### **Electronic Forms Automation Report**

Submitted by the Electronic Forms Automation Work Group

The Electronic Forms Automation Workgroup was formed at the request of the Lotus Notes Collaboration Workgroup with an endorsement from the State Government Council, to gather information and report on the availability of software to create electronic forms in order to accomplish the Governor's directives toward e-government in Nebraska. The RFI (Request for Information) process recently completed by the EFA workgroup to fulfill this mission found a diversity of products available to facilitate Nebraska State agencies in accomplishing this task.

The EFA work group recommends that State of Nebraska specify a policy direction for all state agencies to use in working toward automation of electronic forms.

The commitment shown by the number of agencies involved in this effort clearly demonstrates agency support for EFA. Major issues and challenges remain. The EFA Workgroup identified several of these issues as follows.

- EFA efforts are proceeding and will continue to proceed within the State up to Level III functionality (see definitions below) either independently or collaboratively.
- Key questions of scope and coordination must be answered before collaborative efforts can proceed.
- Without a policy direction for state agencies the following may occur: duplication of costs for hardware, software, coding, support, and processing, missed opportunities for volume discounts, and lack of consistency in look and feel of the final product.
- Additional data gathering is needed from state agencies in order to determine policy direction and resource commitment.

The EFA work group feels that the next course of action should be the establishment of a state policy direction to deal with the issues and challenges identified above.

### **Issues and Findings**

The following issues were addressed by the EFA work group in constructing a Request for Information (RFI).

### What are the EFA needs of State of Nebraska agencies, divisions, boards and commissions?

A series of meetings were held for the purpose of defining the requirements of the fifteen participating agencies, divisions, boards and/or commissions for forms automation. Participating members included LES, University of Nebraska-Lincoln, Nebraska Online, and state agencies of Administrative Services, Education, Environmental Quality, Insurance, Labor, Natural Resources, Roads, Health and Human Services, Library Commission, Lincoln Regional Center, Secretary of State, and Workers Compensation Court. In the process of creating the RFI, three levels of forms automation were defined by the Work Group. They are as follows.

Level I - electronic access to forms, which can be printed and delivered.

Level II - electronic access to forms, which can be electronically completed, printed, and delivered.

**Level III -** electronic exchange (computer-to-computer) of information/data, without the elements of human intervention. The objective is to directly transfer data through electronic means, efficiently and effectively.

The Request for Information (Attachment A) was drafted based on the information obtained from those meetings as well as guidelines supplied by State Purchasing. The EFA work group issued the RFI on October 12, 2001. Ninety-four vendors were included in the mailing. Twenty-five responses were received from vendors detailing product specifications. Of those, twenty-two responded specifically to the RFI.

# Determine costs involved for the state to adopt a solution for either enterprise use or per state agency, board or commission use.

The responses received indicated that the cost of doing EFA was proportional to the level of EFA sophistication and to the degree of state usage. Approximated costs ranged from less than \$100 for a Level I type solution per single use, up to \$2.5 million for a statewide enterprise solution that would deliver Level III. Many configuration options were presented ranging from off-the-shelf products, a mix of custom and off-the-shelf products, totally host offerings, to total custom solutions. (Attachment B)

### Attachments

A - Request for Information B - Table of Responses Created on 12/11/01 9:50 AM

State of Nebraska Dept. of Administrative Service Information Management Service P.O. Box 95045 Lincoln, Nebraska 68509-5045

