



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header 2

List View

**General Information** [Contact](#) [Default Values](#) [Discount](#) [Document Information](#) [Clarification Request](#)

Procurement Folder: 1698045

Procurement Type: Central Master Agreement

Vendor ID: VS0000010082

Legal Name: MSys Inc

Alias/DBA:

Total Bid: \$1,384,448.00

Response Date: 09/10/2025

Response Time: 12:04

Responded By User ID: ankurmsys

First Name: ankur

Last Name: msys

Email: ankur@msysinc.com

Phone: 5107974965

SO Doc Code: CRFQ

SO Dept: 0802

SO Doc ID: DMV2600000001

Published Date: 9/10/25

Close Date: 9/18/25

Close Time: 13:30

Status: Closed

Solicitation Description: Mainframe Application Programmer  
Technical Staffing Services

Total of Header Attachments: 2

Total of All Attachments: 2



Department of Administration  
Purchasing Division  
2019 Washington Street East  
Post Office Box 50130  
Charleston, WV 25305-0130

State of West Virginia  
Solicitation Response

**Proc Folder:** 1698045  
**Solicitation Description:** Mainframe Application Programmer Technical Staffing Services  
**Proc Type:** Central Master Agreement

Solicitation Closes	Solicitation Response	Version
2025-09-18 13:30	SR 0802 ESR09102500000001803	1

**VENDOR**  
VS0000010082  
MSys Inc

**Solicitation Number:** CRFQ 0802 DMV2600000001  
**Total Bid:** 1384448  
**Response Date:** 2025-09-10  
**Response Time:** 12:04:29  
**Comments:**

**FOR INFORMATION CONTACT THE BUYER**  
John W Estep  
304-558-2566  
john.w.estep@wv.gov

<b>Vendor</b>		
<b>Signature X</b>	<b>FEIN#</b>	<b>DATE</b>

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Mainframe Application Programmer Technical Staffing Services				1384448.00

Comm Code	Manufacturer	Specification	Model #
81111600			

**Commodity Line Comments:**

**Extended Description:**

Mainframe Application Programmer Technical Staffing Services. This will be an open-end services contract that will provide the services of mainframe application programmer analysts on an hourly rate basis to provide technical expertise to meet agency needs. These services will be utilized to develop modifications and enhancements to the mainframe computer systems currently utilized by the DMV.

## EXHIBIT A - PRICING PAGE

MAINFRAME APPLICATION PROGRAMMER ANALYSTS				
LOCATION - 5707 MacCorkle Avenue, S.E., Charleston, WV 25304				
Item Number	Quantity	Description	Hourly Rate	Annual Total
Year One - Regular Time	2,080 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, regular time hours- - Year One	\$ 98.00	\$ 203,840.00
Year One - Overtime	832 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, overtime hours - - Year One	\$ 147.00	\$ 122,304.00
Optional Year Two Regular Time	2,080 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, regular time hours- - Optional Year Two	\$ 102.00	\$ 212,160.00
Optional Year Two Overtime	832 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, overtime hours - - Optional Year Two	\$ 153.00	\$ 127,296.00
Optional Year Three Regular Time	2,080 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, regular time hours - - Optional Year Three	\$ 106.00	\$ 220,480.00
Optional Year Three Overtime	832 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, overtime hours - - Optional Year Three	\$ 159.00	\$ 132,288.00
Optional Year Four Regular Time	2,080 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, regular time hours - - Optional Year Four	\$ 110.00	\$ 228,800.00
Optional Year Four Overtime	832 hours	Application Programmer Analysts Contract Cost for 1 year based on hourly rate, overtime hours - - Optional Year Four	\$ 165.00	\$ 137,280.00

**\*\* THIS AMOUNT IS FOR EVALUATION PURPOSES ONLY\*\***



## **Request for Proposal**

**Mainframe Application Programmer Analysts, Technical Staffing Services**

**Solicitation No: CRFQ 0802 DMV2600000001**

**Submitted to:**

**Attention: John W Estep**

**Department of Administration, Purchasing Division**

**2019 Washington Street East**

**Post Office Box 50130, Charleston, WV 25305-0130**

**Phone: 304-558-2566**

**Email: [john.w.estep@wv.gov](mailto:john.w.estep@wv.gov)**

**Due Date and Time: Sep 11, 2025 at 13:30**



**Submitted By**  
**Rajamani Thiyagarajan, President**  
**MSys Inc.**  
**1025 Connecticut Ave, NW Suite 1000**  
**Washington, DC 20036**  
**Phone: 202-629-0353 x701**  
**Fax: 510-280-7352**  
**[rfpresponse@msysinc.com](mailto:rfpresponse@msysinc.com)**  
**[www.msysinc.com](http://www.msysinc.com)**

## Cover Letter

Sep 11, 2025

**Attention:** John W Estep  
West Virginia Office of Technology (WVOT)

In reference to **Solicitation# CRFQ 0802 DMV2600000001 for Mainframe Application Programmer Analysts, Technical Staffing Services**, MSys, Inc. (hereafter referred as "MSys") is hereby submitting its technical quote, demonstrating its capability of meeting requirements of this solicitation.

