

## RFP 22-70621: Workload Automation (WLA) Solution Attachment F: Technical Proposal Template Indiana Office of Technology

### Instructions:

Request for Proposal (RFP) 22-70621 is a solicitation by the State of Indiana in which organizations are invited to compete for a contract among other respondents in a formal evaluation process. Please be aware that the evaluation of your organization's proposal will be completed by a team of State of Indiana employees and your organization's score will be reflective of that evaluation. The evaluation of a proposal is based upon the information provided by the Respondent in its proposal submission. Therefore, a competitive proposal will thoroughly answer the questions listed. The Respondent is expected to provide the complete details of its proposed operations, processes, and staffing for the scope of work detailed in the RFP document and supplemental attachments.

Please review the requirements in **Attachment K** Scope of Work and **Attachment L** Functionality Questionnaire carefully. Please describe your relevant experience and explain how you propose to perform the work detailed in this attachment and Attachment L. For all areas in which subcontractors will be performing a portion of the work, clearly describe their roles and responsibilities, related qualifications and experience, and how you will maintain oversight of the subcontractors' activities.

Please use the yellow shaded fields to indicate your answers to the following questions. The yellow fields will automatically expand to accommodate content. Every attempt should be made to preserve the original format of this form. A completed Technical Proposal is a requirement for proposal submission. Failure to complete and submit this form may impact your proposal's responsiveness. Diagrams, certificates, graphics and other exhibits should be referenced within the relevant answer field and included as legible attachments. Please complete Attachment L Functionality Questionnaire as a part of your Technical Proposal. A completed Attachment L Functionality Questionnaire is a requirement for proposal submission.

### **1. Introduction**

- 1.1 Please detail whether you are offering an on-premises solution or a cloud-based solution and why this solution is in the best interest of the State.

The BMC Control-M solution is available as an on-premises solution as well as a SaaS solution. Both solutions offer orchestration and automation for the enterprise featuring SLA management, forecasting, audit, and reporting capabilities. Where Control-M differentiates itself in the market is through innovation – extensive platform support (mainframe, distributed platforms, containerized and virtualized environments and support for hybrid cloud

implementations), support for the data-driven enterprise (internal and B2B file transfer capabilities, native integrations with database, ETL, messaging, and big data technologies), and lastly by supporting accelerated application delivery (by being able to integrate with any application or technology using the Application Integrator component, providing processing standards by environment and promoting those changes across environments, providing role based access and capabilities, and through “jobs-as-code” enabling the management of automation code through existing application development tools and processes (GIT repository, IDE management, incorporation into Jenkins toolchains, etc.). For the purposes of this proposal, Mainline is offering Control-M as an on-premises solution.

- 1.2 Please provide a high-level introduction to your solution and your relevant experience, including but not limited to an on-premises/cloud-based enterprise-wide automation and scheduling solution contracts you have in the last two years.

Control-M is a solution that began with supporting the mainframe environment and has evolved to support emerging platforms and technologies maintaining its market leadership position since fiscal year 2000. Control-M offers enterprise levels of scalability and functionality and has a customer base including a large portion of the Fortune 500 across all industry verticals. Implementation and conversion offerings include a proven methodology and process, skilled staff, and automated conversion utilities to minimize risk and time of delivery.

## **2. About IOT and Current State**

- 2.1 Please describe your understanding of the information presented in Section 2 and explain any relevant experience implementing an on-premises/cloud-based, enterprise-wide automation and scheduling solution with similar customer(s).

BMC utilizes VPMA Global Services as its preferred implementation provider. VPMA provides workload automation and data analytics solutions to medium and large enterprises. With extensive experiences working with multi-national clients across a diverse portfolio of industries, VPMA consultants are well-equipped with real-world knowledge paired with creative problem-solving skills to customize solutions.

VPMA provides medium to large enterprises with IT consultancy services and advanced IT training. With 15+ years of experience with BMC Control-M Workload Automation and data analytics solutions across diverse industries, consulting experts at VPMA offer Government Employees Health Association a winning combination of real-world knowledge and creative problem-solving

skills.

VPMA has projects running throughout the U.S. and Australia and currently expanding its services into Asia and EMEA regions. VPMA is proud to be a BMC Software Consulting Service Partner and preferred service provider for some of the largest and most demanding corporations within the financial industry.

VPMA Has migrated various clients from their legacy schedulers to BMC Control-M in either the cloud or on prem.

### **3. Future State Goals / General Project Requirements**

- 3.1 Please explain how your relevant experience and proposed solution is the best solution to satisfy the needs of IOT and its agency customers and achieve the desired future state goals.

As an enterprise solution all workloads regardless of underlying platform, application or technology are defined in a single standardized way (mainframe jobs are defined the same way as LINUX jobs, Peoplesoft jobs, AWS jobs, etc.) and are monitored in real-time from the same interface (this could be a Windows client, web client, mobile – smartphone or iPad, command line or “jobs-as-code”.) Windows, LINUX, UNIX, and Peoplesoft are supported platforms and High Availability is available across the client, server, agent, and database components. Support is provided worldwide 24 x7/365 days a year and includes specialized services such as upgrade assistance. On the conversion front – packages are available in “turnkey” offerings (including conversion, implementation, training, etc.) to other offerings customized to the State’s needs. VPMA Global Services, acting as Mainline’s subcontracting partner, will analyze the data and fully scope the engagement to meet the State’s deadlines.

- 3.2 Please explain how your solution meets each of the General Project Requirements outlined in Section III.C of the Scope of Work.

Please see 3.1.

### **4. Workload Automation Software Specifications and Functionalities**

Please describe how your proposed solution meets or exceeds all the requirements in Section IV of the Scope of Work. Specifically, please provide the following related to your solution in addition to completing Attachment L Functionality Questionnaire:

- 4.1 Software Requirements

- 4.1.1 Describe in detail how your solution meets or plans to meet the required and desired functionalities laid out in Section IV.A.i of **Attachment K** Scope of Work.
- 4.1.2 Describe in detail any additional functionalities available to the State via your solution at no additional cost.
- 4.1.3 Describe the environments for developing, staging, and producing deliverables during and after implementation.
  - 4.1.3.1 Describe the process of moving configurations/code between environments.
  - 4.1.3.2 Describe the process to refresh data between environments.