information management services

# Electronic Forms Automation Request for Information

Evaluation of Electronic Forms Automation Applications October 12, 2001

# $Evaluation\ of\ Electronic\ Forms\ Automation\ Applications$

# TABLE OF CONTENTS

1.0 INTRODUCTION	3
1.1 INVITATION	3
1.2 BACKGROUND AND MISSION	
1.3 Inquiries	
1.4 SUBMISSIOM OF RFI RESPONSES	
1.5 RESPONSE INFORMATION	4
2.0 FORMS CREATION	5
2.1 Training	5
2.2 FORMS CONSTRUCTION	5
2.3 Multilingual	
2.4 Data Formats/Existing E-Forms	
2.5 EDITING CAPABILITIES	
2.6 Phased Implementation	
2.7 HANDICAP ACCESSIBILITY  2.8 MULTIPLE PLATFORMS	
2.9 FORMS MANAGEMENT	
2.10 SAMPLE WORKING SCENARIOS	
3.0 PRESENTATION	
3.1 MULTILINGUAL	
3.2 ATTACHMENTS	
3.3 GRAPHICS, DIAGRAMS AND TABLES	
3.5 CLIENT SIDE SUPPORT	
3.6 Wireless Embedded Technology	
4.0 SECURITY	
4.1 Security Strategies	
4.2 FREFILL  4.3 END USER AUTHENTICATION	
4.4 HIPPA	
4.5 Encryption	
4.6 DIGITAL/ELECTRONIC SIGNATURES	7
5.0 BACK END/DATA SHARING	8
5.1 SERVER AUDIT	
5.2 DATABASE INTERFACE/DATA SHARING	
5.4 Received Notification.	
5.5 PROCESSING STATUS.	
5.6 RECORDS MANAGEMENT	
5.0 GENERAL	
6.1 SOFTWARE/HARDWARE LIMITS/CAPACITIES	Q
6.1 SOFTWARE/HARDWARE LIMITS/CAPACITIES	
7.0 LICENSING CONFIGURATIONS AND APPROXIMATE COSTS	9
7.1 LICENSING CONFIGURATIONS	
7.2 SAMPLE SCENARIOS	9
1 / ANTHER COMPONENTS	٠,

### 1.0 Introduction

### 1.1 Invitation

The purpose of this Request for Information (RFI) is to review the functionality of available products to assist a broad range of State agencies in fulfilling the Governor's requirements for Electronic Forms Automation (EFA). Any information supplied in response to this RFI may be used to recommend the purchase of an EFA product or may be used in the development of a Request for Proposal (RFP).

### 1.2 Background and Mission

The Governor of the State of Nebraska has encouraged all state agencies to electronically automate the thousands of paper forms that are critical to the State's business. In compliance with the Governor's Initiative, the State Government Council awarded grant money for a collaborative research project designed to explore three questions.

What are the EFA needs of State of Nebraska agencies, divisions, boards and commissions?

What EFA products exist to meet those needs?

How much will an appropriate EFA solution cost State of Nebraska agencies, divisions, boards and commissions?

Representatives from sixteen state agencies, divisions, boards and/or commissions including the departments of Administration, Education, Environmental Quality, Insurance, Labor, Natural Resources, Roads, Health and Human Services, the Library Commission, the Lincoln Regional Center, Nebraska Online, the Secretary of State, the University of Nebraska-Lincoln, and the Workers Compensation Court have actively participated in a four month effort to explore a common solution for electronic forms automation. A "common" solution will allow entities to benefit from a single, efficient process to automate their forms.

Responses to the RFI will be used to draft a report for the State Government Council addressing the above questions. At that time, further decisions will be made about the future direction of EFA in the State of Nebraska.

For the purpose of this effort, forms automation is broken down into three levels.

Level I is electronic access to forms, which can be printed and delivered.

**Level II** is electronic access to forms, which can be electronically completed, printed, and delivered.

**Level III** refers to the electronic exchange (computer-to-computer) of information/data, without the elements of human intervention. The objective is to directly transfer data through electronic means, efficiently and effectively.

This effort is designed to assist the State in determining the extent to which a given product or suite of products meets the EFA needs of the State of Nebraska. All responders are requested to provide information that encompasses a product or suite of products that will best answer the questions framed in this RFI. The State is primarily seeking a forms creation product to create a front end for data gathering. A backend portion to this solution, that is a system for

### Evaluation of Electronic Forms Automation Applications

storage, manipulation and processing of data, is not expected but if one is available, please provide relevant details in response to questions pertaining to a backend.

### 1.3 Inquiries

All inquiries related to responses to this RFI should be directed to the following:

Trish Souliere Information Management Services State of Nebraska Phone Number: 402-471-4866

Fax: 402-471-4864

Email: tsoulier@notes.state.ne.us

In order to maintain a single point of contact, please route all inquiries to Trish Souliere.

