction in order to determine if an application can be submitted (filed within the deadline) or not submitted (attempt to file outside of the deadline).
7. Yes, the solution complies with this specific requirement as listed. The solution does not allow an applicant that has selected to pay via credit card to submit an application without confirmation from the third-party payment vendor that payment was authorized.
8. Yes, the solution complies with this specific requirement as listed. Only applications that are submitted appear in the core database.

We can categorize applications based on application responses so that when the application appears in the core database, staff knows if the application contains certain responses to character and fitness questions. The solution can also automatically assign work based on the jurisdiction's rules. For example, Analyst 1 is assigned applicants whose last names begin with A, B and C; Analyst 2 is assigned applicants whose last names begin with D, E and F. Alternatively, if the jurisdiction decides to pre-code character and fitness responses, the solution can assign work based on complexity of the file. For example, Analyst 1 is assigned a difficult file, then analyst 2 is assigned the next difficult file. Furthermore, the solution can add upload fields for required documents based on an applicant's response to a specific answer in the application. For example, if an applicant answers affirmatively to questions regarding criminal history, the solution can add an upload box for a copy of the arrest report or an upload box for a copy of the court record. The solution also has the ability to create upload boxes based on specific applications. For example, an application may require an authorization and release; the system will automatically add an upload box for the authorization and release.

Disaster Recovery

The Office of Admissions must not permanently lose access to data in AIMS by any means of disaster, corruption, or system failure. The application requirements are:

1. Should there be data corruption or loss of use, all data and functions shall be available for full use within 24 hours of the failure.
2. The system shall have daily back-ups of the entire database.

Compliance:

- A. Does the proposed solution comply with the requirements identified?
- B. What is the proposed approach to make sure that applications do comply with the requirements?
- C. Are there application process features in the proposed solution that are unique or make the process more effective?

Response:

- A. Yes, the proposed solution complies with the requirements identified.
- B. If hosting is provided by ILG, the backup solution will include:
 1. Daily database backup
 2. Daily filesystem backup
 3. Daily server images
 4. Data files and database backups are synchronized to ILG Technologies, LLC's Backup Servers
- C. No, there are no features in the proposed solution that are unique or make the process more effective.

Notes:

- All backup files are kept for two weeks
- Backup files are kept on the same server and also moved to a remote server

If SBC decides on the option of self-hosting the AIMS solution, ILG Technologies, LLC, will integrate its backup procedures with the backup procedures provided by the SBC infrastructure.

Admission Manager Web Server Acunetix OWASP Report - Explanation of Alerts

Start Date:	13 Apr 2017 14:32
End Date:	13 Apr 2017 14:41
Duration:	0h 9m 49s
Files:	78
Requests:	29866
Hostname:	https://demo.admission-manager.com
Directories:	14
Avg. Response Time:	21.44ms
Scan Target Name:	ILG Admission Manager
Scan Type:	Web

Note: In the detailed OWASP Compliance Report under the Compliance at a Glance section, some alerts are listed multiple times. The Executive Summary provides an alert distribution overview. The information below is detailed by alert group based on the alert overview.

Severe/High Alerts: None

Medium Alerts: None

Low Alerts: None

Informational Alerts: Content type is not specified: 2 Alerts

Acunetix scan identified the following file's content type is not specified.

<https://demo.admission-manager.com/fonts/fontawesome-webfont.woff2>

This file is a binary file that's used as part of the kendo javascript library.

Informational Alerts: Possible username or password disclosure: 1 Alert

Acunetix scanner detects the text "pass:before" in:

<https://demo.admission-manager.com/css/font-awesome.min.css>

This alert is generate due to the string "pass" being used (similarity to password) even though "pass:before" is a valid css statement.



Executive Summary

Scan of https://demo.admission-manager.com

Scan details

Scan information	
Starttime	4/13/2017 3:16:01 PM
Finish time	4/13/2017 3:27:48 PM
Scan time	11 minutes, 47 seconds
Profile	Default
Server information	
Responsive	True
Server banner	Apache/2.4.18 (Ubuntu)
Server OS	Unix






Threat level



Acunetix Threat Level 0

No vulnerabilities have been discovered by the scanner.

Alerts distribution

Total alerts found	3
 High	0
 Medium	0
 Low	0
 Informational	3 

Executive summary

Alert group	Severity	Alert count
Content type is not specified	Informational	2
Possible username or password disclosure	Informational	1



OWASP TOP 10 2013
~ compliance report ~

OWASP TOP 10 2013

compliance report

Description

The primary aim of the OWASP Top 10 is to educate developers, designers, architects, managers, and organizations about the consequences of the most important web application security weaknesses. The Top 10 provides basic techniques to protect against these high risk problem areas - and also provides guidance on where to go from here.

Disclaimer

This document or any of its content cannot account for, or be included in any form of legal advice. The outcome of a vulnerability scan (or security evaluation) should be utilized to ensure that diligent measures are taken to lower the risk of potential exploits carried out to compromise data.

Legal advice must be supplied according to its legal context. All laws and the environments in which they are applied, are constantly changed and revised. Therefore no information provided in this document may ever be used as an alternative to a qualified legal body or representative.







A portion of this report is taken from OWASP's Top Ten 2013 Project document, that can be found at <http://www.owasp.org>.

Scan

URL	https://demo.admission-manager.com
Scan date	4/13/2017 11:32:10 AM
Duration	9 minutes, 40 seconds
Profile	Default

Compliance at a Glance

This section of the report is a summary and lists the number of alerts found according to individual compliance categories.

