ATTACHMENT 1:

RFI TERMS OF REFERENCE AND PROPOSED SOLUTION QUESTIONNAIRE: INTEGRATED AND AUTOMATED APM SYSTEM

Product Positioning

1) ***Research*** - What percentage of turnover is invested in Research and Development of the proposed product set?
2) ***Vision*** - Is there a clear, shared product vision and how well is the product vision aligned with the expected industry, local and international, market and technology trends?
3) ***Accreditation*** - The Vendor is to provide details on the Industry accreditations and conformance to standards on the proposed product offering.

Solution Architecture

1) The vendor is to provide a conceptual solution architecture including a brief overview and description of the various components required within the solution to provide an optimal Unified Enterprise Application Performance Management solution aligned to CIPC's requirements and industry best practices. This should provide CIPC with a holistic view and understanding of the Vendor's proposed solution, its components, the role and fit of each component and internal workings;
2) The vendor needs to provide a single solution that can cover all the requirements within this document, please list the solution and online references to the solutions capabilities;
3) The vendor needs to consider that Dynatrace AppMon and DCRUM are currently in use at CIPC. The vendor needs to provide information on how the proposed solution will integrate seamlessly with the aforementioned solutions, to protect the investment made by CIPC in these product sets;
4) The vendor is required to provide all deployment options around sizing and storage required. The solution needs to be an on-premise deployment;
5) The vendor is to provide an overview and explanation of its agent/agentless technology used, how it fits into the overall architecture, types of agents, how agents are deployed, how are agents upgraded or maintained, the typical footprint and overhead on the respective hosts and network, and the various connection types used to communicate back to the management console. The vendor should also provide details if its solution uses agent-less technology when JavaScript injection is not an option due to regulations or technical issues;
6) The vendor is to provide a brief explanation of the various high-availability and recovery options available to CIPC as part of the proposed solution;
7) The Vendor is to provide details available in its solution to facilitate multi-tenancy (SaaS); and
8) The Vendor is to provide details around its API integration approach and options. This is for 3rd Party CIPC systems to integrate to the Solution and for the Solution to pull data from 3rd Party CIPC systems via API's.

Security

1) The Vendor is to provide details around the user profile and role-based access methodologies and authentication used within the proposed Solution;
2) The Vendor is to describe how sensitive data in discovered transactions and measurements are/can be handled. (This includes from the point of data/transaction discovery, transportation, storage to presentation in dashboards); and

3) The Vendor is to provide details around any security certification or compliance achieved for the proposed Solution (e.g. i.e. ISO2700x, PCI-DSS, application, database and any other technical standards).

Functional Requirements

1) The Vendor is to demonstrate its ability to monitor an application end to end;

2) The Vendor is to provide details around its capabilities to monitor end-to-end real user experience as well as the creation and monitoring of synthetic end user transactions:

   a. Details around hosting options available to CIPC regarding synthetic transaction monitoring is to be provided (SaaS or on premise);

   b. The Vendor should also provide details around its capabilities to integrate the entire end user/customer experience across real user monitoring, synthetic monitoring, mobile and other browser-based interactions; and

   c. The Vendor should also provide details around how its proposed solution can provide insights into how end users engage with applications on mobile devices.

3) The Vendor is to provide details on how its proposed solution will assist CIPC to improve its system availability, stability and performance through rapid root cause identification and leveraging advanced analytics and automation to pro-actively diagnose performance problems and avoiding negative impact of application or infrastructure outages to business;

4) The Vendor is to provide details should it have any plans to enhance or replace analytic tasks with intelligent monitoring software that utilizes anomaly detection, big data analysis and artificial intelligence;

5) The Vendor is to provide details on how its proposed solution can assist CIPC to improve its productivity across operations and development environments leveraging CI/CD pipeline and DevOps principles;

6) The vendor needs to list the testing procedures prior to changes being implemented in newer releases; and

7) Please list and elaborate on the value the proposed solution can deliver to CIPC.

Technical Requirements

1) List all capabilities and functionality available through the proposed solution;

2) Describe the total amount of hosts that can be monitored by the proposed solution and provide a customer use case with the largest deployment;

3) Provide detail on how the proposed solution will deliver on monitoring gapless data and if full stack analysis can be provided;

4) Provide detail on how the proposed solution's analytics engine provides root cause analytics and provides actual problems not just symptoms and events;

5) Provide detail on modern monitoring options, monitoring of VMware, AWS, docker, Golang and AWS lambda as examples;

6) Provide detail on monitoring options available for VB5/VB6;

7) Provide detail on containerization monitoring for the proposed solution;

8) Explain in detail how the proposed solution depicts dependencies and topology mapping and if the topology data is available via API's;

9) Does the proposed solution provide network monitoring including metrics such as QoS, packet loss and connection issues?;

10) The proposed solution needs to provide log file analytics and include log file analytics into the root cause analytics, describe how the proposed solution handles this requirement;

11) Provide detail on how the proposed solution can monitor every process on a monitored host and the detailed metrics associated to this. Do these metrics get incorporated with the overall root cause analysis?