MSys' strategic IT services and solutions focus on enhancing business performance of its clients by streamlining processes, reducing organizational risk and leveraging the global sourcing/ outsourcing organizational model. We have worked with clients in a wide range of industries to help them leverage the strengths of IT to optimize their business performance and produce value driven results.

MSys's quality consulting services are designed to help organizations achieve operational excellence through process solutions. We provide consulting services across three core areas:

- IT governance
- Software Engineering Infrastructure
- Operations

### Key Contracts/ Clients

GSA Schedule 70 (132-51)	State of Kentucky
Department of Defense	State of Maine
Department of Education	State of Maryland
Department of Labor	State of Michigan
California Multiple Award Schedules	State of Arkansas
City of Phoenix, AZ	State of Oklahoma
County of Durham, NC	State of Oregon
Dallas Independent School District, TX	State of Pennsylvania
State of Arizona	State of South Carolina
State of Colorado	State of Minnesota
State of Delaware	State of North Carolina
State of Iowa	State of Utah
State of Virginia	State of Vermont
Sacramento Municipal Utility District, CA	Department of Labor, Licensing & Regulation, MD
Department of Justice	Administrative Office of the Courts, NC

With this submission, MSys acknowledges to receipt of Addendums and acceptance to terms and conditions detailed in this solicitation by West Virginia Office of Technology (WVOT).

Have any queries, feel free to reach me!

Sincerely



Rajamani Thiyagarajan, President  
MSys, Inc.  
Phone: (202) 629-0353 x701  
Email: [rfpresponse@msysinc.com](mailto:rfpresponse@msysinc.com)

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## Candidate Resume

### Bhavish Kumar

#### Professional Summary

- Seasoned Mainframe Developer/ **Application Programmer** with 11+ years of expertise in COBOL, JCL, DB2, Assembler, REXX, and IBM z/OS environments.
- Design and maintain batch and online processing systems for high-volume enterprise applications. Hands-on experience in debugging, job control automation, database tuning, CICS transaction programs, and mainframe utilities like File-AID, SPUFI, SDSF, Abend-AID, and CA7.
- Build efficient, scalable legacy modernization solutions across finance, healthcare, telecom, public sector, and media domains.
- Design and code COBOL programs to automate business logic for financial reporting, improving processing accuracy across z/OS environments.
- Develop DB2 queries, cursors, and stored procedures to retrieve and update large datasets used in high-frequency transactional systems.
- Write optimized JCL streams with conditional steps and restart logic to ensure batch jobs run efficiently and recover gracefully from abends.
- Create assembler subroutines for memory-intensive logic, improving performance in batch utilities and streamlining CPU usage.
- Build REXX scripts to simplify dataset validation, JCL log extraction, and automation of common job execution steps.

#### Technical Skills

- **Programming Languages:** COBOL, Assembler, REXX, SQL, Easytrieve
- **Mainframe Systems:** IBM z/OS, JES2, TSO/ISPF, SDSF
- **Job Control:** JCL, PROC, CA7, Control-M, Tivoli
- **Database Technologies:** DB2 v10–v12, QMF, SPUFI, BMC Tools
- **Debugging Tools:** Abend-AID, IBM Debug Tool, XPEDITER
- **Performance Tuning:** DB2 RUNSTATS, REORG, EXPLAIN, Buffer Pool Management

#### Education

- Bachelors in Computer Science, CMR University, Jul 2010 - May 2014

#### Professional Experience

##### NARS, Altamonte Springs, FL

Sep 2023 – Present

##### Senior Mainframe Application Programmer

- Developed COBOL programs for claims intake and validation using z/OS to ensure robust execution of core policy logic within batch and online environments. Designed and maintained JCL job streams for nightly processing to support seamless business continuity and efficient cycle-time execution.
- Created and optimized DB2 SQL queries within stored procedures to minimize I/O overhead and enhance transactional response times. Developed and enhanced COBOL-DB2 batch and CICS online programs for account setup, transaction posting, and repayment schedule calculations, similar to Systematics ALS lending workflows.
- Implemented assembler exit routines in CICS regions to handle abnormal ends, improving system resilience and reducing MIPS consumption. Maintain and customize REXX utilities for debugging COBOL applications, enabling root-cause analysis of logic errors in production.
- Created and updated IODF entries for new device definitions, LPAR configurations, and channel paths in System z environments. Applied z/OS utilities like IDCAMS, SORT, and IEBGENER for dataset manipulation and archival processes to streamline audit compliance.
- Developed Assembler modules for high-throughput, low-latency transaction routing similar to credit card authorization systems. Enhanced COBOL-DB2 modules for identity and eligibility verification

workflows, similar to Commercial Driver Licensing (CDL) validations, ensuring compliance with federal/state regulatory requirements.