Control-M provides all the functionality described in this section:

User interfaces – Windows, web, mobile, command line, jobs as code (no extra cost with full role-based security across all interfaces)

High availability is available across all components and be managed manually or automated using Control-M's Configuration Manager (no extra cost)

Functionality – real-time workload analysis/management (cross platform dependencies, put on hold, rerun/restart, CC logic, bypass, passing data via variables, file watcher, access to logs and output, documentation, etc.), notifications and alerts, forecasting (effect on workload changes, what if scenarios – server down, workload increase by 50%, etc.), reporting – performance, trending, and audit reports are all available. (All core capabilities listed here are at no extra cost, advanced file transfer capabilities would require an additional fee)

Control-M has the capability of defining operational standards by processing environment and then automating the movement across environments using the Workload Change Manager component (extra cost). This component in combination with role-based security provides governance and control in the definition and management of automation (IE; non-operations/production control personnel such as developers must adhere to the standards defined in each environment, will only have access to the Control-M functions allowed, and could optionally be required to go through an operations review/approval process). These standards are in place regardless of the interface used.

- 4.2 Security Requirements – Describe your overall approach to meeting or exceeding security and compliance standards.
  - 4.2.1 Review the State's Information [Security Framework](#) and either confirm that your company conforms to the policy or provide explanation to the areas for which your company does not conform.

- 4.2.2 Please describe your proposed change management process, providing examples if available.
- 4.2.3 Please describe your ability to audit and provide audit results as requested by Business Unit.
- 4.2.4 Please describe how your solution is Secure Sockets Layer (SSL) and Transport Layer Security (TLS) 1.2 or greater.
- 4.2.5 Please describe your ability to encrypt data at rest and transit. Encryption protocols and ciphers employed for data at rest and data in transit must be FIPS-140-2/3 compliant.
- 4.2.6 Describe how you protect Personally Identifiable Information. Please confirm your understanding with the requirements of 20 C.F.R. 603 regarding Confidentiality of State Unemployment Compensation Information, 34 C.F.R. 99 regarding the Family Educational Rights and Privacy Act, and USDOL Training and Employment Guidance Letter 39-11 regarding Guidance on Handling and Protection of Personally Identifiable Information.
- 4.2.7 If you are providing a cloud-based solution, please describe how you will achieve and maintain the following compliance standards throughout the entirety of the engagement with the State.
  - 4.2.7.1 HIPAA (See Attachment O The Bidder's Library, Exhibit 4: HIPAA Agreement), IRS Pub 1075, NIST 800-53 R5 (See Attachment O The Bidder's Library, Exhibit 5: NIST 800-53), Social Security Administration TSSR (Technical System Security Requirements), and current MARS-E (Minimum Acceptable Risk Standards for Exchanges) compliant – must demonstrate compliance.
  - 4.2.7.2 Please confirm your understanding that you must be FedRAMP Certified or committed to becoming FedRAMP certified in accordance with the State's standards in Section IV.B. If you are not FedRAMP Certified *and are proposing a cloud-based solution*, please describe how and when you will achieve FedRAMP certification.

From an overall security perspective – all actions are fully audited and reportable (regardless of whether it was done by a person or the product) and available from the enterprise interface without the need to go to the execution platform. This includes any actions done as part of the change management process outlined in 4.1.3.

4.2.4 (SSL and TLS) – supported in both on-premises and SaaS implementations – please see attached links:

[https://documents.bmc.com/supportu/9.0.20/help/Main\\_help/en-](https://documents.bmc.com/supportu/9.0.20/help/Main_help/en-)

<US/index.htm#4342.htm>

<https://confluence.bmc.com/display/DPM/Helix+Control-M+security+overview>

<https://docs.bmc.com/docs/ctmhelix/security-964536137.html>

4.2.5 (data encryption) – BMC uses AES-256 encryption. Database hashing of internal user password was SHA-512 until V20 and with V21 will have PBKDF2 hashing. There is no local user password in Helix and therefore no need for such hashing.

4.2.6 (PII data) – Control-M does not hold any PII. The only item with Helix is the user who is based on emails.

4.2.7.1 (HIPAA) – Control-M does not store this type of data, so no compliance has been pursued.

4.2.7.2 (FEDRAMP) – Control-M is not Fedramp certified, and this is not currently on the product development roadmap. Future development will be based on market and customer demand.

## **5. Transition, Project Management, Implementation, and Training**

Please describe how your proposed solution meets or exceeds all the requirements in Section V.

### **5.1 Transition Plan from Current Solution**

5.1.1 Please describe your proposed transition plan, including how you will work with the State to develop and manage plans for transferring services from the incumbent product.

5.1.2 Please describe the steps of your proposed transition process, which typically include discovery, design, development and testing, and implementation or go-live phases, and the associated timeline(s).

5.1.3 Please describe in detail previous experience(s) transitioning similar clients to your proposed solution.

5.1.4 How will your company define, review, confirm, validate, elaborate, and understand the State's requirements?

5.1.5 Include examples of requirements documents generated for similar projects.

- 5.1.6 Identify and describe the tool(s) used to capture, track, and manage requirements throughout the project.

**5.1.1 - Phase 1 – State of Indiana Project Plan Review, Discovery, Additional Requirement Gathering (where applicable) and Project Preparation**

- Produce job migration Project Plan. Conduct Workshop to review and finalize the plan. Make suggestions for changes and updates to benefit the overall initiative.
- Review of current job environments to include types of Jobs, complexities and any/dependencies ensuring that all job types and complexities are considered.
- When required participate in any additional Workshops with job owners and application teams. This might include interfacing with other State of Indiana vendors and partners.
- Validate planning readiness such as asset provisioning, VPN, ID setup, access, and authorization.
- Understand all existing processes and the existing ITIL framework. Perform risk assessment and document any potential impact to the migration activity.
- Evaluation of applicable supporting scripts and mapping rules for the workflow conversion during the migration.
- Related testing with sample jobs in the State of Indiana lab environment together with State of Indiana Engineering team.

