



FREQUENTLY ASKED QUESTIONS

1. Can information be provided regarding the winning price of Phase 1 of this RFS?

We are not at liberty to provide this information.

2. Have funds for the project already been allocated/budgeted. If so, can this be shared?

We are not at liberty to provide this information.

3. Is fixed pricing a requirement for costing the solution or can Time & Materials pricing be proposed?

Fixed pricing is indeed a requirement for costing the solution. We are looking for a fixed-price solution for this project including this phase.

4. Has an expected timeline been assigned to project completion? Are there any additional projects dependent on the completion of this project? If so, have expected timelines been established for those dependencies?

Yes, our target is to have this phase of the project completed before the end of April. Fortunately, there are no dependencies on other projects that could impact this timeline. The project is on track to be finished as planned.

5. Will the vendor from the 1st phase of the project be participate in this RFS?

We do not have any restrictions on who can participate in this RFS.

6. Is a Public Sector entity and/or government agency an acceptable entity for reference requirement of a not-for-profit organization or DAA?

We are okay with references of non-profit other government agencies.

7. Please confirm if there are to be negotiations between CAO and a preferred Vendor of governing terms and conditions prior to execution of a services contract?

Yes, there will be negotiations between CAO and the preferred vendor regarding terms and conditions before the execution of a services contract.

8. Given the potential size of our response, is there a size limitation associated to the email submission? If so, is there an alternative means for proposal submission?

The email attachment size limit is 50MB. If you reach this limit, please inform us, and we will grant you access to a temporary secure storage location for your files.

9. Can CAO provide insights as to why the services are being migrated to a new landing zone?

Having successfully completed the Azure Landing Zone setup, our next step is to proceed with the migration of Azure resources.

10. Where is the work to be performed - at a CAO work location or remotely?

Remotely is okay as well.

11. What is the expectation for staffing the solution? Is the preference all resourcing resides in GTA / Ontario, or can part of the proposed delivery team reside in other locations - onshore (Canada) or offshore (e.g. delivery center in India)?

Almost all resourcing resides in Ontario. Some reside in other parts of Canada.

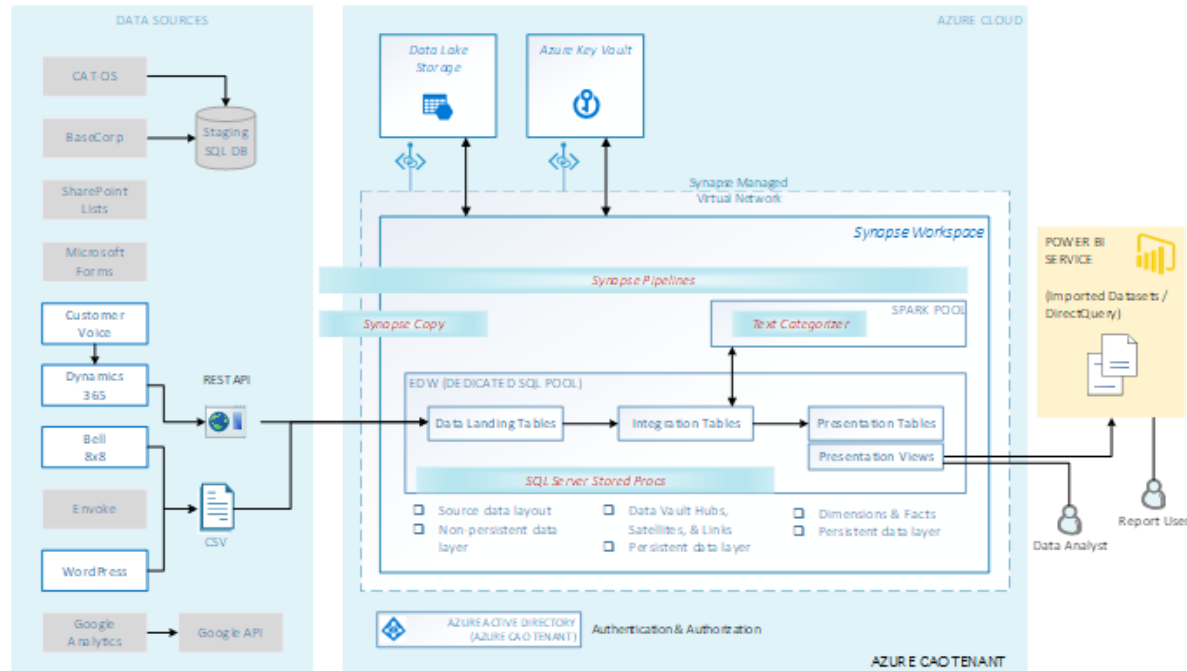
12. What is the total amount of data expected for migration in GB?