### 1.4 Submission of RFI Responses

There are two ways to complete this RFI, manually and electronically.

The State of Nebraska will accept submissions in response to this RFI no later than November 14, 2001. All responders are requested to answer all questions on the RFI and to provide an electronic copy of the response.

Manual copy of responses should be sent to:

### **Contact:**

Trish Souliere Information Management Services P.O. Box 95045 Lincoln, Nebraska 68509-5045

Electronic copy of response should be sent to:

tsoulier@notes.state.ne.us

Due to time constraints associated with reviewing responses to this RFI, please note it may not be possible to include information contained in responses received after the date specified in the drafting of a possible RFP.

### 1.5 Response Information

Please note that this is a fact-finding effort. The State is interested in obtaining as much information about each product and its capabilities and features as the responder can provide however, **no live demonstrations** will be permitted.

All responders may append existing literature on the company or products **to support but not replace the answer.** All questions must be answered.

### 2.0 Forms Creation

### 2.1 Training

- a. What prerequisite knowledge or training must a designer have to utilize your software?
- b. What is essential training?
- c. What is recommended training?
- d. What is optional training?
- e. What onsite courses are offered?
- f. What onsite designer training is offered?

### 2.2 Forms Construction

- a. How does your product handle graphics, fonts, logos, etc.? (Note: The solution being sought is not a desktop publishing product.)
- b. Describe the tools used to create a form with your software package. (e.g. drag and drop, wizard, form description language, etc.)

### 2.3 Multilingual

Please list the foreign language character sets your product supports? (i.e. Unicode)

### 2.4 Data Formats/Existing E-Forms

- a. What formats does your product allow to be imported? (i.e. PDF, Post-Script, etc.) Please explain how.
- b. To what extent does your product allow for images of existing paper forms to be imported?

### 2.5 Editing Capabilities

- a. Please discuss the validation/editing range your product supports, including alpha/numeric, relational crosschecks, required/optional fields, validation of date ranges, real time edit ability, field formatting, non-editable or protected fields etc.
- b. What type of form fields can your product provide? (i.e. drop downs, text areas, check boxes, radio buttons, etc.)
- c. Does your product support field calculations? Explain
- d. Does your product provide any special server side scripting capability? (ASP, CGI, JSP, etc.) Explain

### 2.6 Phased Implementation

a. Describe your product's ability to create forms at each level of EFA as defined in section 1.2. Please elaborate on any strengths, weakness or gaps.

Level I

Level II

Level III

 Explain the process by which a designer would use your product to migrate an existing form from Level 1 to Level III.

### 2.7 Handicap Accessibility

How does your product address the American Disabilities Act and the Federal Section 508 handicap accessibility standards? (For information about Section 508, please see http://www.section508.gov/docs/508law.html)

### 2.8 Multiple Platforms

- a. Do you offer an Applications Programming Interface set that can be used for customized programming? If so, briefly describe your API.
- b. List platforms on which the forms creation software can run.

### 2.9 Forms Management

- a. Does your product include forms management capabilities? Describe.
- b. If not, does a third party application fulfill that function? Describe.
- c. What types of metadata does your product include with a created form to facilitate forms management?
- d. Please detail designer defined fields for metadata.

### 2.10 Sample Working Scenarios - Assumptions: all will be available for a website

- a. A form exists as a pdf for printing. Outline steps necessary to have this form now capture client information and print the form with the captured information. For this example, client information to be captured includes name, address, and phone.
- b. Starting from a blank form, outline steps to create a form to capture client information, print and submit data for retention to an SQL database. For this example, client information to be captured includes name, address, phone, donation amount, and display amount allocated as overhead. Overhead is 7% of donation amount. Overhead amount is not retained in SQL database.

### 3.0 Presentation

### 3.1 Multilingual

Please list which foreign language character sets your product can accept and display.

### 3.2 Attachments

Does your product support digital attachments? Please explain how.

### 3.3 Graphics, Diagrams, Tables

- a. Does your product support diagramming, drag and drop, and freeform drawing? Please describe.
- b. Is there a text only feature to allow low-end users access?