- [Injection \(A1\)](#)
 **No alerts in this category**
- [Broken Authentication and Session Management \(A2\)](#)
 **No alerts in this category**
- [Cross Site Scripting \(XSS\) \(A3\)](#)
 **No alerts in this category**
- [Insecure Direct Object Reference \(A4\)](#)
 **No alerts in this category**
- [Security Misconfiguration \(A5\)](#)
Total number of alerts in this category: 2
- [Sensitive Data Exposure \(A6\)](#)
Total number of alerts in this category: 3
- [Missing Function Level Access Control \(A7\)](#)
 **No alerts in this category**
- [Cross Site Request Forgery \(CSRF\) \(A8\)](#)
 **No alerts in this category**
- [Using Components with Known Vulnerabilities \(A9\)](#)
Total number of alerts in this category: 2
- [UnvalidatedRedirects and Forwards \(A10\)](#)

✔ No alerts in this category

Compliance According to Categories: A Detailed Report

This section is a detailed report that explains each vulnerability found according to individual compliance categories.

(A1) Injection

Injection flaws, such as SQL, OS, and LDAP injection occur when untrusted data is sent to an interpreter as part of a command or query. The attacker's hostile data can trick the interpreter into executing unintended commands or accessing data without proper authorization.

No alerts in this category.

(A2) Broken Authentication and Session Management

Application functions related to authentication and session management are often not implemented correctly, allowing attackers to compromise passwords, keys, or session tokens, or to exploit other implementation flaws to assume other users' identities.

No alerts in this category.

(A3) Cross Site Scripting (XSS)

XSS flaws occur whenever an application takes untrusted data and sends it to a web browser without proper validation or escaping. XSS allows attackers to execute scripts in the victim's browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites.

No alerts in this category.

(A4) Insecure Direct Object Reference

A direct object reference occurs when a developer exposes a reference to an internal implementation object, such as a file, directory, or database key. Without an access control check or other protection, attackers can manipulate these references to access unauthorized data.

No alerts in this category.

(A5) Security Misconfiguration

Good security requires having a secure configuration defined and deployed for the application, frameworks, application server, web server, database server, and platform. Secure settings should be defined, implemented, and maintained, as defaults are often insecure. Additionally, software should be kept up to date.

Total number of alerts in this category: 2

Alerts in this category

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16
Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1
Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

(A6) Sensitive Data Exposure

Many web applications do not properly protect sensitive data, such as credit cards, tax IDs, and authentication credentials. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data deserves extra protection such as encryption at rest or in transit, as well as special precautions when exchanged with the browser.

Total number of alerts in this category: 3

Alerts in this category

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 <ul style="list-style-type: none">- Access Vector: Network- Access Complexity: Low- Authentication: None- Confidentiality Impact: None- Integrity Impact: None- Availability Impact: None
CWE	CWE-16

Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1

Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

Possible username or password disclosure

A username and/or password was found in this file. This information could be sensitive.

This alert may be a false positive, manual confirmation is required.

CVSS	Base Score: 5.0 <ul style="list-style-type: none">- Access Vector: Network- Access Complexity: Low- Authentication: None- Confidentiality Impact: Partial- Integrity Impact: None- Availability Impact: None
CVSS3	Base Score: 7.5 <ul style="list-style-type: none">- Attack Vector: Network- Attack Complexity: Low- Privileges Required: None- User Interaction: None- Scope: Unchanged- Confidentiality Impact: High- Integrity Impact: None- Availability Impact: None
CWE	CWE-200
Affected item	/css/font-awesome.min.css
Affected parameter	
Variants	1

(A7) Missing Function Level Access Control

Most web applications verify function level access rights before making that functionality visible in the UI. However, applications need to perform the same access control checks on the server when each function is accessed. If requests are not verified, attackers will be able to forge requests in order to access functionality without proper authorization.

No alerts in this category.

(A8) Cross Site Request Forgery (CSRF)

A CSRF attack forces a logged-on victim's browser to send a forged HTTP request, including the victim's session cookie and any other automatically included authentication information, to a vulnerable web application. This allows the attacker to force the victim's browser to generate requests the vulnerable application thinks are legitimate requests from the victim.

No alerts in this category.

(A9) Using Components with Known Vulnerabilities

Components, such as libraries, frameworks, and other software modules, almost always run with full privileges. If a vulnerable component is exploited, such an attack can facilitate serious data loss or server takeover. Applications using components with known vulnerabilities may undermine application defenses and enable a range of possible attacks and impacts.

Total number of alerts in this category: 2

Alerts in this category

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16
Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1
Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

(A10) UnvalidatedRedirects and Forwards

Web applications frequently redirect and forward users to other pages and websites, and use untrusted data to determine the destination pages. Without proper validation, attackers can redirect victims to phishing or malware sites, or use forwards to access unauthorized pages.

No alerts in this category.

E-Bar Web Server Acunetix OWASP Report - Explanation of Alerts

Start Date:	12 Apr 2017 17:32
End Date:	12 Apr 2017 18:42
Duration:	1h 10m 48s
Files:	79
Requests:	55778
Hostname:	https://data.ilgnow.com
Directories:	21
Avg. Response Time:	77.89 ms
Scan Target Name:	ILG E-Bar
Scan Type:	Web

Note: In the detailed OWASP Compliance Report under the Compliance at a Glance section, some alerts are listed multiple times. The Executive Summary provides an alert distribution overview. The information below is detailed by alert group based on the alert overview.

Severe/High Alerts: None

Medium Alerts: None

Low Alerts: Session Token in URL: 2 Alerts

This alert is generated because the Acunetix Scanner misidentified a valid URL parameter as a session parameter. In "Browse Forms", we use a query parameter "ssid" which identified the id of the subform and because of the naming convention, it is falsely identified as a session id parameter.

Informational Alerts: Broken Link: 1 Alert

Acunetix scan identified the link below as broken:

<https://data.ilgnow.com/httppageerror.action?httpStatusCode=404&requestUrl=errors>

The link is not a valid link and renders a proper Http Not Found - 404 page.

Informational Alerts: Content type is not specified: 2 Alerts

Acunetix scan identified the following file's content type as not specified.

<https://data.ilgnow.com/fonts/fontawesome-webfont.woff2>

This files is a binary file that is used as part of the kendo javascript library.