**5.1.2 – Overall recommendation to ensure the migration Project Plan includes ‘thing-to-consider,’**

- Provide guidance and best project/program or operational practices to Northwestern Mutual for the new Control-M environment. Create continuous improvement input into the overall Technical Solution.
- Provide scripting and automation techniques based on the feasibility/applicability work to enable a faster execution and efficiencies around the migration effort.
- Utilize VPMA Dashboard to determine job wave analysis breakout.
- Evaluation of automation possibilities and related product features feasibility/applicability before and during the migration.
- Evaluation of applicable supporting scripts and mapping rules for the workflow conversion before and during the migration.
- Finalize job conversion scripts and DB queries.
- Assist Northwestern Mutual to communicate with job owners based on T-minus communication plan. Confirm migration schedules with job owner. Update tracking database as applicable.

- Configure Control-M as required – connections, user access after training completion, folders, etc.
- Provide advisory technical level guidance for the migration effort and to the Northwestern Mutual project team, Northwestern Mutual Architects, and management team where appropriate.
- Finalize testing plan.
- Validate and finalize the job conversion plan.
- Finalize go-live run book.
- Finalize naming standards.
- Integration into ticketing System

5.1.3 – Please see RFP 22-70621 Attachment F for Mainline Information Systems - VPMA\_CTM\_Migration\_Methodology (Attachment F 5.1.3). This migration methodology has been successfully utilized for countless clients.

5.1.4 – VPMA will review State of Indiana requirement document provided, and work with the appropriate State of Indiana resources to develop review, confirm, validate, elaborate project goals and deliverables. VPMA will Conduct a Workshop to review and finalize the plan. Make suggestions for changes and updates to benefit the overall initiative.

5.1.5 – Please see RFP 22-70621 Attachment F for Mainline Information Systems - Sample Project Plan - Excel Export View (Attachment F 5.3.2).

5.16 – VPMA along with State of Indiana project team will create a project plan to outline the requirements and milestones. Other accompanying documents may include weekly dashboard & RAID reports to track progress throughout the project

- Utilize VPMA Dashboard to determine job wave analysis breakout. VPMA utilizes a proprietary dashboard that assists organizations in job remediation and validation between the legacy scheduler and New Scheduling Systems. It streamlines und user validation
- VPMA utilizes Monday.com as its project management system. That is a single source Project plan that is accessible to identified resources at the client site

## 5.2 Project Management

5.2.1 Provide a document to describe your company's project management approach and methodology for this project. This should be a high-level document that pulls everything together.

5.2.2 Please describe your proposed project management process, including the subprocesses outlined in Section V.B.



5.2.3 Please identify any potential risks and how you will identify risks in the future.

Please also include the following:

5.2.3.1 How you will determine the effect of a delayed timeline.

5.2.3.2 How you will determine the effect of overlapped sprints.

5.2.3.3 How you will determine the effect of a rejected sprint.

5.2.1 – Please see RFP 22-70621 Attachment F for Mainline Information Systems - Project Management (Attachment F 5.2.1)

5.2.2 –

1. Project Phases
2. Project Initiation/Planning
3. Requirements
4. Design
5. Configuration
6. Test/QA
7. Deployment/Cutover
8. Project Close

VPMA will provide a project plan and allocate resources for this project prior to the kick-off meeting with the State of Indiana. VPMA and the State of Indiana will conduct a series of workshops to gather requirements and finalize the design of the new system.

After the requirements and design is signed off, VPMA and the state of Indiana will start the configuration and conversion work needed to migrate over to the new solution. VPMA will assist in training and provide guidance in the migration effort to the State of Indiana project team and management team where appropriate.

After the configuration and conversion work is completed, VPMA and the State of Indiana project team will conduct a series of tests to ensure that the new solution is working appropriately. Any discrepancies will be resolved prior to cut-over. Once the migration is completed, VPMA will review the project deliverables with the State of Indiana prior to final signoff and project closeout.

The Contractor shall have a detailed project management process that includes, at a minimum, the following sub-processes:

- i. Scope Management

A project scope statement and deliverables list will be agreed upon by VPMA and the State of India during the project planning and preparation.

After deliverables are completed VPMA will require signoff/acceptance from the State of Indiana.

Any change request will need to be approved by VPMA and the State of Indiana before being added to the project changelog and deliverables list.

ii. Time Management

VPMA will provide a project plan to the State of Indiana during project kick-off.

VPMA will review the project plan with the State of Indiana during the weekly cadence call and discuss issues that may affect the planned delivery date.

Any change request will need to be signed off by VPMA and the State of Indiana prior to updating the project plan.

iii. Cost Management

VPMA will provide a weekly export of the cost associated with each activity identified within the project plan.

Any change requests will need to be signed off by VPMA and the State of Indiana prior to updating the project plan.

iv. Quality Management

VPMA and the State of Indiana will agree upon a test plan prior to UAT (User Acceptance Test).

Any discrepancies will need to be resolved prior to deployment and project closeout.

v. Change Control and Management

All change requests will need to be approved by VPMA and the State of Indiana.

All approved changes will need to be logged in the changelog and project deliverables list. If needed, the project plan and budget will be updated accordingly.

vi. Deliverable Development, Review and Approval

During the project planning/preparation stage, VPMA and the State of Indiana will agree upon a list of deliverables that will be completed.

After each deliverable is completed, VPMA will request sign-off by the State of Indiana prior to moving into the next phase of the project.