The total amount of data expected for migration is less than 100GB in total.

13. Is the migration expected to occur within one Azure tenant?

Yes.

14. Would it be possible to provide details about the Datawarehouse application, encompassing, but not limited to, a high-level architecture diagram, a list of integrations, dataflow, and the volume of data processed?



15. Is the expectation that migration will be leveraging native cloud services/tools?

No, there is no specific requirement to exclusively use native cloud services or tools for migration. We are open to utilizing any tools that are best suited for the job and ensure a successful migration.

16. On page 4 of the RFP, it is mentioned that there are additional Azure resources to be migrate. Can CAO be more specific as to what these resources are?

Azure resources to be migrated include several Azure Functions (8), Small Azure Blob storages, and 3 containerize solutions.

17. Are there any external dependencies that will need to be evaluated, repointed or tested in the process of migration implementation? If so does CAO have an approximate count of external integrations?

External Dependencies are emailchecker, SendGrid, dynamics CRM, and SFTP .

18. How many users (internal/external) are leveraging the current services/system?

External users = less than 100,000. Internal users = less than 200.

19. What level of criticality does the current services/system have for your business? What impact would an outage of current services/system have (financially, reputationally etc.)?

The current services/system have a high level of criticality for our business, with four of them being mission-critical. Any downtime for these services cannot exceed 2-3 hours. These services are hosted in virtual machines (VM)/containers/app services. A more extended outage of these critical services would have a significant impact on our reputation, potentially leading to reputational damage. Therefore, minimizing downtime for these services is paramount to our organization.

20. Could you kindly classify each of these applications into the following categories based on their business impact: 1 - Mission Critical, 2 - Business Critical, 3 - Medium Critical, 4 - Not Critical?

- VM1 (CAT) Application - Mission Critical
- VM Container App (PayByBank) Application - Mission Critical
- Datawarehouse, VM2 (KingswaySoft) and VM3 (CAT UAT) - Business Critical
- Rest of the VMs(s) - Non-Critical

21. On page 4 of the RFS, reference is made to four applications hosted in virtual machines. Could you please elaborate on the technology stack used by each of these applications? Are they running on platforms such as VMware or Hyper-V? If not, kindly provide the technology stack details for each application within the scope of services.

- VM 1:

Application: Asp.Net 4.8 MVC application connecting to Azure SQL Database, accompanied by 3 Asp.Net 4.7.2 APIs.

Web Server: IIS

Operating System: Windows Server 2012 R2

Additional Component: 1 Windows Service Application connecting to Azure SQL Database

- VM 2:

Application: Asp.Net Core 3.0 Razor Pages application connecting to Azure SQL Database

Web Server: IIS

Additional Components: KingswaySoft used for integrations, staging, and transformation

Operating System: Windows Server 2016

- VM 3:

Application: Asp.Net 4.8 MVC application connecting to Azure SQL Database, along with 3 Asp.Net 4.7.2 APIs

Web Server: IIS

Operating System: Windows Server 2012 R2

Additional Component: 1 Windows Service Application connecting to Azure SQL Database

- VM 4:

Application: Asp.Net 4.8 MVC application connecting to Azure SQL Database, along with 3 Asp.Net 4.7.2 APIs

Web Server: IIS

Operating System: Windows Server 2012 R2

Additional Component: 1 Windows Service Application connecting to Azure SQL Database

- VM 5 (Linux):

Python with PostgreSQL (Containers)

22. What is the nature of the current service/system? What functions do they serve for your business?

Mostly digital services to Condo owners /directors/managers

23. Are there established regulatory or compliance requirements, both internal and external, for each applications in scope, and is there a centralized, up-to-date policy repository in Azure to facilitate compliance with both internal and external regulatory standards?

Regarding regulatory and compliance requirements, we have thoroughly assessed each of the applications within the scope. We are actively working on establishing a centralized and up-to-date policy repository within Azure to ensure compliance with both internal and external regulatory standards. This repository will serve as a robust framework for managing and maintaining compliance across all applications and services, enhancing security and governance in the Azure environment.

24. Is any hybrid-connectivity involved in this setup (on-prem to Azure)?

No, there is no hybrid connectivity involved in this setup from on-premises to Azure.

25. Is any multi-regional setup required or already present on Azure?

No.