Informational Alerts: Robots.txt: 2 Alerts

Acunetix scan found the robots.txt file below :

<https://data.ilgnow.com/robots.txt>

Robots.txt file is used for communicating with the friendly web crawlers to provide information on the server content and structure but can be exploited by the non-friendly crawlers to gather information on the server file content. Our robots.txt file simply has the following content:

User-agent: *

Disallow: /

Which tells all web crawlers to not proceed further and does not disclose any additional information.

Informational Alerts: Possible username or password disclosure: 1 Alert

Acunetix scanner detected the text "pass:before" in:

<https://data.ilgnow.com/css/font-awesome.min.css>

This alert is generate due to the string "pass" being used (similarity to password) even though "pass:before" is a valid css statement.



Acunetix Website Audit

13 April, 2017

Executive Summary

Scan of https://data.ilgnow.com

Scan details

Scan information	
Starttime	4/12/2017 2:32:10 PM
Finish time	4/12/2017 3:42:35 PM
Scan time	1 hours, 10 minutes
Profile	Default
Server information	
Responsive	True
Server banner	Apache/2.4.18 (Ubuntu)
Server OS	Unix

Threat level



Acunetix Threat Level 1

One or more low-severity type vulnerabilities have been discovered by the scanner.

Alerts distribution

Total alerts found	8
High	0
Medium	0
Low	2
Informational	6

Executive summary

Alert group	Severity	Alert count
Session token in URL	Low	2
Broken links	Informational	1
Content type is not specified	Informational	2
GHDB	Informational	2
Possible username or password disclosure	Informational	1



OWASP TOP 10 2013
~ compliance report ~

OWASP TOP 10 2013

compliance report

Description

The primary aim of the OWASP Top 10 is to educate developers, designers, architects, managers, and organizations about the consequences of the most important web application security weaknesses. The Top 10 provides basic techniques to protect against these high risk problem areas - and also provides guidance on where to go from here.

Disclaimer

This document or any of its content cannot account for, or be included in any form of legal advice. The outcome of a vulnerability scan (or security evaluation) should be utilized to ensure that diligent measures are taken to lower the risk of potential exploits carried out to compromise data.

Legal advice must be supplied according to its legal context. All laws and the environments in which they are applied, are constantly changed and revised. Therefore no information provided in this document may ever be used as an alternative to a qualified legal body or representative.







A portion of this report is taken from OWASP's Top Ten 2013 Project document, that can be found at <http://www.owasp.org>.

Scan

URL	https://data.ilgnow.com
Scan date	4/12/2017 2:32:10 PM
Duration	1 hours, 10 minutes
Profile	Default

Compliance at a Glance

This section of the report is a summary and lists the number of alerts found according to individual compliance categories.

- [Injection \(A1\)](#)
 **No alerts in this category**
- [Broken Authentication and Session Management \(A2\)](#)
 **No alerts in this category**
- [Cross Site Scripting \(XSS\) \(A3\)](#)
 **No alerts in this category**
- [Insecure Direct Object Reference \(A4\)](#)
 **No alerts in this category**
- [Security Misconfiguration \(A5\)](#)
Total number of alerts in this category: 3
- [Sensitive Data Exposure \(A6\)](#)
Total number of alerts in this category: 6
- [Missing Function Level Access Control \(A7\)](#)
 **No alerts in this category**
- [Cross Site Request Forgery \(CSRF\) \(A8\)](#)
 **No alerts in this category**
- [Using Components with Known Vulnerabilities \(A9\)](#)
Total number of alerts in this category: 3
- [UnvalidatedRedirects and Forwards \(A10\)](#)

✔ No alerts in this category

Compliance According to Categories: A Detailed Report

This section is a detailed report that explains each vulnerability found according to individual compliance categories.

(A1) Injection

Injection flaws, such as SQL, OS, and LDAP injection occur when untrusted data is sent to an interpreter as part of a command or query. The attacker's hostile data can trick the interpreter into executing unintended commands or accessing data without proper authorization.

No alerts in this category.

(A2) Broken Authentication and Session Management

Application functions related to authentication and session management are often not implemented correctly, allowing attackers to compromise passwords, keys, or session tokens, or to exploit other implementation flaws to assume other users' identities.

No alerts in this category.

(A3) Cross Site Scripting (XSS)

XSS flaws occur whenever an application takes untrusted data and sends it to a web browser without proper validation or escaping. XSS allows attackers to execute scripts in the victim's browser which can hijack user sessions, deface web sites, or redirect the user to malicious sites.

No alerts in this category.

(A4) Insecure Direct Object Reference

A direct object reference occurs when a developer exposes a reference to an internal implementation object, such as a file, directory, or database key. Without an access control check or other protection, attackers can manipulate these references to access unauthorized data.

No alerts in this category.

(A5) Security Misconfiguration

Good security requires having a secure configuration defined and deployed for the application, frameworks, application server, web server, database server, and platform. Secure settings should be defined, implemented, and maintained, as defaults are often insecure. Additionally, software should be kept up to date.

Total number of alerts in this category: 3

Alerts in this category

Broken links

A broken link refers to any link that should take you to a document, image or webpage, that actually results in an error. This page was linked from the website but it is inaccessible.

CVSS	Base Score: 0.0 - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16
Affected item	/httppageerror.action (f94cfd87afb832c86625bdd48f9ab4c)
Affected parameter	
Variants	1

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 <ul style="list-style-type: none"> - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16

Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1
Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

(A6) Sensitive Data Exposure

Many web applications do not properly protect sensitive data, such as credit cards, tax IDs, and authentication credentials. Attackers may steal or modify such weakly protected data to conduct credit card fraud, identity theft, or other crimes. Sensitive data deserves extra protection such as encryption at rest or in transit, as well as special precautions when exchanged with the browser.

Total number of alerts in this category: 6

Alerts in this category

Session token in URL

This application contains a session token in the query parameters. A session token is sensitive information and should not be stored in the URL. URLs could be logged or leaked via the Referer header.