- Developed and supported applications for wire transfer processing, including SWIFT message generation and parsing. Managed mainframe application source code using SCM Changeman, performing code check-in/check-out, branching, and merging for development and production streams.
- Collaborated with DB2 system programmers and DBAs on DB2 subsystem performance optimization, buffer pool tuning, and storage group management.
- Hands-on experience configuring and supporting IBM z15/z16 environments, including HMC operations and LPAR management. Worked with NETRON Application Analysis tools to document legacy COBOL applications for modernization projects.
- Integrated external data sources via REST APIs and MQ messaging, providing real-time state-to-state data exchange functionality comparable to AAMVA CDLIS and PDPS transactions. Designed, developed, and maintained enterprise applications using CA IDEAL, integrating with COBOL/ CICS for high-volume transaction processing. CD31 extractions (job scheduled every week, collaborating with AAMVA)
- Supported migration and integration efforts involving Natural/ADABAS applications, collaborating with system programmers during modernization projects. Integrated COBOL modules with third-party data feeds for credit validation, payment posting, and account status updates.
- Hands-on experience with Micro Focus Visual COBOL in Visual Studio for developing and debugging COBOL applications. Collaborated on mainframe modernization projects by rewriting COBOL modules into Java services to enable platform independence.
- Enhanced COBOL-DB2 stored procedures and ensured proper indexing for efficient medical claim adjudication processes. Applied RC/Update utilities for DB2 object migrations, schema updates, and dataset validations across regulated workloads.
- Hands-on experience with ACI Money Transfer System (MTS) for processing domestic and international wire transfers. Developed and tested API integrations (REST/SOAP) for COBOL-based applications using IBM API Connect. Worked with z/OS Unix System Services (OMVS) and AIX environments for script execution, dataset management, and integration with distributed platforms.
- Gained exposure to PostgreSQL concepts and query optimization while supporting cross-platform reporting solutions. Collaborated with DBAs to design PostgreSQL tables mirroring mainframe DB2 schemas for data replication.
- Built dynamic JCL templates with symbolic parameters to simplify scheduling under CA7/ESP job control systems. Utilized z/OS SDSF and OMEGAMON to monitor system logs, job outputs, and performance metrics for real-time production support.
- Exposure to SANNAV or similar storage management tools for end-to-end visibility of SAN environments. Maintained IODF datasets, added/modified device numbers, control units, and channel paths for z/OS subsystems.
- Developed Java programs for middleware integration between CICS transactions and distributed applications. Assisted in defining data pipeline architecture to streamline ETL from mainframe DB2/VSAM to external systems.
- Using assembler or COBOL specifically for problem isolation in CICS – you have assembler/CICS experience, but not framed in problem isolation context. Developed Java/J2EE services to integrate COBOL-based payment modules with distributed platforms.
- Designed and maintained COBOL/Assembler programs for credit card transaction validation, routing, and host authorization. Collaborated with cloud engineering teams to integrate mainframe data processing with AWS-hosted services.

- Coordinated with cloud engineers to configure EC2 instances for hosting application components previously on-premise. Supported MTS job scheduling, message processing, and reconciliation logic to ensure secure and timely interbank transfers.
- Applied DevOps practices for automated builds, code migration, and integration testing in mainframe development. Monitored and troubleshooted Kofax batch processing jobs, ensuring SLA compliance and partnered with business teams to refine Kofax workflows for higher accuracy in data capture.
- Worked with z/OS Unix System Services (OMVS) for dataset management, scripting, and integration with distributed platforms. Participated in modernization of insurance claim processing and policy servicing applications.
- Managed incident tracking and resolution using enterprise ticketing systems similar to CAPRS, documenting problem details, resolution steps, and follow-up actions. Migrated mainframe archival datasets into AWS S3 for long-term storage and reporting.
- Developed parameterized REXX execs to extract allocation data for datasets nearing space limits, preventing abends. Migrated COBOL workloads to Java using Heirloom, ensuring compatibility with payment processing rules.
- Collaborated with cross-platform database teams to develop and review PL/SQL scripts for Oracle-based downstream systems.
- Worked in SAFe Agile environment, participating in PI planning, sprint reviews, and daily standups. Participated in testing and debugging Java-based front-end applications that interfaced with COBOL back-end services.
- Delivered incident triage support by analyzing SYSUDUMP and system traces using IPCS on z/OS 2.4 platform. Involved in replat forming COBOL applications using HEIRLOOM to Java-based environments.
- Integrated mainframe applications with distributed systems using SOAP and RESTful APIs, ensuring secure data exchange.
- Managed RMF and SMF data to analyze workload performance, identify bottlenecks, and support Workload Management (WLM) tuning. Automated batch job outputs to AWS S3 buckets for downstream analytics.
- Worked with z/OS networking components including VTAM session setup and TCP/IP configurations for CICS and FTP communications. Created IMS and DB2 hybrid interfaces within COBOL to integrate structured/unstructured data for special claims processing.
- Automated job scheduling transitions from JCL to Control-M using REXX and script wrappers to align with enterprise scheduling. Managed DB2 object migrations using DDL scripts via RC/Update and ensured alignment across DEV, TEST, and PROD.

**Environments:** COBOL (Enterprise v6.3), JCL (z/OS 2.4), DB2 v12, REXX, Assembler (HLASM), CICS, VSAM, CA7, SmartISPF, TSO/ISPF, XPEDITER, Control-M, SDSF, OMEGAMON, IPCS.