26. Is it a valid assumption that application SMEs will be present on the client side for application-level validation and the vendor is only required to move the infra as present in the existing Resource Group (RG) within the existing subscription?

Yes.

27. Do the source and destination Subscriptions within which the resources need to be moved reside in the same Microsoft Entra tenant?

Yes.

28. Does Microsoft EntraID govern the IAM rules and permissions?

Yes.

29. What is the size of the data residing in Data Warehouse and what product is being used for the dataware housing capabilities?

The size of the data residing in the Data Warehouse is less than 2 TB, and we are using Synapse for data warehousing capabilities.

30. Is it a valid assumption that all Azure native tooling will be used (and no external tool set/expertise are required) for all the line items mentioned under *Section 2.1: The scope of services*

Yes, while we plan to utilize Azure's native tooling for our processes, we are certainly open to considering and using external tools and expertise for migration where necessary. This flexibility ensures we can choose the best tools for each task and potentially optimize our migration strategy.

31. For Azure policies implementation, has the client already documented the policies that need to be implemented in Azure, or is it an expectation that the Vendor work with Client's governance/security teams to first define the list of these policies and then implement them in Azure?

Some policies are documented, while others will be developed based on recommendations.

32. For Training & KT, is it a valid assumption that client already has resources trained in Azure and KT will only require the vendor to provide specific training on the migration activities in scope?

Yes, our staff is trained in Azure already.

33. For all the applications mentioned in the RFS, a database does not seem to have been mentioned. Do these applications connect to the data warehouse which hosts both RDBMS and Reporting DBs? If not, to what kind of databases/sources do these applications connect?

Applications establish connections with databases. We have 4 Azure DBs and one PostgreSQL database.

34. Is it a valid assumption that a Discovery phase will be provided to assess the existing source and target environment so the selected vendor can assess the details of the environment and come up with the required plan for migration?

Yes.

35. Are Vendors expected to consider a post migration monitoring and support period?

Yes.

36. By what metrics are the security and scalability improved?

It will be measured this on a per-application basis, assessing the resources utilized upon each application's access.

37. Are there existing backups that need migration or implementation?

Yes, that's correct. Presently, our usage is exclusively limited to Azure Backups.

38. Please define what strategize means in this context.

- **Assessment and Inventory:** Start by conducting a comprehensive assessment of your existing Azure resources. Create an inventory of all your assets, including virtual machines, databases, storage accounts, networking configurations, and any other services in use.
 - **Identify Dependencies:** Determine interdependencies between resources. Identify any applications or services that rely on one another to ensure a smooth transition.
 - **Resource Tagging:** Implement a robust tagging system to categorize and label resources based on their criticality, ownership, and function. This will help in prioritizing migrations and resource management.
 - **Resource Sizing and Right-Sizing:** Analyze the current resource sizes and utilization. Optimize resource allocation by right-sizing instances to match your new ALZ's requirements and budget constraints.
 - **Backup and Data Migration:** Ensure you have up-to-date backups of all critical data and configurations. Plan for data migration strategies, whether it's using Azure Data Factory, Azure Site Recovery, or other suitable Azure services.
 - **Select Migration Tools:** Depending on the specific resources and workloads, choose the appropriate migration tools and services provided by Azure. For example, Azure Migrate, Azure Database Migration Service, or Azure Site Recovery.
 - **Recreate Resources:** In some cases, it may be more efficient to recreate resources in the new ALZ environment rather than migrating them directly. This could involve setting up new virtual machines, databases, and services from scratch.
 - **Testing and Validation:** Set up a testing environment in the new ALZ to validate the migration process. Ensure that applications and services function correctly and meet performance expectations.
 - **Data Replication and Sync:** For databases and other data-intensive applications, establish data replication or synchronization mechanisms to keep data consistent during and after migration.
 - **Rollback Plan:** Develop a rollback plan in case any issues arise during the migration. This plan should include steps to revert to the previous Azure environment if necessary.
 - **Security and Compliance:** Ensure that security measures and compliance requirements are met in the new ALZ environment. Implement access controls, encryption, and auditing as needed.
 - **Training and Documentation:** Train your team on the new ALZ environment and provide documentation for reference. Ensure that your team is well-prepared to manage and monitor resources in the new environment.
- Incremental Migration:** Consider a

phased or incremental migration approach, focusing on migrating less critical or non-production resources first to minimize disruption.