CVSS	Base Score: 0.0 <ul style="list-style-type: none"> - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CVSS3	Base Score: 7.5 <ul style="list-style-type: none"> - Attack Vector: Network - Attack Complexity: Low - Privileges Required: None - User Interaction: None - Scope: Unchanged - Confidentiality Impact: High - Integrity Impact: None - Availability Impact: None
CWE	CWE-200

Affected item	/browseform.action (7df7e13a870d7a9acc2fcffa46573778)
Affected parameter	sid
Variants	1
Affected item	/browseform.action (7df7e13a870d7a9acc2fcffa46573778)
Affected parameter	ssid
Variants	1

Broken links

A broken link refers to any link that should take you to a document, image or webpage, that actually results in an error. This page was linked from the website but it is inaccessible.

CVSS	Base Score: 0.0 <ul style="list-style-type: none"> - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16
Affected item	/httppageerror.action (f94cfd87afb832c86625bdd48f9ab4c)
Affected parameter	
Variants	1

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 <ul style="list-style-type: none"> - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: None - Integrity Impact: None - Availability Impact: None
CWE	CWE-16
Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1
Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

Possible username or password disclosure

A username and/or password was found in this file. This information could be sensitive.

This alert may be a false positive, manual confirmation is required.

CVSS	Base Score: 5.0 <ul style="list-style-type: none"> - Access Vector: Network - Access Complexity: Low - Authentication: None - Confidentiality Impact: Partial - Integrity Impact: None - Availability Impact: None
CVSS3	Base Score: 7.5 <ul style="list-style-type: none"> - Attack Vector: Network - Attack Complexity: Low - Privileges Required: None - User Interaction: None - Scope: Unchanged - Confidentiality Impact: High - Integrity Impact: None - Availability Impact: None
CWE	CWE-200
Affected item	/css/font-awesome.min.css
Affected parameter	
Variants	1

(A7) Missing Function Level Access Control

Most web applications verify function level access rights before making that functionality visible in the UI. However, applications need to perform the same access control checks on the server when each function is accessed. If requests are not verified, attackers will be able to forge requests in order to access functionality without proper authorization.

No alerts in this category.

(A8) Cross Site Request Forgery (CSRF)

A CSRF attack forces a logged-on victim's browser to send a forged HTTP request, including the victim's session cookie and any other automatically included authentication information, to a vulnerable web application. This allows the attacker to force the victim's browser to generate requests the vulnerable application thinks are legitimate requests from the victim.

No alerts in this category.

(A9) Using Components with Known Vulnerabilities

Components, such as libraries, frameworks, and other software modules, almost always run with full privileges. If a vulnerable component is exploited, such an attack can facilitate serious data loss or server takeover. Applications using components with known vulnerabilities may undermine application defenses and enable a range of possible attacks and impacts.

Total number of alerts in this category: 3

Alerts in this category

Broken links

A broken link refers to any link that should take you to a document, image or webpage, that actually results in an error. This page was linked from the website but it is inaccessible.

CVSS	Base Score: 0.0 <ul style="list-style-type: none">- Access Vector: Network- Access Complexity: Low- Authentication: None- Confidentiality Impact: None- Integrity Impact: None- Availability Impact: None
CWE	CWE-16
Affected item	/httppageerror.action (f94cfd87afb832c86625bdd48f9ab4c)
Affected parameter	
Variants	1

Content type is not specified

This page does not set a Content-Type header value. This value informs the browser what kind of data to expect. If this header is missing, the browser may incorrectly handle the data. This could lead to security problems.

CVSS	Base Score: 0.0 <ul style="list-style-type: none">- Access Vector: Network- Access Complexity: Low- Authentication: None- Confidentiality Impact: None- Integrity Impact: None- Availability Impact: None
CWE	CWE-16
Affected item	/fonts/fontawesome-webfont.woff2
Affected parameter	
Variants	1
Affected item	/fonts/fontawesome-webfont.woff2 (a23a7c0dd63699af6f5f4b09cdb62be3)
Affected parameter	
Variants	1

(A10) Unvalidated Redirects and Forwards

Web applications frequently redirect and forward users to other pages and websites, and use untrusted data to determine the destination pages. Without proper validation, attackers can redirect victims to phishing or malware sites, or use forwards to access unauthorized pages.

No alerts in this category.

E-Bar Web Server Acunetix Network Report - Explanation of Alerts

Start Date	11 Apr 2017 20:52
End Date	11 Apr 2017 21:00
Duration	0h 7m 21s
Hostname	https://data.ilgnow.com
Scan Target Name	ILG E-Bar
Scan Type	Network

Severe/High Alerts: None

Medium Alerts: None

Low Alert: None

Informational Alert: Apache Web Server Version Detection: Alert 1

Acunetix is able to detect the version of the Apache Web Server.

Informational Alert: OS fingerprinting: Alert 1

Acunetix is able to detect the type of Operating System (Linux Kernel)

Informational Alert: SSH Server type and version: Alert 1

Acunetix is able to detect the name and version of the SSH server running on the server.

Informational Alert: Web mirroring: Alert 1

Acunetix is suggesting that the website content is prone to mirroring by use of cgi scripts.

All alerts are informational and do not pose any vulnerability to the overall system security.



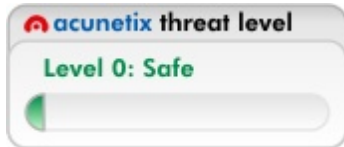
Security Report

Scan of data.ilgnow.com

Scan details

Scan information	
Start time	4/11/2017 5:52:51 PM
Finish time	4/11/2017 6:00:05 PM
Scan time	7 minutes, 14 seconds
Server information	
Responsive	True






Threat level



Acunetix Threat Level 0

No vulnerabilities have been discovered by the scanner.