**CVS, Irving, TX**

**Jun 2021 – Sep 2023**

**Senior Mainframe Application Programmer**

- Authored JCL streams to orchestrate batch claims processing, allowing reliable execution of upstream/downstream billing and eligibility checks. Maintained COBOL modules handling pharmacy transactions to validate member data and medication rules across DB2 subsystems.
- Developed automated job restart logic in JCL to enhance resilience during abends and reduce turnaround time for nightly cycles. Managed dataset migrations and schema changes using BMC tools and RC/Update, ensuring consistency across dev, test, and production.
- Partnered with document automation teams using Kofax for scanning, OCR, and workflow integration into mainframe applications. Used Git for version control in cross-platform development projects, managing code merges and maintaining repository integrity.

- Applied NETRON utilities to identify redundant/unused COBOL modules for optimization and supported project planning by exporting NETRON insights into modernization roadmaps. Assisted in data migration and replication initiatives with exposure to Q Replication and CDC Replication processes for high-availability systems.
- Leveraged Datacom QDRY and DB utilities for data extraction, migration, and performance tuning, improving system efficiency. Designed and optimized Oracle PL/SQL stored procedures, triggers, and packages to support wire transfer workflows.
- Tuned DB2 stored procedures supporting cost adjudication to reduce fetch latency and optimize access paths using EXPLAIN. Designed COBOL service programs that expose business functions as APIs to external systems.
- Used Java APIs to connect DB2 mainframe databases with external applications. Participated in data center move and hardware refresh projects by exporting/importing HCD configurations, validating device connectivity, and ensuring IPL readiness.
- Provided support for VTAM and TCP/IP networking, including session establishment, routing validation, and connectivity troubleshooting. Converted and migrated mainframe COBOL applications into Micro Focus COBOL environments for distributed processing.
- Supported debugging and testing of Java-based services during COBOL-to-Java migration. Worked with infrastructure teams to configure DB2 storage groups, tablespaces, and database objects for large-scale transactional systems.
- Leveraged z/OS utilities like IDCAMS and IEFBR14 to manage GDG datasets, improving job housekeeping in the production LPAR. Used Azure DevOps for user story tracking, code repository management, and CI/CD pipeline execution.
- Coordinated deployments using Urban Code Deploy (UCD) for automated migration of components to test and production regions. Worked on policy management systems supporting annuities and life insurance products and experience with repetitive payment systems and policy-linked financial transactions in insurance domain.
- Collaborated with cloud architects to integrate AWS services into hybrid mainframe-cloud environments. Integrated COBOL applications with Oracle backend for transaction validation and settlement.
- Collaborated on modernization projects converting COBOL modules into Java/J2EE services, ensuring seamless integration with DB2 and CICS. Worked with VTAM Session Manager (VTAM/SWITCH) for user session handling and mainframe access optimization.
- Provided support for JES3 environments alongside JES2, assisting in job queue monitoring, output management, and priority workload handling. Created Unix shell scripts for automating payment batch jobs and system health checks.
- Supported security audits and access reviews using RACF and worked with RACF Admin Tool teams to manage user permissions and dataset access. Integrated Dynatrace and Introscope monitoring dashboards with z/OS environments to enable proactive detection of CICS and MQ performance issues and automated alerting.
- Used JCL condition codes and overrides to manage complex job dependencies involving billing, drug tier checks, and audit logs. Collaborated with cloud architects to integrate AWS services into hybrid mainframe-cloud environments.
- Debugged and optimized payment processing jobs running in AIX environments. Participated in z/OS system IPL validations by reviewing SYSLOG and SDSF messages during platform patch rollouts.
- Built DB2 triggers and update routines for transactional integrity on refill logic and formulary validation modules. Crafted dynamic JCL procedures using symbolic parameters to improve reusability across member eligibility jobs.

- Created REXX diagnostic tools to trace runtime errors in DB2-connected COBOL applications used in Medicaid billing. Managed JCL cataloging issues and dataset versioning by validating DISP parameters and retention policies.
- Migrated COBOL-JCL jobs from old TWS to Control-M without breaking SLA requirements, improving job scheduling efficiency. Troubleshoot multi-database environments including DB2, Oracle, and IDMS, coordinating with database teams to resolve query performance and connectivity issues.
- Performed job tracing and debugging using SDSF, IPCS, and Abend-AID on z/OS to resolve critical production issues.

**Environments:** JCL (z/OS 2.3), COBOL v6.2, DB2 v11, REXX, Assembler (HLASM), VSAM, Control-M, Abend-AID, SDSF, TSO/ISPF, SPUFI, IBM Debug Tool, BMC Tools.