After deployment, VPMA will review the deliverables list with the State of Indiana before requesting final signoff before project closeout.

vii. Communication Management

VPMA will provide a weekly dashboard to the State of Indiana and discuss the timeline, issues, and risks during the weekly cadence call.

viii. Issue Management

VPMA will provide a weekly dashboard to the State of Indiana and discuss the timeline, issues, and risks during the weekly cadence call.

ix. Risk Management

VPMA will provide a weekly dashboard to the State of Indiana and discuss the timeline, issues, and risks during the weekly cadence call.

x. Analytics Plan

VPMA will provide a weekly export of the project schedule and cost year to date. This will include a burndown chart with the variances to the project cost and schedule.

5.2.3.1 – The jointly created project plan, RAID log and VPMA weekly dashboard will help keep track of timelines, issues & risks.

5.2.3.2 – The jointly created project plan, RAID log and VPMA weekly dashboard will help keep track of timelines, issues & risks.

5.2.3.3 – The jointly created project plan, RAID log and VPMA weekly dashboard will help keep track of timelines, issues & risks.

### 5.3 Implementation

5.3.1 Please describe in detail previous experience(s) implementing your solution with other clients.

5.3.2 Please describe how you will define and maintain an implementation schedule. Describe and provide an example of your proposed implementation plan/strategy (Pilot, phased rollout, “big bang”, etc.) and implementation checklist for this project or a similar project.

5.3.3 Please describe how you will define the Scope of Work, including the outline of sprints and an outline of the risks of each, accommodation of different SDLC methodologies, and the development of transition plans for individual agencies.

5.3.4 Please define your proposed staffing plan, including the required staff for each deliverable and sign-off for each sprint.

5.3.5 Please describe in detail how you will support the migration of jobs from the current environment to your solution. Please describe your approach to the migration of customized jobs.

5.3.6 Please describe how you will lead testing of your proposed solution with IOT and how this testing plan will be affected based on whether you are offering an on-premises or cloud-based solution.

5.3.1 – VPMA Global Services (“VPMA”) provides medium to large enterprises with IT consultancy services and advanced IT training. With 15+ years of experience with BMC Control-M Workload Automation across diverse industries, consulting experts at VPMA offer Orlando Utilities Company a winning combination of real-world knowledge and creative critical thinking skills.

VPMA has projects running throughout the U.S. and Australia, and currently expanding its services into other regions. VPMA is proud to be a BMC Software Consulting Service Partner and preferred service provider for some of the largest

and most demanding corporations within the financial, retail, energy, manufacturing, and healthcare industry.

VPMA has converted clients from (CA7, IBM, AUTOSYS, AUTOMIC, TIDAL, UC4, STONEBRANCH) just to name a few.

Please see RFP 22-70621 Attachment F for Mainline Information Systems - Client Success Story (Attachment F 5.3.1)

5.3.2 – RFP 22-70621 Attachment F for Mainline Information Systems - Sample Project Plan - Excel Export View (Attachment F 5.3.2) – This project will be based upon a sprint schedule. Any impact to the schedule will be tracked by the project plan.

5.3.3 – RFP 22-70621 Attachment F for Mainline Information Systems - Statement of Work (Attachment F 5.3.3)

5.3.4 – The staffing plan typically includes the following resources. The number of resources will depend on bandwidth of the client and ability to validate and remediate. Each engagement will consist of 5 to 6 resources at any given time based upon the phase of the engagement.

Senior Architect

Senior Conversion Analyst

Senior Consultant (3+)

Training Consultant

Project Manager

5.3.5

- Execute automated conversion of jobs from CA7 to Control-M per the Project Plan in conjunction with BU's and End Users.
- Validation of jobs to be migrated with the Application/BU/End Users/job owners and set expectations for the steps that will be executed.
- Run the Configured Jobs in Control-M with the job status set to Dummy to ensure that the workflow is proper in Pre-Prod Environment.
- Perform migration or wave cutover on the scheduled date/day as proposed by State of Indiana Engineering team, or from the Project Plan or calendar function.
- Utilize VPMA Dashboard to determine assist in job remediation
- Validation of converted jobs, fix any partial/problematic converted jobs until resolved.
- Run the Jobs to ensure that scripts are being triggered as intended when they are run manually.
- Input into any State of Indiana or BU "Go or No-Go" decision making to

ensure that all relevant conversion/migration data points have been shared, prior to final decision making.

- Work with State of Indiana to roll back in case of “No-Go” decision due to any Migration issues.
- Provide assistance during the calendar conversions.

#### 5.3.6

- This will be an On Prem solution
- After utilizing the BMC Automated conversion Utility
- The VPMA dashboard will be utilized to break the jobs down into waves (sprints). The teams then decide if the sprints and the job breakouts are acceptable. (Freezes / application owner availability, all play a part in determining) the subset of jobs to be migrated
- Use the VPMA dashboard to assist end user in Job remediation
- Run the Configured Jobs in Control-M with the job status set to Dummy to ensure that the workflow is proper in Pre-Prod Environment. (This only validates successor predecessor relationships, and scheduling validation)
- Validate agent connectivity to the Master Server
- Validate User profiles
- Migrate jobs from
- Disable jobs in legacy scheduler
- Start jobs in New Scheduling Tool

### 5.4 Training

- 5.4.1 Please describe how you will develop a training plan for State staff (administrators, schedulers, and end-users), including relevant examples if applicable.
- 5.4.2 In addition to a standard training plan, please describe how you will develop custom training plans and training materials.
- 5.4.3 How will new application users be trained going forward and what options exist for refresher training?
- 5.4.4 Will there be a repository for training materials accessible by application users created / maintained?
- 5.4.5 Please describe in detail previous experience(s) training similar clients on your proposed solution.
- 5.4.6 If offering a cloud-based solution, please also describe the sharing of responsibility for training between you and your Cloud-provider.