Alerts distribution

Total alerts found	4
 High	0
 Medium	0
 Low	0
 Informational	4 

Alerts summary

Apache Web Server Version Detection

Affected items	Variation
80/tcp	1

OS fingerprinting

Affected items	Variation
general/tcp	1

SSH Server type and version

Affected items	Variation
22/tcp	1

Web mirroring

Affected items	Variation
80/tcp	1

Alert details

Apache Web Server Version Detection

Severity	Informational
Reported by module	Product detection

Description

Detection of installed version of Apache Web Server

The script detects the version of Apache HTTP Server on remote host and sets the KB.

Affected items

80/tcp
Details
Detected Apache Version: 2.4.18 Location: 80/tcp CPE: cpe:/a:apache:http_server:2.4.18 Concluded from version identification result: Server: Apache/2.4.18

OS fingerprinting

Severity	Informational
Reported by module	Product detection

Description

This script performs ICMP based OS fingerprinting (as described by Ofir Arkin and Fyodor Yarochkin in Phrack #57). It can be used to determine remote operating system version.

References

<http://www.phrack.org/issues.html?issue=57&id=7#article>

Affected items

general/tcp
Details
ICMP based OS fingerprint results: (80% confidence) Linux Kernel

SSH Server type and version

Severity	Informational
Reported by module	Product detection

Description

This detects the SSH Server's type and version by connecting to the server and processing the buffer received. This information gives potential attackers additional information about the system they are attacking. Versions and Types should be omitted where possible.

Affected items

22/tcp

Details

Detected SSH server version: SSH-2.0-OpenSSH_7.2p2 Ubuntu-4ubuntu2.1 Remote SSH supported authentication: password,publickey Remote SSH banner: (not available)
CPE: cpe:/a:openbsd:openssh:7.2p2
Concluded from remote connection attempt with credentials:
Login: OVS
Password: OVS

Web mirroring

Severity	Informational
Reported by module	Web application abuses

Description

This script makes a mirror of the remote web site and extracts the list of CGIs that are used by the remote host. It is suggested you allow a long-enough timeout value for this test routine and also adjust the setting on the number of pages to mirror.

Affected items

80/tcp

Details

The following CGI have been discovered :

Syntax : cginame (arguments [default value])

- /appinfo.action (id [2])
- /getpdfform.action (id [11])
- /browseapplication.action (id [2])
- /struts/themes/cupertino/jquery-ui.css (s2j [3.7.1]) /httppageerror.action (requestUrl [/images/ilgdata/] httpStatusCode [404] requestUrl=/images/;jsessionid [D6988F0705CAABFE3477FD50067C675B] requestUrl=/css/;jsessionid [D44E451623E027B940504182017AE660] requestUrl=/images/ilgdata/;jsessionid [30888ED38C16DB7FF76D9B1CD62AD2BC] requestUrl=/css/ilgdata/;jsessionid [5DDD98F643934ECA06A12F00954D3846])
- /confirmselectapplication.action (id [2])
- /faq.action (pageId [242])
- /search.action (search.token [HIYOT97XWOUUG4ARIQIXACTE2EVST33E] searchString [] struts.token.name [search.token]) /login.action (token [4QMJB4NDM49GCS8DXFJSUW0U2WHAPZUU] password [Password] email [Email] struts.token.name [token]) /news.action (id [33301])
- /sendsupport.action (struts.token.name [token] token [M0X89XGXPENASHHYWRHQXESW8T957RVE] supportName [] supportEmail [])

The following directories have been discovered :

- /images/ilgdata
- /css
- /css/ilgdata
- /struts/themes/cupertino
- /images

Attachment J: Technical Requirements Compliance Matrix AIMS

		Vendor Name:	ILG Technologies LLC.
ID	Requirement Text	Response Code	Assumptions/Comments
DBA Access			
DB-001	The Applications should provide the ability to access the transactional database directly for query purposes.	Currently Deployed	ILG's EBAS consists of two distinct applications: E-Bar and Admission Manager. E-Bar is primarily used by applicants for the application process and Admission Manager is primarily used by the office staff for application processing operations. E-Bar uses a PostgreSQL Database (9.3) and Admission Manager uses a MySQL database (5.6). Both databases can be accessed for direct query purposes.
DB-002	The Applications should provide the ability to export data from transactional database using system utilities.	Requires Customization	Custom reports can be built on each application to export data from both databases.
DB-003	The Applications should support State Bar allowed user-creation of views to support real-time analysis.	Requires Configuration	Custom reports can be built on each application to support real-time analysis of data. Report views can be saved for each State Bar user.
DB-004	The Applications should support a method to easily find and use existing views into the database.	Future Release	
Export			
DB-005	The proposed solution must support data export in a variety of common file formats, such as, CSV, tab-delimited text, SQL, XLS, DOC, which the State Bar can manipulate for reporting.	Currently Deployed	All custom reports built on Admission Manager supports exports data in CSV and Excel formats.
Documentation			
DB-006	The Applications should provide ready access to an up to date Entity Relationship Diagram (ERD) and Data Dictionary by State Bar technical staff from the initiation of design, forward.	Currently Deployed	
DB-007	The Applications must provide tools and capability for State Bar management and technical control of schema and other database implementation as new versions of The Applications are released.	Currently Deployed	
DBMS Platform			
DB-008	The transactional database should be a Microsoft SQL database. (Other database platforms will be considered.)	Alternative Proposed	ILG's EBAS consists of two web applications with MySQL and PostgreSQL databases.
Replication			
DB-009	The Applications must be capable of replicating to a Microsoft SQL database.	Currently Deployed	Raw SQL Exports can be retrieved from both databases to be imported into Microsoft SQL database. This might require data mapping to MS SQL Database.
DB-010	The replication between the production transactional database and the reporting / public access databases should, at a minimum, be performed on a near real-time basis. (This may be asynchronous).	Requires Configuration	Both MySQL and PostgreSQL databases can be configured to perform near real-time replication.
DB-011	The database implementation should be capable of journaling.	Requires Configuration	
Distribution			
DB-012	The Applications must allow for a distributed database environment supporting distributed production operation with peer fail over of database operations.	Requires Configuration	
Logging			
DB-013	The proposed solution must provide self-generated audit reports based on log entries.	Requires Customization	
DB-014	The proposed solution must rotate and archives activity logs.	Currently Deployed	
DB-015	The proposed solution must support export of audit or log data to an external system for archive and analysis (syslog, SIM, etc.).	Requires Customization	