**Costco, Issaquah, WA**

**Aug 2019 – Jun 2021**

**Cobol Developer**

- Developed COBOL subprograms for billing frequency logic to enable monthly, annual, and executive member cycles with precision and consistency. Tuned DB2 queries inside COBOL modules to optimize lookup performance for membership and payment history records.
- Oversaw the deployment of new front- and back-office technologies, factory integration, and a new card design idFabric Multistate CDL Screening: Designed assembler logic to handle real-time discount validation for executive members to reduce lookup time during POS transactions.
- Developed COBOL-DB2 modules supporting near real-time transaction processing for financial workflows, ensuring high availability and minimal latency across host systems. Configured and maintained SCLM for mainframe configuration management and controlled application deployments.
- Maintained z/OS JES2 output handling for key billing cycles, ensuring critical batch jobs were executed and archived without spool overflow. Created COBOL modules to integrate third-party credit validation systems using DB2 staging tables and audit columns.
- Collaborated with cross-functional teams to design and test transaction routing logic for batch and online systems, simulating credit card authorization scenarios during testing cycles. Provided technical consultation to cross-functional IT teams for z/OS-related projects and transformations.
- Collaborated with development teams on CICS applications using COBOL, Assembler, and Java components for problem isolation, debugging, and performance tuning. Managed COBOL copybook refactoring across modules for schema changes to reduce technical debt and improve readability.
- Supported backup, restore, and validation of PostgreSQL databases during migration cycles. Tuned DB2 queries for loan-like installment and repayment reporting to finance auditors. Enhanced DB2 stored procedures with cursor control to manage mass mailing triggers for expiring memberships.
- Coded new COBOL interfaces to support upcoming tax rules and integrated changes into nightly billing batch. Validated JCL execution steps using dataset retention policies and added alerts for missing control cards.
- Designed DB2 views to enable ad hoc reporting for membership trends without impacting OLTP performance. Improved COBOL EBCDIC-to-ASCII transformation logic for bank files using in-line perform statements for speed.
- Used DB2 RUNSTATS and REORG utilities to maintain query performance across archived and active partitioned tables. Provided production support by resolving DB2 locking and deadlock issues during high-volume renewal periods.

**State of VA (VDOT), Richmond, VA**

**Feb 2017 – Aug 2019**

**z/OS Developer**

- Managed z/OS batch environments using SDSF and JES2 to ensure timely pension disbursement cycles through secure COBOL program execution. Wrote COBOL routines to calculate retirement eligibility and contribution summaries using DB2 queries across multiple indexing strategies.

- Modified JCL to include condition codes and execution control, improving runtime orchestration for benefit audit trails. Tuned DB2 access paths for stored procedures used by the member lookup modules to improve performance on legacy CICS screens.
- Integrating various 3rd Party Applications and AAMVA Driver Licensing Systems like CDLIS, CSTIMS, NMVTIS, SSOLV, PDPS, and SPEXS (S2S). Worked on public pension benefit systems hosted on z/OS; this included federal/state regulatory compliance, secure data management, and eligibility calculations.
- Enhanced z/OS file management using IDCAMS and IEBGENER utilities to clean up orphaned datasets post-disbursement batch cycles. Designed COBOL and DB2 workflows for benefit eligibility validation, experience directly transferable to driver license issuance and validation logic.
- Validated dataset allocations and retention in JCL streams to eliminate redundant storage usage across job generations. Assisted with z/OS IPL events and conducted JES2 queue validations to ensure no pension-critical jobs were delayed.
- Refactored COBOL modules to improve modularization and readability of early retirement projection logic. Designed DB2 temporal tables to support retroactive pension plan modifications and improve traceability.
- Built REXX scripts for batch DB2 data extracts, feeding downstream actuarial forecasting reports. Automated z/OS SMF record analysis using assembler routines to track resource consumption across fiscal months.
- Created JCL catalog checks and alerts for early detection of catalog failures affecting critical monthly jobs. Partnered with DBAs to implement DB2 partitioning strategies and enhance batch update performance across beneficiary datasets.

**Star TV, Lower Parel, Mumbai**

**Jul 2014 – Dec 2016**

**Mainframe programmer Analyst**

- Developed COBOL modules for real-time advertisement billing computation across z/OS environments to ensure accurate revenue processing. Designed JCL chains with restart logic and condition codes to control scheduling of billing and invoicing cycles.
- Built DB2 query layers to aggregate advertising performance metrics, enabling visibility across channel-wise ad impressions. Maintained z/OS dataset lifecycle via IDCAMS and IEBCOPY utilities to manage billing file versions and archival policies.
- Authored COBOL logic to convert broadcast airtime contracts into structured DB2 records for compliance and reporting. Integrated REXX-based monitoring tools for tracking JCL execution results and notifying errors to operations dashboards.
- Implemented DB2 triggers and stored procedures to handle time-sensitive updates in billing and discount validation tables. Refactored legacy COBOL modules into reusable subprograms to improve readability and reduce maintenance efforts.
- Created REXX scripts for pulling ad revenue data from multiple DB2 tables and formatting reports for business teams. Optimized DB2 indexes for programmatic joins across advertisement metadata, reducing fetch time for audit queries.
- Participated in z/OS IPL and post-IPL validations to ensure system readiness before quarterly ad rollouts. Tuned COBOL-DB2 interactions for high-throughput processing of daily regional channel revenue files.
- Validated JCL symbolic parameters and conditional steps for efficient job reruns across failed segments. Created DB2 synonym structures and views to enable simplified access by downstream analytics teams.
- Designed REXX panels for non-technical business analysts to extract daily revenue deltas from DB2. Provided z/OS SDSF-based triage for identifying root causes installed or abended revenue jobs.