- **Monitoring and Optimization:** Continuously monitor resource performance, costs, and security in the new ALZ. Optimize configurations as needed to ensure efficiency and cost-effectiveness.
- **Communication:** Keep stakeholders informed throughout the migration process. Maintain open lines of communication to manage expectations and address concerns.
- **Post-Migration Testing:** After completing the migration, conduct thorough testing and performance analysis to confirm that all resources are functioning optimally in the new ALZ.
- **Continuous Improvement:** Implement a process for ongoing evaluation and improvement of your ALZ environment, ensuring it aligns with your organization's evolving needs and goals.

39. What testing strategies are currently used for these applications? Are there any specific testing requirements for the migration process? Are there existing test suites to run? Do these need to be developed?

Currently, most of our applications undergo manual testing primarily through Staging or User Acceptance Testing (UAT) environments. Following the migration process to production, we conduct a smoke test to ensure basic functionality. While we have established testing processes in place, there are no specific testing requirements solely dedicated to the migration process. Regarding existing test suites, we do possess suites that have been utilized for our regular application testing procedures. However, these suites may need to be adapted or extended to include testing scenarios specific to the migration process. The extent of development required for these test suites will be evaluated on a case-by-case basis as we progress with each application's migration.

40. How do you validate the functionality and performance of applications in new environments?

The validation of functionality and performance for applications in new environments is predominantly carried out through manual testing processes. Our team conducts thorough manual testing to ensure that the applications are functioning as expected and meeting the performance criteria in the new environments. This approach allows us to carefully assess and validate various aspects of the application, including functionality, usability, compatibility, and performance, while also addressing any specific requirements or nuances associated with the new environment.

41. Existing Documentation: What existing documentation is available for each application? How current and detailed is it?

For the majority of our applications, we rely on pipelines for deployment processes. Fortunately, we have comprehensive documentation in place for these deployment pipelines. This documentation is up-to-date and detailed, providing clear instructions

on the deployment steps, configuration settings, and any other relevant information needed for successful deployment. It serves as a valuable resource for our team to ensure consistency and reliability in the deployment process across different applications. We also have high level application architecture documentation

42. In what format is the current documentation? Where is it stored, and how is it accessed?

The current documentation is primarily stored in electronic formats. These documents are typically in DevOps Wiki or PDF or Word document format. They are securely stored in our internal document repository. Access to this documentation is controlled and restricted to authorized team members. We ensure that it is readily accessible to our team members upon request to maintain security and confidentiality.

43. What specific details must be included in the documentation for each application? (e.g., configurations, environment variables, dependency diagrams)?

Documentation Update Processes:

- Regular review schedules.
- Feedback mechanisms from users.
- Version control systems.
- Automated alerts for outdated content etc

44. How should issues be prioritized for corrective actions?

After migrating apps to the Azure Landing Zone (ALZ), issue prioritization for corrective actions should follow a structured approach:

- **Impact Assessment:** Prioritize issues based on their impact on business operations, user experience, and system stability. High-impact issues that affect critical business functions or a large number of users should be addressed first.
- **Urgency:** Consider the urgency of the issue. Issues that cause immediate disruptions (like system outages) require prompt attention, whereas less urgent issues can be scheduled for later resolution.
- **Complexity and Resources Required:** Evaluate the complexity of resolving each issue and the resources required. If a high-impact issue requires extensive resources or time, balance it with quicker fixes to maintain system functionality.
- **Dependencies:** Prioritize issues based on azure resources dependencies. Some issues might be blockers to other tasks or processes and resolving them could have a cascading positive effect.

- **Compliance and Security:** Issues related to security vulnerabilities or compliance breaches should be given high priority due to potential legal and reputational risks.
- **Feedback and Input from Stakeholders:** Incorporate feedback from stakeholders, including end-users and IT teams, to understand which issues are affecting them most.
- **Long-Term vs Short-Term Fixes:** Balance between implementing quick fixes for immediate relief and working on long-term solutions that address root causes.

By following these guidelines, you can ensure a methodical and effective approach to prioritizing issues post-migration to ALZ.

45. How are your organizational policies and governance standards currently implemented / managed within your Azure environment?