ID	Requirement Text	Response Code	Assumptions/Comments
DB-016	The proposed solution must protect audit log files from unauthorized alteration from system users and/or by the vendor support staff.	Requires Customization	
Disaster Recovery			
DB-017	The Database architecture must support the industry best practices protocols for disaster recovery, including employing an out of state, third party service provider.	Requires Configuration	ILG has its own backup procedures and can integrate with the state provided or third-party solutions
Load Balancing			
DB-018	The database implementation should provide load balancing (active/active) across the replicated databases.	Requires Configuration	

ID	Requirement Text	Response Code	Assumptions/Comments
Application			
AV-001	All components of the application should operate 24 hours a day, 7 days a week.	Currently Deployed	
AV-002	Downtime due solely to application failure must be less than 0.001% measured annually.	Currently Deployed	
AV-003	All components of the application should be fully functional within 30 minutes of a failure of a vendor provided DBMS.	Requires Configuration	ILG's EBAS has built-in availability and alerting mechanisms
Facilities			
AV-004	In the event that a local State Bar facility becomes unavailable (e.g., natural or man-made disaster), all local applications should be fully functional with complete and current data between State Bar sites within 24 hours of the provisioning of those facilities, allowing State Bar employees to resume full operations.	Requires Configuration	
AV-005	In the event that the data center facility supporting the Application becomes unavailable (e.g., natural or man-made disaster), all local applications should be fully functional with complete and current data between State Bar sites within 24 hours of the provisioning of those data center facilities, allowing State Bar employees to resume full operations.	Requires Configuration	
AV-006	The application should be compatible with the industry best practices for disaster recovery, which includes ability to restore systems from backups and the reapplication of update transactions from available journal files.	Currently Deployed	ILG's EBAS has built-in backup scripts for both user-generated files and daily database backup. Backup files can be synchronized to a remote server or ILG's central server.
Notification			
AV-007	The proposed solution should notify the State Bar of service outages or degradations through e-mail alerts or RSS feeds that the State Bar can integrate into its internal infrastructure monitoring tools or dashboards.	Currently Deployed	ILG's EBAS has built in notification email / sms system. RSS feed can be custom built for this purpose.
AV-008	The proposed solution should provide State Bar user and administrator viewable reporting related to the uptime and performance state of each of its included services.	Currently Deployed	
Hardware			
AV-009	All components of the application should be fully functional within 30 minutes of a server hardware replacement. (Please note that this requirement does not make the vendor responsible for server hardware performance, unless vendor is proposing a hosted solution. However, the Application's design and hardware component architecture should provide for this recovery of operations.)	Currently Deployed	Application software can be re-build and configured within 30 minutes assuming there is no disk corruption or the files are restored properly from replication servers.
AV-010	In the event of a desktop hardware failure, all components of the application should be fully functional within 15 minutes of hardware replacement, allowing State Bar employee to resume full operations. (Please note that this requirement does not make the vendor responsible for server hardware performance. However, the application design and hardware component architecture should provide for this recovery of operations.)	Currently Deployed	Since all applications are browser based, there is nothing to install on the client desktops except for a mac / windows desktop environment and a modern browser.
Maintenance			
AV-011	Backup should not interrupt Application operations.	Currently Deployed	
AV-012	The maintenance and upgrades should not interrupt the Application's operations for a hosted solution.	Currently Deployed	

ID	Requirement Text	Response Code	Assumptions/Comments
Event Based Interfaces			
IN-001	The Application must be able to produce a transaction record as a web service whenever an update is made to the Application's database.	Requires Customization	
IN-002	The Application must have facilities to push events and properties to other State Bar Applications.	Requires Customization	We need to work with the other State Bar Agencies to connect to their services.
IN-003	The Application must have facilities to receive events and properties from other State Bar Applications.	Requires Customization	We need to work with the other State Bar Agencies to receive events from their services.
IN-004	The Application must be able to hold interface transactions in queue if receiving State Bar Applications are unavailable.	Requires Customization	
Messaging Protocol			
IN-005	Data Transmission to other State Bar Applications should utilize XML technology as the standard format of data transmission, unless otherwise specified.	Requires Customization	All of ILG's web services are based on SOAP (XML Based) architecture
IN-006	Any interfaces between the Applications and other State Bar Applications should be implemented using standard messaging protocols.	Requires Customization	ILG uses SOAP based service architecture
IN-007	The proposed solution must include a recovery and synchronization process (following the failure of the proposed system) for interfaces with external Applications.	Requires Customization	
Produce/Publish			
IN-008	The Application should employ a standardized, "Publish/Subscribe", approach for Web services (i.e., a way for a Web service, or other entity, to disseminate information to a set of other Web services, without having to have prior knowledge of these other Web Services.) Examples include WS-Notification and WS-Base Notification standards 1.3.	Currently Deployed	
Publication			
IN-009	The Applications should be able to provide a generic Notify based Web Service.	Requires Customization	
IN-010	The Applications should be able to publish notifications to a Web Service.	Requires Customization	
Request / Response			
IN-011	The Application must be able to produce requests and receive responses in request/response service interaction profile.	Currently Deployed	
IN-012	The Application must be able to receive requests and produce responses in request/response service interaction profile.	Currently Deployed	
Standards			
IN-013	System interoperability should adhere to the WS-I Basic Profile 1.2 or higher standard.	Currently Deployed	
IN-014	The Application must be able to produce and to consume data files via FTP.	Requires Configuration	
Subscription			
IN-015	Provide for a run time mechanism or Subscription Manager where a requestor such as another State Bar Application can query other Applications and data structures.	Requires Customization	
IN-016	Provide for a run time mechanism or Subscription Manager where a requestor Application can subscribe to obtain notifications and related data from the other State Bar Applications and data structures.	Requires Customization	
IN-017	Provide for a run time mechanism or Subscription Manager where a requestor such as another Application can manipulate (change filters on) data obtained from the State Bar Applications and data structures.	Requires Customization	
Topic Hierarchy			
IN-018	Should provide the topic hierarchy, message schemas and other notification metadata. (ex. XML Topic Namespace documents using the WS-Topics 1.3 or higher standards.)	Requires Customization	
eSignature			
IN-019	The Application should be able to integrate with one of the market leader eSignature platforms.	Requires Customization	