Required Forms

	Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	State of West Virginia Centralized Request for Quote Info Technology
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<b>Proc Folder:</b> 1698045			<b>Reason for Modification:</b>
<b>Doc Description:</b> Mainframe Application Programmer Technical Staffing Services			
<b>Proc Type:</b> Central Master Agreement			
<b>Date Issued</b>	<b>Solicitation Closes</b>	<b>Solicitation No</b>	<b>Version</b>
2025-08-14	2025-09-11 13:30	CRFQ 0802 DMV2600000001	1

<b>BID RECEIVING LOCATION</b>
BID CLERK DEPARTMENT OF ADMINISTRATION PURCHASING DIVISION 2019 WASHINGTON ST E CHARLESTON WV 25305 US

<b>VENDOR</b>		
<b>Vendor Customer Code:</b> VS0000010082		
<b>Vendor Name :</b> MSys, Inc.		
<b>Address :</b>		
<b>Street :</b> 1025 Connecticut Ave, NW Suite 1000		
<b>City :</b> Washington		
<b>State :</b> DC	<b>Country :</b> USA	<b>Zip :</b> 20036
<b>Principal Contact :</b> Rajamani Thiyagarajan		
<b>Vendor Contact Phone:</b> (202) 629-0353 x 701		<b>Extension:</b>

<b>FOR INFORMATION CONTACT THE BUYER</b>		
John W Estep 304-558-2566 john.w.estep@wv.gov		
		
<b>Vendor Signature X</b>	<b>FEIN#</b> 56-1862003	<b>DATE</b> Sep 11, 2025

All offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION**

**REQUEST FOR QUOTATION :**

The West Virginia Purchasing Division is soliciting bids on behalf of WV Division of Motor Vehicles (WV DMV) to establish a contract for technical mainframe application programmer technical staffing services. This will be an Open-End services contract that will provide the services of Mainframe Application Programmer Analysts. All services will be provided at the DMV Headquarters location in Charleston, WV. Per the Bid Requirements, Specifications, Terms and Conditions attached to this solicitation.

INVOICE TO		SHIP TO	
DIVISION OF MOTOR VEHICLES 5707 MACCORKLE AVE. S.E., SUITE 200  CHARLESTON WV US		DIVISION OF MOTOR VEHICLES RECEIVING AND PROCESSING 5707 MACCORKLE AVENUE, S.E. SUITE 200 CHARLESTON WV US	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Mainframe Application Programmer Technical Staffing Services				

Comm Code	Manufacturer	Specification	Model #
81111600			

**Extended Description:**

Mainframe Application Programmer Technical Staffing Services. This will be an open-end services contract that will provide the services of mainframe application programmer analysts on an hourly rate basis to provide technical expertise to meet agency needs. These services will be utilized to develop modifications and enhancements to the mainframe computer systems currently utilized by the DMV.

**SCHEDULE OF EVENTS**

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Tech Questions due by 10:00am	2025-09-02

	Document Phase	Document Description	Page 3
DMV2600000001	Final	Mainframe Application Programmer Technical Staffing Services	

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**12. MISCELLANEOUS:**

**12.1 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

**Contract Manager:** Rajamani Thiyagarajan

**Telephone Number:** (202) 629-0353 x 701

**Fax Number:** 510-280-7352

**Email Address:** rfpresponse@msysinc.com

Revised 2/15/2024

### **Company Capability**

MSys Inc., founded in 1994 and headquartered in Washington, DC, stands as a premier provider of IT services and solutions, specializing in enterprise applications and integrated business solutions. With a global presence and offices spanning multiple continents, MSys has established itself as a trusted partner for both government agencies and Fortune 500 companies. Our reputation is built on delivering high-quality, cost-effective services that drive tangible business value while maintaining the highest standards of technical excellence and client satisfaction.

Our comprehensive portfolio of technical services encompasses critical areas including programming and application development, infrastructure management, database administration, desktop support, and GIS solutions. We excel in delivering network and security services, telecommunications solutions, archival and records management, public safety radio systems, and professional graphics and web design. This broad spectrum of capabilities enables us to serve as a one-stop solution provider for complex IT initiatives.

MSys distinguishes itself through several key differentiators that set us apart in the IT consulting landscape. Our technical excellence is demonstrated through our team of certified professionals who possess deep domain expertise across various technologies and industries. We implement proven methodologies and best practices while maintaining a strong focus on innovation and emerging technologies. Our strategic partnerships with leading technology vendors ensure that our clients have access to cutting-edge solutions and support.

Our client-centric approach is fundamental to our success. We develop tailored solutions that align precisely with business objectives, implement proactive risk management strategies, and emphasize knowledge transfer to ensure long-term client success. Our 24/7 support capabilities demonstrate our commitment to client service excellence. Quality and security are paramount in our delivery approach, with rigorous quality assurance processes, a security-first development methodology, and strict adherence to industry standards and compliance requirements.