#### 5.4.1 – TRAINING (INSTRUCTOR LED)

##### ➤ BASIC SCHEDULING & OPERATIONS

This course covers many of the functions and features of CONTROL-M. This course explores the tools available for monitoring and managing the active environment, including all jobs and workflows for an enterprise. Additionally, hands-on exercises are used extensively to demonstrate job-scheduling functions. By the end of this course, participants should have the skills and knowledge to manage daily business operations, as well build and implement new workflows.

##### ➤ ADVANCED SCHEDULING

Building upon the topics of the Basic Scheduling track, this four-day track includes an in-depth analysis of the various CONTROL-M features and options. Real-world scenarios are used to demonstrate how CONTROL-M can be leveraged for best effect. Participants should have a firm understanding of basic CONTROL-M functions before taking this course.

##### ➤ ADMINISTRATION

This program reviews the architecture, design, and configuration of CONTROL-M and all its components. Intended for system administrators, this course describes the various hardware and software requirements of the system, how it communicates over networks, its database structure, and other aspects of the product.

5.4.2 – VPMA has developed customized training material for other clients. The training is developed upon client needs. We Have developed customized training for CA, IBM, etc. Over to Control-M.

5.4.3 – BMC offers training credits to new customers (LPC) Learning pass credits. This is online training that users will have access to.

5.4.4 – VPMA Can share its training material which can be stored in a share point repository for its application staff who whoever needs refreshers.

5.4.5 – VPMA offers a vast offering of its training material. Either already developed material or customized. VPMA routinely gives training to new clients or existing clients which might need more advanced training or customized based upon a new BMC product offering. As part of the migration engagement VPMA will train the required personal on the product features, and they will also be trained on the VPMA dashboard to learn techniques on job remediation and validation

5.4.6 – N/A – This is an “ON Prem” offering

## **6. Staffing**

Please describe how your proposed solution meets or exceeds all the requirements in Section VI.

## 6.1 Vital Staff

6.1.1 Please provide your Project Resource Staffing plan for all phases of transition and maintenance and operations, including:

- 6.1.1.1 The necessary roles
- 6.1.1.2 The number of staff proposed for each role
- 6.1.1.3 Their qualifications
- 6.1.1.4 Their location
- 6.1.1.5 A RACI chart
- 6.1.1.6 A plan for new or replacement staff

6.1.2 Please provide resumes (or job descriptions if personnel have not yet been identified) for all Vital and Essential Staff and, if you are offering a cloud-based solution, whether they are employed by the Contractor or by the cloud provider.

6.1.3 Complete **Attachment N** Resource Usage Template to provide the number of hours the Respondent expects to commit to the project and the number of hours estimated for the State resources. These amounts should be based on the functionality the State desires, included in this RFP. Any assumptions related to the number of the Respondent Project Team and the State Team staff, roles of staff, and duration of involvement used in the development of the resource hour estimates should be outlined below.

6.1.4 Provide an overall project organizational chart that includes roles / responsibilities on your team as well as expected roles / responsibilities at the State to help ensure project success. This should mirror the roles outlined in the Resource Usage Template.

6.1.5 If the Contractor is offering a cloud-based solution, the Contractor must clearly designate which positions are provided by the Contractor and by the cloud provider.

### 6.1.1.1

Senior Architect  
Senior Conversion Analyst  
Senior Consultant  
Training Consultant  
Project Manager

### 6.1.1.2

Senior Architect (1)

Senior Conversion Analyst (1)  
 Senior Consultant (3+)  
 Training Consultant (1)  
 Project Manager

6.1.1.3 Reply – All VPMA consultants are BMC certified, and have been working in the Control-M Space either at BMC or a past customer or a combination of both

6.1.1.4 – VPMA Has resources scatter throughout the US, UK, India, Australia, Mexico. Individual resources will be identified once a start date for the engagement is determined, however it is anticipated the following positions will be filled by personnel in the identified locations.

Senior Architect - Nevada  
 Senior Conversion Analyst Florida  
 Senior Consultant - US – UK – Mexico – India  
 Senior Training Consultant Australia  
 Project Manager - Texas

6.1.1.5 Reply – Please see RFP 22-70621 Attachment F for Mainline Information Systems - RACI STOfIn- AUTOSYS to Control-M (Attachment F 6.1.1.5)

6.1.16 – As mentioned in 6.1.1.2 VPMA also has more Senior Consultants identified initially who will be working limited hours on the project in the event a primary resource becomes unavailable. VPMA has 40+ technical resources on the team

6.1.2 – Not a cloud offering, but the resources roles of those involved in the migration effort consist of

#### Senior Architect

- ✓ Finalize job conversion scripts and DB queries
- ✓ Finalize testing plan
- ✓ Finalize go-live runbook
- ✓ Finalize naming standards
- ✓ Provide guidance and assistance during job and calendar conversions
- ✓ Work with the State of Indiana team to complete conversion lead with advice and guidance for job selection/filtering,
- ✓ data extraction, conversion, remediation, validation, testing, and go-live
- ✓ Provide ad-hoc support to answer Control-M related technical questions and make design decisions
- ✓ Provide ad-hoc support to answer questions throughout the conversion process



**Senior Conversion Analysts**

- ✓ Product Installation
- ✓ Manage the conversion waves
- ✓ Promote job scheduling best practice throughout the conversion process
- ✓ Provide post go-live support for each conversion wave

**Senior Consultant**

- ✓ Take guidance from Senior Conversion analyst
- ✓ Validate Job integrity from CA7 Scheduler to Control-M
- ✓ Work with End Users on Job remediation

**Training Consultant**

- ✓ Provide Training on Basic, Advanced, Administration of Control-M

**Project Manager**

- ✓ Creating long- and short-term plans, including setting targets for milestones and adhering to deadlines
- ✓ Delegating tasks on the project to employees best positioned to complete them
- ✓ Making effective decisions when presented with multiple options for how to progress with the project
- ✓ Serving as a point of contact for teams when multiple units are assigned to the same project to ensure team actions remain in synergy
- ✓ Communicating with executives or the board to keep the project aligned with their goals
- ✓ Performing quality control on the project throughout development to maintain the standards expected
- ✓ Adjusting schedules and targets on the project as needs or financing for the project change
- ✓ Validate and finalize job conversion Project Plan

6.1.3 – Attachment N has been completed and provided with Mainline’s submission.