ID	Requirement Text	Response Code	Assumptions/Comments
Server			
OP-001	The application should support Windows Server 2012 R2.	Currently Deployed	ILG's EBAS will work on Tomcat 7 or higher running on on Windows servers, however our preferred server environment is Linux / Ubuntu servers.
OP-002	Windows servers should be managed under VMWare ESX version 5.5 or higher.	Currently Deployed	

ID	Requirement Text	Response Code	Assumptions/Comments
Network			
ENV-001	The Application must efficiently operate using network core with Cisco switches with front-end connectivity between the two State Bar locations (Los Angeles and San Francisco) using Cisco routers.	Requires Configuration	Both Electronic Bar Application and Admission Manager are standard web applications running on port 80/http or on 443/https.
ENV-002	The Application must efficiently operate using Internet access via Cisco routers.	Currently Deployed	
ENV-003	The Application must efficiently operate using Internet access employing Checkpoint Firewall and F5 Web Application Firewall (WAF).	Currently Deployed	
IVR			
ENV-004	The Application must efficiently operate with Cisco Unified Communications Suite (Unity IVR).	Currently Deployed	
Backup			
ENV-005	The proposed solution must include a built-in data backup capability.	Currently Deployed	ILG's EBAS has scripts to backup user-generated files (incremental) and for database backups.
ENV-006	The proposed solution must include utilities enabling independent State Bar backup of proposed system data as an alternative to vendor backup.	Requires Configuration	We will work with the State Bar backup solution. ILG's EBAS has built in backup scripts to prepare the data for daily backups.
ENV-007	The proposed solution must support backup of user-specified files.	Currently Deployed	ILG's EBAS has scripts to backup user-generated files (incremental) and for database backups.
ENV-008	The proposed solution must be available for use (e.g., inquiry and update) during backup without affecting backup integrity.	Currently Deployed	
ENV-009	The proposed solution must support unattended backup including complete audit and verification of creation of a readable and complete backup.	Currently Deployed	
System Environments			
ENV-010	The proposed solution must include separate environments for configuration/development, QA testing, training, staging and production in alignment with approved deployment and production support approaches.	Currently Deployed	We generally use two separate instances; one staging and one production. We don't keep the staging instance up-to date but refresh the data as becomes necessary for testing / QA etc.
ENV-011	The proposed solution must include automated load testing tools.	Currently Deployed	
ENV-012	The solution must be compatible with McAfee version 8.8 and higher anti-virus software	Alternative Proposed	ILG currently uses ClamAV AntiVirus program
Office Automation			
ENV-013	The proposed solution must support creating and merging documents using case tracking data and Microsoft Word 2010 and higher.	Alternative Proposed	Our solution comes with native letter management for editing and merging that is html based and doesn't depend on any 3rd part commercial Word Processing product. State Bar Admission office can create letters and documents to be used for case tracking based on existing MS Word Documents.
ENV-014	The proposed solution must be able to integrate with Microsoft Office suite 2010 and higher.	Alternative Proposed	State Bar Admission Office can use MS Office documents with the proposed solution. However there is no direct integration with the MS Office Suite 2010 or higher.

ID	Requirement Text	Response Code	Assumptions/Comments
Component Architecture			
AR-001	All proposed applications should be based on n-tiered architectures.	Currently Deployed	
Component Interaction			
AR-002	The application must be able to manage printing through the Windows operating system.	Currently Deployed	
AR-003	The application must effectively operate in a network environment featuring address translation.	Currently Deployed	
AR-004	The application must effectively operate in an environment featuring load balanced web, application, and database servers.	Requires Configuration	
AR-005	The application should be compatible with the network infrastructure as described in the Environment section of this document	Currently Deployed	Please see Environment Section for details.
AR-006	The application must effectively operate in conjunction with the State Bar current anti-virus software.	Alternative Proposed	ILG uses ClamAV for Anti-Virus software for uploaded documents to the server by applicants. The uploaded documents are limited to PDF and common Image files (PNG, JPG). For desktop use, State Bar staff can continue to use their preferred Anti-Virus program.
Documentation			
AR-007	The application must provide ready access to an up-to-date and accurate description of the enterprise (statewide) application architecture from the initiation of design, forward, including: application (including 3rd party) components, component distribution, component function, licensing, and dependencies on other components.	Currently Deployed	
AR-008	The application should provide ready access to an up to date and accurate description of the application network architecture from the initiation of design, forward.	Currently Deployed	
AR-009	The application should provide ready access to an up-to-date and accurate description of the enterprise (statewide) hardware architecture from the initiation of design efforts, forward.	Currently Deployed	