MSys brings extensive experience in serving state and local government agencies, including successful engagements with the State of North Carolina Administrative Office of the Courts, Department of Justice, US Attorney General Office, and various state departments of labor, motor vehicles, healthcare, and human services. This deep understanding of government operations and requirements positions us uniquely to serve State's IT consulting needs.

Our project management and staffing approach ensures consistent delivery excellence through structured methodologies, dedicated engagement managers, and rigorous resource screening processes. We emphasize continuous training and professional development for our team members, maintaining a strong focus on retention and career growth. This approach enables us to provide stable, highly qualified teams for our clients' projects.

Quality assurance is integrated into every aspect of our delivery model. We implement comprehensive testing across all project phases, utilizing both automated and manual testing capabilities. Our focus on performance and security testing, regular quality audits, and continuous process improvement ensures that our deliverables meet the highest standards of quality and reliability.

The MSys value proposition combines technical expertise for solving complex IT challenges with cost-effective solutions that drive business value. We provide reliable support and maintenance services while fostering innovation through emerging technologies. Our approach to risk mitigation and compliance ensures that our clients' interests are protected throughout the engagement lifecycle.

Our commitment to client success is demonstrated through our focus on building long-term relationships, delivering high-quality solutions on time and within budget, and providing exceptional customer service. We maintain transparency and open communication throughout our engagements, ensuring that our clients are fully informed and engaged in the process. Our support for clients' strategic objectives goes beyond project delivery to include strategic consulting and guidance for future initiatives.

As State of OK's potential IT consulting partner, MSys offers the experience, capabilities, and commitment necessary to deliver exceptional value and drive successful outcomes. Our comprehensive service offerings, proven track record, and unwavering focus on client success make us uniquely qualified to meet the State's IT consulting needs and support its strategic objectives.

### Strategic Capabilities

MSys offers a wide range of strategic capabilities to support clients in their digital transformation journeys. These include:

- **Data & Analytics:** Providing cloud, big data, and predictive analytics solutions that turn data into valuable business insights.
- **Business Process Services:** Enhancing performance, productivity, and driving growth initiatives with industry-specific consulting expertise.
- **Organizational Change Management:** Supporting executives in navigating strategic and transformational challenges to drive successful organizational change.
- **Customer Relationship Management:** Delivering expert solutions to help businesses build strong, lasting connections with their customers.
- **Digital Transformation:** Enabling organizations to create consistent and engaging digital experiences across all touchpoints, unlocking new growth opportunities.
- **Supply Chain Optimization:** Re-engineering supply chains to improve global trade, transportation, distribution, planning, and forecasting.
- **Business & IT Strategy:** Creating business strategies that maximize value, manage complex changes, and define new operating models for global companies.
- **Enterprise Architecture Services:** Helping businesses stay agile by aligning with emerging technologies and ensuring they can leverage new opportunities.
- **Enabling Infrastructure:** Building and managing IT infrastructures that meet the demands of a rapidly changing business environment.
- **Program Management:** Offering industry-leading program management consulting to drive successful business transformations.
- **Quality Engineering and Assurance:** Providing rigorous testing processes to ensure the highest quality of service for clients.

MSys's consulting solutions span several industries, including Healthcare, Public Sector, Natural Resources, Financial Services, Enterprise Management, Governance, Infrastructure, and Privatization. The company has extensive experience delivering both vertical and integrated management consulting services, providing clients with significant return on investment.

MSys has provided management consulting services to several high-profile organizations, including the MN Judiciary, the Department of Labor, Licensing and Regulations MD, and the South Carolina Department of Human Services and Social Services. Through these relationships, MSys has earned a reputation for delivering exceptional service, achieving high client satisfaction, and continuously raising the bar for quality, cost containment, and on-time delivery.

MSys remains dedicated to providing the best solutions for its clients. The company's commitment to excellence is reflected in its approach to every project, offering the most senior consultants and breakthrough service strategies to ensure outstanding results, regardless of the circumstances. This dedication to client success and continual improvement defines MSys as a leader in the IT services industry. MSys offers extensive expertise in the design, development, modernization, and maintenance of **mainframe applications**, providing end-to-end solutions for organizations that rely on legacy systems. With deep proficiency in mainframe platforms, MSys stands out by blending decades of experience with modern development methodologies, ensuring your organization can leverage the power of mainframe systems while driving efficiency and future-proofing your infrastructure.

### Key Capabilities:

- **Comprehensive Mainframe Expertise** - MSys has an experienced team skilled in **COBOL, JCL, DB2, CICS, and IMS**. Our developers have worked on complex mainframe applications, including transaction processing systems, batch processing, and database management systems, allowing us to deliver highly reliable and secure solutions tailored to your needs.
- **Mainframe Modernization** - We specialize in modernizing legacy mainframe applications by re-engineering, re-hosting, and transitioning them to more scalable and flexible environments. MSys follows a structured approach, which includes automated code transformation, data migration, and service-oriented architecture (SOA) integration, reducing technical debt while ensuring business continuity.