### 3.4 Pre-fill

Please discuss any pre-fill capability your product possesses. (i.e. address information associated with a recurring user etc.) Include special features such as ability to retrieve information from a database or directory, customized view for multiple users.

### 3.5 Client Side Support

- a. List the browsers your product supports, including version numbers.
- b. What versions of HTTP and HTML does your product support?
- c. What versions of Java does your product support?
- d. List platforms on which the forms can be used.

### 3.6 Wireless/Embedded Technology

Can forms created with your product be accessed/filled out using wireless devices such as Palm Pilots, handheld PC's (i.e. Windows CE), web-enabled cellular phones, etc.?

### 4.0 Security

### **4.1 Security Strategies**

Please provide security measures and strategies related to this RFI on each level of EFA.

### 4.2 Pre-fill

Please address any security features related to pre-filled information.

### 4.3 Authentication of End User

- a. How does your product interface with a backend system to facilitate user authentication?
- What level of security can your product provide? (i.e. PIN application, password security, etc.)

### 4.4 Health Insurance Portability Accountability Act (HIPAA)

In what ways does your product satisfy (HIPAA) privacy requirements? (for further information about HIPAA, please see <a href="http://www.hcfa.gov/hipaa/hipaahm.htm">http://www.hcfa.gov/hipaa/hipaahm.htm</a>)

### 4.5 Encryption Capability

How does your product support secure communication between client and server?

### 4.6 Digital/Electronic Signatures

How does your product support digital and electronic signatures?

### 5.0 Back End/Data Sharing

### **5.1 Server Audit**

What data logging features are available with your product? (i.e. tracking number associated with a time/date stamp and user ID)

### 5.2 Database Interface/Data Sharing

- a. Please discuss product ability to share data with other systems.
- Detail how your product supports standard, non-proprietary data formats (i.e. XML) and data transport protocols (i.e. HTTP).
- c. Please address product ability to link with and utilize data from Geographic Information Systems.
- d. Please detail how data is delivered from the client to the server when a form is submitted.
- e. Is the layout of the form stored in a non-proprietary format or can it be exported? (i.e. XML)

### **5.3 Payment Options**

How does your product facilitate online monetary transactions?

### **5.4 Received Notification**

How does your system notify users when a submitted form has been successfully transmitted?

### **5.5 Processing Status**

Describe how your product provides processing status information to the user.

### 5.6 Records Management

Explain how your product integrates with records management systems.

### 6.0 General

### **6.1 Software/Hardware Limits/Capacities**

- a. How many simultaneous connections can it handle?
- b. Describe any capacity issues with forms creation and backend/data sharing (e.g. number of fields, field sizes, number of documents, number of records, etc.)

### **6.2 Open Standards Based Tools**

- a. How does your product support/utilize open standards? (e.g. XML)
- b. Describe how your product allows for forms built today to be extracted and utilized by upcoming technology.

### 7.0 Licensing Configurations and Approximate Costs

### 7.1 Licensing Configurations

- a. Please explain your licensing configurations. (i.e. site, CPU, designer, etc.)
- b. If you offer site licenses, please provide your definition of a site as it relates to State of Nebraska agencies, divisions, boards and commissions.

### 7.2 Sample Scenarios

Given the following, approximate the cost of and licenses needed for acquiring your solution. A firm bid is not desired. This is for informational purposes only.

- a. Single agency, single server, single CPU, 50 users, 1 designer
- b. Three agencies, 4 servers, 10 CPU's, 600 users, 20 designers
- c. Enterprise (State wide use, unlimited servers, users, designers)

### 7.3 Other Components

Please provide cost estimates for the following. This is for informational purposes only. The State is not soliciting bids at this time.

- a. Technical Support
- b. Maintenance
- c. Product Training
- d. Warranty
- e. Variables that may impact licensing.

### Results of Electronic Forms Automation Request for Information

An advisory workgroup was formed at the request of the Lotus Notes Collaboration Workgroup to gather information and report on the availability of software to create electronic forms for use in automation. A Request for Information was drafted based on guidelines supplied by State Purchasing and issued by the EFA work group on October 12. 94 vendors were included in the mailing and received the RFI outlining desired features and functions and inquiring about licensing and approximate costs. The following are results of the Electronic Forms Automation (EFA) information gathering effort.