6.1.4 – Please see RFP 22-70621 Attachment F for Mainline Information Systems - VPMA Org Chart for ST Of Indiana Project (Attachment F 6.1.4)

6.1.5 – N/A (Not A cloud Offering)

**7. System Maintenance and Operations (M&O)**

Please describe how your proposed solution meets or exceeds all the requirements in Section VII.

**7.1 Application and Infrastructure Monitoring**

- 7.1.1 Describe your overall approach to meeting the requirements in Section 7.1, depending on whether you are offering a Cloud or on-premises solution.
- 7.1.2 If offering a cloud-based solution, please explain how you propose to maintain and monitor critical operations in accordance with Section VII of **Attachment K** Scope of Work.
- 7.1.3 Describe your process for addressing bugs and issues.
- 7.1.3.1 Further, if offering a cloud-based solution, please describe how your proposed team will notify the State when you become aware of bug or issue with your proposed solution.
- 7.1.3.2 Please describe how your proposed team will respond if the State notifies you of a bug or issues with your proposed solution.
- 7.1.4 If offering a cloud-based solution, please describe how you will log, monitor, and investigate security events that may occur.
- 7.1.5 If offering a cloud-based solution, please describe how you will conduct an annual vulnerability assessment, including relevant examples if applicable. Please also describe how this assessment will identify vulnerabilities and how you plan to remediate these.

The solution being proposed is a self-hosted on-premises solution. Any monitoring of the products components is done using configuration interfaces included with the product's graphic user interfaces. Any issues that may be encountered would be reported to the BMC product support group for review, analysis, and potential workarounds or remedies to issues encountered. BMC's product support group has response timelines defined based on ticket severity level.

### Severity Codes

Severity Codes are associated with all cases, failures, and enhancement Requests. The severity code indicates the type of Customer issue.

Severity Level	Severity Criteria
1	<b>Critical Service Impact</b> Issue critically affects the primary business service, major application, or mission critical system. Customer resources should be available and willing to work on a 24x7 basis with BMC to resolve the issue. Characteristics of a Severity 1 issue include: <ul style="list-style-type: none"> <li>✓ Business service is not operational</li> <li>✓ Production system crashes</li> <li>✓ Data integrity at risk</li> <li>✓ Production backup and recovery operations fail</li> </ul>
2	<b>Significant Service or Implementation Impact</b> The business service, major application, or system is seriously affected, or implementation stopped. No acceptable workaround is available.

3	<b>Moderate Service Impact</b> The business service, major application, or system is moderately impacted, no data has been lost, and the business service, application, or system is still functioning. The issue may be temporarily circumvented using an available workaround.
4	<b>No Service Impact</b> Non-critical issues, general questions, enhancement requests, or documentation issues

**Note** - Severity 1 issues require a customer resource to be available onsite around the clock. Cases submitted through email will receive a default severity code of 3 - Medium. This severity code cannot be adjusted when the case is submitted using this method.

BMC's product support team uses a "follow the sun" methodology for product support with appropriate handoffs between geographically dispersed support teams involved in reported issues. Product support teams may request further support from BMC's product R&D organization where appropriate should the reported issue need R&D review and resolution.

## 7.2 Reporting

7.2.1 Please describe how you will meet the State's reporting requirements as laid out in Section VII.B.

7.2.2 Please provide example reports for similar clients, if applicable.

The BMC Control-M product has a built-in reporting engine for use of data extraction and reporting in several areas from job definition reporting, to historical reporting. There is also an add-on to the BMC Control-M product, called Workflow Insights, that allows analysis reporting to be done for the BMC Control-M solution. Sample reports are currently not available for distribution, however, the Control-M solution satisfies the State's requested reporting requirements.

## 7.3 System Maintenance

7.3.1 Please describe how you will maintain full system functionality at or above 99.99% availability per month.

7.3.2 Please describe how you will address and resolve bugs, issues, and serious issues affecting critical business operations.

BMC Software customer support teams use an industry leading incident tracking software solution, ensuring efficient, timely resolution of support requests. This software enables BMC to create a detailed incident report (case), track it through to completion, and reference the resolution to assist other customers using the same product.

## 7.4 Warranty

7.4.1 Please describe how you will meet the State's warranty expectations, as laid out in Section VII.D.

BMC warrants that (a) the Product will perform in substantial accordance with its Documentation for a period of one year from the date of the first Order, (b) BMC has used commercially reasonable efforts consistent with industry standards to scan for and remove software viruses, and (c) other than passwords that may be required for the operation of the Product, BMC has not inserted any code that is not addressed in the Documentation and that is designed to delete, interfere with or disable the normal operation the Products in accordance with the License. This warranty will not apply to any problems caused by hardware, Computers, or software other than the Product, or misuse of the Product, use of the Product other than as provided by the applicable License, modification of the Product, or claims made either outside the warranty period or not in compliance with the notice and access requirements set forth below. No warranty is provided for additional Licensed Capacity, Product provided pursuant to Support or Product provided pursuant to Section 12.

## 7.5 Software Updates

7.5.1 Please describe how you will meet the State's software updates expectations, as laid out in Section VII.E.

7.5.2 Please detail any additional support features for the State before, during, and after software updates.

7.5.3 Describe your company's overall release management strategy and processes.

7.5.4 How frequently are new versions / patches released? Is there a regular release schedule?

BMC software is kept up to date with the latest enhancements, fixes, and features as each reaches production readiness. All updates are provided by BMC proactively and include monthly updates for [Technology Knowledge Update](#) (TKUs) which contain new patterns and other content. Application upgrades are provided quarterly, per the BMC release schedule. Updates that require downtime will be made during scheduled maintenance windows. Development instances are updated first, followed by production instances. See [Maintenance windows](#) for more information.