- **Legacy System Integration** - MSys excels in integrating mainframe applications with modern enterprise systems. Whether you need to link mainframe data with cloud applications, ERP systems, or new web-based front ends, MSys has the expertise to ensure seamless connectivity and data flow across your IT ecosystem.
- **Robust Testing and Optimization** - To ensure high performance and availability, MSys implements rigorous **performance testing**, **load testing**, and **security auditing** for mainframe applications. Our testing process ensures that applications run optimally, even under heavy transaction loads, and remain secure from vulnerabilities.
- **End-to-End Lifecycle Management** - MSys supports the entire **application lifecycle**, from initial design and development to post-deployment support. We provide ongoing maintenance, ensuring that the system is always up-to-date and running efficiently, with proactive monitoring and continuous improvements.
- **Skilled in Batch and Transactional Processing** - With extensive experience in **batch processing** and **transactional applications**, MSys offers reliable solutions to optimize your mainframe workloads, ensuring high-speed processing, minimal downtime, and adherence to strict SLAs.
- **Cross-Platform Compatibility** - MSys bridges the gap between mainframe and modern technologies by developing hybrid solutions that enable smooth operation across different platforms (mainframe, cloud, distributed environments), enhancing your organization's agility and operational efficiency.
- **Compliance and Security** - Our team understands the strict regulatory requirements that govern many industries (finance, healthcare, government). MSys adheres to **compliance standards** and implements security protocols to ensure that your mainframe applications meet all industry standards for data protection and confidentiality.
- **Skilled Workforce** - MSys prides itself on its team of skilled professionals who bring a wealth of experience in legacy systems. Our developers are proficient in **mainframe languages**, such as **COBOL**, **PL/I**, and **Assembler**, and are trained in modern techniques to enhance legacy system functionality.
- **Client-Centric Approach** - MSys works closely with clients to understand their unique business challenges and delivers tailored solutions that align with their specific objectives. From legacy system maintenance to complete application redesign, MSys offers a flexible and personalized approach that meets each client's strategic goals.

#### Why Choose MSys for Mainframe Application Development:

- **Proven Track Record**: MSys has successfully delivered mainframe application development and modernization projects for diverse industries, including **financial services**, **government**, **healthcare**, and **telecommunications**.
- **Future-Ready Solutions**: MSys ensures that your mainframe applications are ready to meet the demands of future technologies, positioning your organization for ongoing success in a digital-first world.
- **Efficiency and Cost-Effectiveness**: By optimizing mainframe applications, MSys helps you maximize the value of your existing IT infrastructure while minimizing operational costs and resource usage.

#### Experience

Client	Services Provided
Cognoscentio/ Liberty Mutual	<p>Project focused on upgrading and modernizing outdated mainframe systems to enhance performance, scalability, and compatibility with modern technologies. The goal is to improve system reliability and ensure long-term supportability, while also preparing for cloud integration if required.</p> <ul style="list-style-type: none"> <li>• <b>Legacy System Audit</b>: A detailed assessment of existing mainframe systems, including hardware, software, and processes to identify areas for improvement.</li> <li>• <b>Migration Strategy</b>: A comprehensive roadmap outlining the steps and best practices for migrating from legacy systems to modern architectures.</li> <li>• <b>Updated Mainframe Infrastructure</b>: A fully upgraded and optimized mainframe environment, incorporating updated tools, processes, and technologies to ensure future scalability and performance.</li> </ul>

Value Momentum/ Geico	<p>Project involved refactoring and optimizing legacy applications that run on mainframe platforms to improve performance, scalability, and maintainability. The aim was to minimize technical debt, enhance user experiences, and improve efficiency in business processes without a complete system overhaul.</p> <ul style="list-style-type: none"> <li>• <b>Refactored Application Code:</b> Updated and optimized application code to improve performance, remove obsolete dependencies, and increase efficiency in data processing.</li> <li>• <b>Performance Benchmarks:</b> A set of performance benchmarks to evaluate the improvements in application speed, reliability, and resource utilization post-refactoring.</li> <li>• <b>Testing Documentation:</b> Comprehensive documentation of test cases, execution plans, and results to ensure the applications function as intended post-re-engineering, including regression testing.</li> </ul>
Oklahoma Department of Career and Technology Education	<p>Project developed a comprehensive disaster recovery (DR) strategy for critical mainframe systems to ensure data availability and business continuity in the event of a system failure or disaster. It involved designing backup and recovery processes, as well as performing failover tests to ensure all recovery mechanisms are effective and efficient.</p> <ul style="list-style-type: none"> <li>• <b>Disaster Recovery Plan:</b> A detailed, step-by-step DR plan that includes identification of critical systems, processes for restoring operations, and communication protocols.</li> <li>• <b>Backup and Recovery Testing:</b> A series of tests to simulate disaster scenarios, ensuring that backup systems work correctly and recovery times meet business requirements.</li> <li>• <b>Risk Assessment:</b> A comprehensive analysis of potential risks and vulnerabilities in the mainframe environment, along with mitigation strategies to reduce downtime and data loss.</li> </ul>