Twenty-five vendors responded with information and twenty-two completed the RFI questions. Following are tables listing responding vendors. The tables list, comments concerning RFI, licensing info, and approximate costs based on RFI scenarios.

(Note: The costing questions in the RFI were limited to approximate cost because the Request for Proposal (RFP) is the tool for obtaining finite costs. The costing questions were in the form of two scenarios, one being for a single server, fifty users, and one designer, second being for three servers, four CPU's, six hundred users, and twenty designers.)

## No formal responses:

Vendors	Comments	License info	Approx. Costs
Millennium	No response to RFI		
Data	questionnaire/Sent marking info		
Access Justice Response	No response to RFI questionnaire/Sent marketing info		
EZ-Forms	No response to RFI questionnaire/sent marking info		

### **Custom solutions:**

Vendors	Comments	License info	Approx. Costs
Niobara	Partially met RFI,	Server/+1	\$95,000/add \$20,000
	Customized built	Designer	\$1000
	solution, some	Client	\$1000
	commercial available		
	products/no		
	installation/setup/tuning		
	included		
PlaNet	Partially met RFI,	License is based on	Starts \$80,000-300,000,
	Custom solution, has	contributors	upgrades to enterprise
	management of forms		\$300,000-600,000
Policy	Partially met to RFI,	N/A	N/A
Studies	Custom built solution		
Modis	Partially met to RFI,	N/A	N/A
	Custom built solution		

# Partially met:

Vendors	Comments	License info	Approx. Costs
Silicon Commerce	Partially met RFI Custom builds/hosts forms	No licensing	Cost based on # of forms and transactions \$.25 per form min-max \$900- 5000 up to 40,000 forms then \$.12
Webase(Exp erforms)	Partially met RFI, No forms extraction, once converted, proprietary web language	Server Designer Client	\$4,995 (relies on Adobe) None
Lytrod	Partially met RFI, No field calculation/ Not Web Based	Undetermined	Undetermined
EZGov	Partially met RFI, no form import/export	Licensing has many options based on scenarios	Starts -\$302,863 to enterprise \$2,476,900
Advanced Maintenance Systems	Partially met RFI, No form import, no PKI support	Licensing is for development environment, and run time based on # users	Single scenario from RFI \$200,000
Esmart	Partially met RFI, missing PKI support	Server Designer Client	\$30,000 \$500 None

### Met:

Vendors	Comments	License info	Approx. Costs
Formatta	Met RFI, license price quoted not valid in ASP model (one agency couldn't host for another) but pricing for this option is available	Server/+2 Designer/10+ Client	\$29,000/20,000 \$995/10,000 None
Net Delivery	Met RFI, license for client/designer	Server (1 designer with) Designer Client/50+	\$50,000 \$40/30 \$40/30
ITM	Met RFI, data store concern possibly(Lotus based)	Server CPU/CPU+ Designer Client	\$21,500/\$29,500 (base on Adobe) None
Accelio	Met RFI, has license for both designer and client	Server Designer Client	General pricing from scenarios \$10,000- 35,000 or \$150,000- 300,000
IBM	Met RFI, has user license, needs several partner product to met RFI/not all price estimated	Server Designer Client	\$12,100 \$400 \$40
AI	Met RFI, license for designer	Server license Designer Client	\$5,000 per server \$450 None
Adobe	Met RFI, no sever component	Server Designer Client	None \$44 None
TopImage	Met RFI, license is concerned with number of transactions	Undetermined	Estimated cost 200,000+ for multi servers, 80,000 for single
Datalect	Met RFI, has management of forms included	Licensing is concurrent users, price per scenarios	Single - \$75,000 Multi - \$325,000 Site - \$1,200,000
Shana	Met RFI	Server/+4 Designer/20+ Client/600+	\$24,950 \$1,495/1,248 \$195/100
PureEdge	Met RFI	License per page base on distributing a viewer	Undetermined
Cardiff	Met RFI, require login to use forms for approval routing	Server Designer Client-std/apprx	\$14,000 \$1,000 None/\$125