Updates that require downtime will be made during scheduled maintenance windows. Development instances are updated first, followed by production instances. See [Maintenance windows](#) for more information. Time of day is determined by the data center location but is scheduled during customers' off-peak hours.

## 7.6 Help Desk and Customer Support

- 7.6.1 Please describe your proposed Help Desk and Customer Support solution.
- 7.6.2 Please describe how issues are escalated and resolved within your Help Desk and Customer Support solution.
- 7.6.3 Describe your company's escalation process. If there's a problem, what escalation procedures do you have? Are there tiered layers? What happens at each stage?
- 7.6.4 If offering a cloud-based solution, please also describe the sharing of responsibility for training between you and your Cloud-provider.

BMC's introductory offerings (Continuous Support, SaaS Support, Helix Control-M Support) are provided as part of the price of your product license purchase. The enhanced support offerings, Premier Support, are priced based on the level of service selected. Premier Support offers multiple configurations of Support options for each BMC product. BMC offers Self-Help features as part of all Support packages.

#### **Escalation**

Each BMC Software product has a documented process for problem isolation and identification. The troubleshooting procedures are too vast and complex to respond to in this venue. There is however a full and proven **escalation** process for each BMC Software product.

Depending upon the severity of the incident, incidents are classified into four severity levels S1, S2, S3 and S4. For detailed response times please see the following link - <https://docs.bmc.com/docs/display/public/helixsubscriber/Service+levels+and+support+hours>

Security Incidents are classified as S1 and Customer notification for a security incident is as soon as possible (within 24 hours), following assessment and validation of the event by the SaaS Information Systems Security Officer

BMC's support teams strive to resolve your issues and service requests as quickly as possible based on [incident severity level](#). If you are not satisfied with the progress of your request, you may request an escalation. For more detailed information on **escalation** protocol please see the following link - <https://docs.bmc.com/docs/display/public/helixsubscriber/Escalation+protocol>

#### **Training**

BMC Education Services offers learning paths for key roles across industries and organizations. Each learning path includes **training** in a sequence that will help you reach the highest level of proficiency. For a complete listing and description of our course offerings please visit our website or reach out to us directly: [education@bmc.com](mailto:education@bmc.com)

## **8. Business Continuity and Disaster Recovery**

Please describe how your proposed solution meets or exceeds all the requirements in Section VIII in accordance with the requirements' application to an on-premises or Cloud solution.

## 8.1 Business Continuity

8.1.1 Please describe how you will meet the State's business continuity requirements as laid out in Sections VIII.

8.1.2 Please describe any enhanced tiers to the State's business continuity requirements as laid out in Sections VIII.

8.1.3 If offering a Cloud-based solution, please provide an example business continuity plan. If offering an on-premises solution, describe how you will partner with the State in the development of a BC plan.

BMC's business continuity and disaster recovery plan can be found at -

<https://docs.bmc.com/docs/display/public/helixsubscriber/Business+continuity+and+disaster+recovery>

### Business Continuity at BMC Software

BMC is the leading provider of enterprise management software with a mission of "assuring business availability" to its customers. As such, you can be sure that BMC is focused on assuring its own availability. Given recent world events, natural disasters, and the threat of an Avian Flu pandemic, BMC is responding with increased vigilance to ensure the safety of our employees, the integrity of our systems and data and our ability to serve the needs of our customers without interruption.

### Business Continuity Practices

BMC's Business Continuity Management Program encompasses Crisis/Emergency Management, Business Resumption, and IT Disaster Recovery with a specific addendum addressing Pandemic Flu and Hurricane pre-event readiness. This program conforms to the ISO22301 standard to identify risks and the associated business impact and ensure the development of plans to resume critical business functions and/or recover critical systems. This program is maintained by on staff certified continuity professionals.

All BMC locations identified as critical by the annual Business Impact Analysis, must develop, maintain, and exercise recovery plans for the timely resumption of all critical services in the event of any disruption. Required personnel and designated alternates are identified and trained in the execution of plan activities. Sungard's automated notification system, NotiFind has been implemented. Procedures have been established for annual testing of BMC's Business Continuity Management strategy.

### Assuring Continuity for our Customers

BMC conducts an annual Business Impact Analysis of all Business Processes and affirms that the following processes are critical to assuring ongoing service to our customers:

- Customer Support
- Product Management
- Account Management

- Business Infrastructure
- Security

Each of these is discussed briefly in the sections below.

#### Customer Support

BMC has five customer support call centers located globally: two in North America, one in Ireland, one in Australia, and one in China. In the event one call center cannot perform the required services, customer calls can be serviced by the other call centers.

Support technicians have the ability to work remotely to support customers in the event they are unable to access their office. BMC maintains personnel with technical expertise around the globe. In the event of a regional disaster, worldwide resources can be leveraged to address customer needs if local support technicians are unavailable.

BMC Customer Support is responsible for providing product support to external BMC customers on a global basis. This includes activities such as problem resolution and software updates. To provide this support, we rely on a variety of IT systems and components. Therefore, to assure the availability of this business process, we have developed a disaster recovery strategy that calls for the rapid failover of key systems to an alternate computing facility, located outside of the region and controlled by BMC. This strategy and the required steps to implement the tactics are documented in the Customer Support Business Service Disaster Recovery Plan. As previously stated, all plans are maintained and tested on an on-going basis. In the event of a Pandemic, the BMC Crisis Management Plan has incorporated procedures recommended by the Centers for Disease Control (CDC) to manage an outbreak that may affect BMC operations. Plans are also in place to address a potential reduction in staffing during a pandemic event. A vigorous critical process cross training program as well as telecommuting capabilities have been implemented to address these effects.