Given that policies are already defined in the Azure Landing Zone (ALZ), the focus shifts to their effective management and enforcement within the Azure environment. The approach includes:

- **Policy Integration:** Integrating the pre-defined ALZ policies into the existing Azure environment, ensuring they align with the organization's specific needs and compliance requirements.
- **Assignment and Scope Management:** Assigning these ALZ policies to appropriate scopes such as subscriptions, resource groups, or individual resources. This step is crucial for ensuring that policies are applied where most relevant.
- **Role-Based Access Control (RBAC):** Utilizing RBAC to control who can manage and modify these policies, thereby maintaining a secure and controlled environment.
- **Leveraging Azure Policy Service:** Employing Azure Policy to enforce and evaluate the ALZ policies across the environment, ensuring compliance and governance.
- **Automated Remediation:** Setting up automatic remediation actions for policy violations to maintain compliance and reduce manual intervention.
- **Monitoring and Compliance Reporting:** Continuously monitoring the adherence to these policies and generating compliance reports to track and audit the environment's state.
- **Training and Awareness:** Ensuring team members are knowledgeable about the ALZ policies and their importance, promoting a culture of compliance and awareness.
- **Documentation and Knowledge Sharing:** Keeping documentation up-to-date regarding policy implementations and changes, and sharing knowledge across teams for consistent understanding and application.

46. What is the anticipated impact of these policy implementations on daily operations?

Initially, there may be a slowdown in operations in the beginning as employees adjust to new workflows and procedures. Training sessions will likely be required to familiarize staff with the changes, demanding an investment in time and resources. While short-term productivity might decrease, efficiency could improve in the long term. Additional resources may be needed for compliance monitoring and communication efforts to ensure everyone understands and adheres to the new policies. Finally, policy implementation might necessitate technological upgrades or infrastructure changes, influencing operations during the transition. Overall, while there might be initial challenges, the long-term benefits often include enhanced operational efficiency and risk mitigation.

47. Is there a defined schedule for reviewing and updating these policies?

There is a defined schedule for regularly reviewing and updating policies. This includes setting specific intervals for reviews, conducting additional reviews in response to significant changes or incidents, involving key stakeholders in the process, promptly updating and communicating any changes in the policies, and fostering a culture of continuous improvement and feedback. This approach ensures policies stay relevant, effective, and aligned with organizational and external needs.

48. What metrics or indicators will be used to measure the success of policy implementation?

To measure the success of policy implementation, we follow some of the following metrics:

- Compliance Rate: Measures how well the policy is being followed.
- Incident Frequency: Tracks the number of policy violations or related issues.
- Audit Results: Assess adherence to the policy and identify improvement areas.
- User Feedback and Satisfaction: Gathers insights on policy perception and impact.
- Efficiency Metrics: Evaluates improvements in task completion times, resource utilization, and cost savings.
- Risk Reduction: Monitors reduction in risk exposure and security incidents.
- Training and Awareness Metrics: Assesses the number of staff trained and awareness levels.
- Behavioral Changes: Observes changes in employee behavior or practices.
- Performance Benchmarks: Compares pre- and post-implementation performance.
- Policy Update Frequency: Indicates the stability or need for revisions of the policy.

49. How do you envision the knowledge transfer process to occur for the ALZ environment and related processes?

To facilitate effective knowledge transfer for the Azure Landing Zone (ALZ) environment:

- **Develop Comprehensive Documentation:** Cover all aspects of ALZ, including architectural and operational guidelines.
- **Organize Training Workshops:** Conduct educational sessions for both technical and non-technical staff about the ALZ environment.
- **Provide Hands-On Training:** Offer practical learning experiences with guided tutorials and sandbox environments.
- **Implement Mentoring Programs:** Pair experienced staff with newcomers for personalized learning and shadowing.
- **Schedule Regular Meetings:** Host discussions for sharing experiences and addressing ALZ-related challenges.
- **Use Online Platforms:** Create forums and wikis for ongoing access to resources and community support.
- **Incorporate Feedback Mechanisms:** Use feedback to continuously improve the knowledge transfer process.
- **Promote Cross-Functional Collaboration:** Encourage interactions across different teams for a broader understanding.
- **Update and Refresh Knowledge Regularly:** Keep training and resources current with the evolving ALZ environment.

50. The RFS outlines the objective of identifying and securing a vendor to provide an estimate for the migration of all applications, data, services, and Azure resources to the new Landing Zone environment.

- a) To better understand the data that needs to be migrated, could you provide details on the total volume of data (in GB/TB/PB) and its current storage locations within Azure? For instance, please specify if the data is stored in blob storage, SQL Database, or any other Azure resources.

The majority of the production databases are more minor than 50 GB in size, and the Azure Storage accounts hold less than 2 GB of data.

- b) Could you kindly list all Azure services and resources that require migration, outside of the applications listed in scope?

All applications are currently hosted within the Azure Cloud environment. However, there is a requirement to migrate them to newly created Azure subscriptions that are configured within a firewall/ VNet.