12) Does the proposed solution provide detail on every file change on a host and when events occur on a host such as server shutdowns?

13) Can the proposed solution replay the evolution of problems that occur in real time?

14) Can the proposed solution provide the customer and environment impact when a problem occurs?

15) List all available API's within the proposed solution;

16) Summarise the ease of use of the proposed solution;

17) List all supported technologies;

18) Provide all the detail required in order to install a single agent on a host and the configuration steps required to monitor a .Net and a Java application running on the same host;

19) Does the proposed solution have auto deployment options, please describe in detail how this works if available;

20) Does the proposed solution auto-discover applications, transactions and monitoring candidates;

21) Does the proposed solution monitor every transaction; and

22) Describe how the proposed solution would monitor C/C++ based applications including data centre transactions that are not user centric. Examples of these would be windows services and batch jobs.

Support and services

1) Please provide detail on local support of the proposed solution;

2) Please provide the number of certified individuals available to the vendor that are proficient in utilizing the proposed solution and please provide proof of the certifications;

3) Please provide specifications on the services and support provided by the vendor;

4) Please provide a list of customers using the proposed solution within South Africa; and

5) Please provide a schedule of a few customers that leverage the proposed solution globally.

COMPLIANCE

Number	Questions	Compliance - please mark with an X			Terminology
		Not Compliant	Partially Compliant	Compliant	
1	Out of the box Integration with Dynatrace AppMon and Dynatrace DCRUM.				
2	Does the solution have an on-premise solution?				
3	Does the proposed solution have a high availability deployment option?				
4	Can the solution be scaled as a single monitoring entity to handle load?				
5	Can the solution handle multi-tenant applications				
6	Does the proposed solution provide synthetic monitoring of external and internal web applications?				
7	Is Synthetic monitoring and User experience monitoring integrated to show availability?				
8	Is User experience monitoring integrated with the code level transaction calls?				
9	Does the solution have Artificial Intelligence?				
10	Can the solution provide root cause analysis through causation not correlation?				
11	Does the solution have anomaly detection?				
12	Does the solution integrate with CI/CD tool sets?				
13	Can the solution scale to over 30 thousand hosts?				

Number	Questions	Compliance - please mark with an X			Terminology
		Not Compliant	Partially Compliant	Compliant	
14	Does the solution provide **full stack analysis.**				Full stack analysis refers to monitoring everything from layer 7 upwards. This includes monitoring of the web-based applications, the executable code, every process running, every file change, every log file every host metric including the network from interfaces and process to process
15	Does the solution automatically monitor docker containers with no configuration.				
16	Can the proposed solution monitor VB5/VB6.				
17	Does the proposed solution provide **topology** and **dependency** mappings.				Topology and dependency mappings refer to every transaction linked end to end from the user's device to the backend server calls, including every line of code and every database statement. This needs to include dependencies based on processes powering executable applications or network communication for every endpoint including a process that is not application based
Number	Questions	Compliance - please mark with an X			Terminology
		Not Compliant	Partially Compliant	Compliant	
18	Does the proposed solution provide network monitoring including connection problems and retransmission rate.				
19	Does the proposed solution provide log file analytics of every log file on a host including event logs.				
20	Can performance events be triggered on specific patterns that reside within the log files.				

21	Does the proposed solutions artificial intelligence engine use log file analytics for root cause analysis.				
22	Can the solution leverage automatic rule and tag detection of hosts, processes and executable code.				
23	Does the proposed solution monitor every process running on a host.				
24	Do process and host metrics get leveraged by the artificial intelligence for root cause analytics.				
25	Does the proposed solution provide detail on every file change on a host and when events occur on a host such as server shutdowns.				
26	Can the proposed solution replay the evolution of problems that occur in real time				
27	Can the proposed solution provide the customer and environment impact when a problem occurs.				
28	Does the proposed solution auto-detect all processes and technologies and auto-instrument the applications.				
29	Does the proposed solution monitor every transaction.				
Number	Questions	Compliance - please mark with an X			Terminology
		Not Compliant	Partially Compliant	Compliant	
30	Does the proposed solution store every transaction for manual analysis at any given time.				
31	Is there local support for the proposed solution				
32	Does your organization have local certified consultants for the proposed solution.				