#### Product Management

Tightly coupled with the Customer Support Call Center is Product Distribution Management. This business process is responsible for providing software updates and patches as necessary to resolve customer product issues. Due to the fact that BMC provides support for the current version/release of all its products as well as one release preceding it (C-1), and limited support for older releases, it is imperative that we ensure that multiple iterations of source code are available in the event of a disaster. To provide this assurance, offsite copies of source code are maintained for recovery purposes in multiple locations. Additionally, multiple copies of product master CDs and/or tapes are distributed to three product distribution sites on three different continents. Finally, BMC has also implemented a software repository managed by a third party for keeping current versions of all marketed BMC products.

In the event of a local disruption of service, product development and distribution could be supported via retrieval of source code from an offsite facility, distribution from one of the alternate product distribution sites, or through customer downloads from the software repository.

#### Account Management

Unlike many technology companies, BMC's high-touch account management model leaves it uniquely underexposed to potential interference with its infrastructure. BMC's account management teams are geographically dispersed and can, if needed, offer redundant support to any one account. Communication and information exchange with customers is accomplished on a variety of levels and is not dependent on any one method. This insures a minimum of disruption in relationship management in most disaster scenarios.



### Business Infrastructure

Our offices worldwide use the same underlying global enterprise applications that are hosted in our primary data center. These systems support critical services such as customer sales and technical support, the management of product distribution and documentation, web applications, expense management, financial reporting, and HR processes.

Critical customer facing services such as the BMC Software website, sales and technical support are designed to fail over to a hot site in the event of a service failure in our primary data center.

- All production applications have scheduled backups with offsite storage of backup tapes.
- Networking has been implemented for BMC offices globally to provide redundant services. In the event the primary network fails the system will automatically reroute through an alternate connection.

### Security

- Facilities – Entry to BMC facilities is controlled via badge scanning and onsite security personnel.
- Systems – Access to BMC systems is tightly managed to ensure that only authorized personnel have access. BMC has implemented its own product, Control-SA®, to automate and secure password administration.
- Virus Control – A standing Virus Control team has implemented corporate-wide global virus control policies and manages response strategies to protect against virus attacks.

## 8.2 Disaster Recovery

8.2.1 Please describe how you will meet the State’s disaster recovery requirements as laid out in Sections VIII.

8.2.2 Please describe any enhanced tiers to the State’s disaster recovery requirements as laid out in Sections VIII.

8.2.3 If offering a Cloud-based solution, please provide an example disaster recovery plan, including timing. If offering an on-premises solution, describe how you will partner with the State in the development of a DR plan.

BMC offers a four-hour RTO and a 15-minute RPO for all BMC services.

For additional details please see the following link:

<https://docs.bmc.com/docs/display/public/helixsubscriber/Business+continuity+and+disaster+recovery>

Additionally, Customers can purchase annual DR test certification service for production environment. The test is scheduled by BMC in advance and all customers in each service location who subscribe to this service are tested simultaneously.

For additional details please see the following link :

<https://docs.bmc.com/docs/display/public/helixsubscriber/Yearly+Disaster+Recovery+Certification+service>

## **9. Contractor Performance and Service Level Agreements (SLAs)**



Please describe how your proposed solution meets or exceeds all the requirements in Section IX.

#### 9.1 Contractor Performance

9.1.1 Please describe any roadblocks you foresee in meeting the State's Service Level Agreements as laid out in Section IX of **Attachment K** Scope of Work.

9.1.2 Please provide any edits or comments to the State's Service Level Agreements.

BMC does not provide performance-based SLA/response time targets in its contracts. Measuring performance/response time is subjective as BMC does not control the overall latency from the customer's desktop to the service. BMC can provide analysis to indicate typical performance timing based on sample transactions.

BMC provides an availability Service Level Agreement (SLA) for the production systems in its commitment to meet a minimum 99.9% uptime. The SLA comes with hour for hour service credits in the event BMC does not meet this commitment. For a DR event, BMC offers a four-hour RTO and a 15 minute RPO for all BMC services. For more information please visit:

<https://docs.bmc.com/docs/display/helixsubscriber/Service+levels+and+support+hours>

BMC Customer Support has Initial Response Goals for all issues logged with BMC, goals can be found at: <https://www.bmc.com/support/resources/bmc-support-service-levels.html>.

#### **10. Billing & Invoicing, Corrective Action, and Service Credits**

Please describe how your proposed solution meets or exceeds all the requirements in Section X.

##### 10.1 Billing and Invoicing

10.1.1 Please confirm your understanding of the State's billing and invoicing requirements laid out in Sections X.A-B, including the distinction between Year One Solution Costs, Year One Migration Cost, and optional Post-Implementation Enhancements and Consulting Costs.

Mainline will bill in accordance with the provisions within Contract Addendum #25605, as amended and effective as of May 01, 2018, governing billing and invoicing.

##### 10.2 Service Credits

- 10.2.1 Please confirm your understanding and acceptance of the State's service credit methodology.

BMC provides an availability Service Level Agreement (SLA) for the production systems in its commitment to meet a minimum 99.9% uptime. The SLA comes with hour for hour service credits in the event BMC does not meet this commitment.

## **11. End of Contract Turnover**

Please describe how your proposed solution meets or exceeds all the requirements in Section XI.

### **11.1 Turnover Plan**

- 11.1.1 Please confirm your understanding of the State's expectations as laid out in Section XI.A of **Attachment K** Scope of Work for a State-approved Turnover Plan. Please detail how you will work with the State to develop this plan.

N/A – Mainline's offering is not a cloud-based solution.

### **11.2 Information Handover**

- 11.2.1 Please confirm your understanding of the State's expectations as laid out in Section XI.B of **Attachment K** Scope of Work for transferring ownership of non-proprietary solution components, databases, operational artifacts, and operational documentation.

N/A – Mainline's offering is not a cloud-based solution.

### **11.3 Solution Handover**

- 11.3.1 Please confirm your understanding of the State's expectations as laid out in Section XI.C of **Attachment K** Scope of Work for training State staff on your proposed solution. Please describe how you will conduct this training in accordance with Section XI. C.

N/A – Mainline's offering is not a cloud-based solution.