ID	Requirement Text	Response Code	Assumptions/Comments
Initial Capacity			
PF-001	Initially, the application must be able to maintain data and documents for at least 500,000 cases	Currently Deployed	ILGs Electronic Bar Admission Solution is currently used by 8 other jurisdiction, including some of the large jurisdictions such as Illinois, Texas and New Jersey.
PF-002	Initially, the application must be able to maintain data and documents for at least 300,000 members	Currently Deployed	
PF-003	Initially, the application should be capable of accommodating a baseline of 300 concurrent users	Currently Deployed	
Annual / Perpetual Storage Increase			
PF-004	Annually, the application must, scale to maintain data and all documents of record for an additional 15,000 cases.	Currently Deployed	
PF-005	Annually, the application must, scale to maintain data and all documents of record for an additional 10,000 members	Currently Deployed	
Scalability			
PF-006	The application should be capable of accommodating a user base growth of up to 15%	Currently Deployed	
State Bar Wide System Performance			
PF-007	A user must be able to review and process 1 filing in 1 minute. This process includes receipt, review, recording on the docket, and notification of the filing. This benchmark is for a filing of 1 document in a case with a single respondent.	Currently Deployed	
PF-008	A user should be able to find, select, and submit to print a standardized report in less than 30 seconds.	Currently Deployed	
PF-009	A user should be able to log into the application and access its functions in 5 seconds or less.	Currently Deployed	
PF-010	The application must be able to accept 4 filings (4 pages or less) in 1 minute.	Currently Deployed	
PF-011	The applications should allow a user to initiate a case in less than 1 minute.	Currently Deployed	
PF-012	Upon inquiry, a user must be able to obtain a candidate result list of high probability matches in 2 seconds.	Currently Deployed	
PF-013	A user must be able to retrieve the document file for any case in his/her assigned case load in 3 seconds. For this benchmark, this is the time required to open the document after it is selected.	Currently Deployed	
PF-014	A user must be able to retrieve and display a selected page of an open document in 1 second. For this benchmark, this is the time required to open the page after it is selected.	Currently Deployed	
PF-015	A user must be able to retrieve the document file for any case of up to 100 pages in 15 seconds. For this benchmark, this is the time required to open the document after it is selected.	Currently Deployed	
PF-016	A user must be able to retrieve and display adjacent pages of an open document in 1 second.	Currently Deployed	
State Bar Court System System Performance			
PF-017	A clerk should be able to scan, index, and upload a 4 page court filing in 1 minute.	Currently Deployed	
PF-018	A judge supported by a single clerk must be able to conduct 12 status conferences per 1 hour session including searching for future calendar dates and scheduling future events.	Currently Deployed	

ID	Requirement Text	Response Code	Assumptions/Comments
PF-019	Parties to a case must be able to receive a paper copy or electronic copy of the court decisions and documents from a hearing, immediately after the hearing.	Currently Deployed	
PF-020	During a court session, a judge must be able to retrieve and display a selected page of an open document in 1 second. For this benchmark, this is the time required to open the page after it is selected.	Alternative Proposed	A single page document can be opened in 1 second; however, a large document cannot be opened in 1 second.
PF-021	During a court session, a judge must be able to retrieve the document file for a case (scheduled to be heard in that session) in 3 seconds. For this benchmark, this is the time required to open the document after it is selected.	Alternative Proposed	Smaller documents can be opened in 3 second; however, a large document cannot be opened in 3 second.
PF-022	During a court session, a judge or clerk must be able to identify an available date, time, and location for a new court event within 1 second. For this benchmark, the application must show available time slots for the date specified by the judge (e.g., When the user invokes a search for available time slots for a specific judge and date, the application responds with available time slots within 1 second).	Requires Customization	
PF-023	During a court session, a judge or clerk must be able to schedule a court event for a selected date, time, and location within 10 seconds. For this benchmark, the clerk or judge must be able to select an available time slot (conformant to time standards by case type), schedule an event, schedule the case parties who must attend this event, and send notifications to these parties.	Requires Customization	

ID	Requirement Text	Response Code	Assumptions/Comments
Browser-based			
CL-001	Application functionality must be provided by a browser-based user interface.	Currently Deployed	
CL-002	Browser-enabled interfaces must support Internet Explorer 11 and higher.	Currently Deployed	
CL-003	Public facing portals must support all commonly used browsers, such as Google Chrome, Mozilla Firefox, etc.	Currently Deployed	
Screen Based Redaction			
CL-004	The proposed solution must support redaction of the data that can be presented on a screen (including specified fields or entries) to protect confidential information, such as confidential matters related to the respondent.	Currently Deployed	
Accessibility			
CL-005	The proposed solution should comply with current webs accessibility standards and guidelines. <i>See ATTACHMENT C for itemized requirements.</i>	Currently Deployed	
CL-006	All users, regardless of disability, should be able to access and use the application. <i>See ATTACHMENT C for itemized requirements.</i>	Currently Deployed	

ID	Requirement Text	Response Code	Assumptions/Comments
Authentication (Application Users)			
SEC-001	The applications must provide a single sign on authentication against the State Bar's Active Directory (AD). If this is not possible the systems user directory must be able to synchronize objects with the central directory and the application providers must work with State Bar IT staff.	Alternative Proposed	Our platform is not Microsoft based (.NET) and hasn't been used with Active Directory. Admission Office staff generally creates their own user profiles on both Admission Manager and E-Bar applications on our platform. Even though we can provide single-sing-on like capability within our applications. We haven't implemented the full SSO stack in our software.
SEC-002	Application must have single sign on capabilities	Alternative Proposed	ILG's EBAS does provide Single Sign-On like capabilities within it's platform (E-Bar and Admision Manager). Anything beyond ILG's existing applications will require further integration with the State Bar's Active Directory. We do not guarantee that single sign on capability will be achieved with the State Bar's Active Directory, however if it's technically possible we'll make every effort to provide this capability to the State Bar Admission Office.
Authentication (Portal Users)			
SEC-003	The systems user directory must be able to synchronize objects with the existing central directory and should provide a single sign on to other portal features.	Requires Configuration	
SEC-004	Authentication should be available even if the system host is unavailable.	Requires Configuration	
SEC-005	The proposed solution must be capable of using SAML assertions for inter-tier authentication.	Requires Configuration	
Authorization			
SEC-006	The Application should support role based access.	Currently Deployed	