Assessing AIOps Platforms

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AIOps Definition : AIOps platforms is a discipline under ITOM that combines big data and AI/Machine Learning functionality to enhance and partially replace a broad range of IT operations processes and tasks, leading to a more proactive and predictive insight driven environment.

Goal is to discover patterns to describe databases being considered and leverage that for **real time and historical analysis to predict possible future incidents.**

Points to ponder for the CXOs to assess an AIOps tool

- **Rates of raw ingestion** : This unravels the data collection speeds from various source nodes. Measurements include the following :

1. Latency of transport

2. **Rate of data flow to distributed database** : Rate at which data moves into staging area of distributed database – why is this important for assessment? This relates to the ETL side of things. How fast we process the inbound data

3. **I/O Mb/Sec** : Measurements that apply are input/output measurements per second and Megabytes per second Is this a measurement criterion for latency? This is to do with the throughput of storage devices.

- **Rate of Data Preprocessing** : The preparation starts from basic indexing to elaborate structuring. For the purpose of measuring performance the consumption of time, space and computing power for these needs to be monitored.

- **Query latency** in the database is needed to be monitored.

- **Rates of pattern learning** :

1. **Time of pattern recognition** : Actual time taken for an algorithm to arrive at a pattern needs to be monitored.

2. **Effectiveness of pattern recognition** : Effectiveness of the pattern learning needs to be monitored.

- **Rate of anomaly detection** : A key performance indicator is anomaly detection.

1. **No. of anomalies detected/ unit time** : Measuring the number of anomalies detected by the AIOps tool in a given time period.

2. **Anomaly co-relation with event data** : Correlating anomaly information with other sources of metrics and event data in order to contextualize the effectiveness of anomaly detection and the robustness of established patterns.

- **Data utilization** : Ability to incorporate data from different IT systems and sources such as from application development tools to ITOM data, I&O and application operation data to even IOT , social media and LOB applications

- **Support for wide variety of data** : Ability to incorporate data from different IT systems and sources.

Application Developments Tool Data
Build/Continuous Int.
Source Code Mgmt.
Issue/Bug Tracking
Testing

Other Tool Data Sources
IAM
LOB Applications
Social Media IoT

ITOM Data
Agents Discovery
Mechanisms Automation
Artifatcs Configuration
States Documentation
Service Desk

I&O and Application Opertional Data
Streams
Logs
Packets
Flows

Public and Private Content Sources
Government/Nonprofits
Consumer Applications
Commercial Data
Providers

AIOps Platform

AIOPS PLATFORM

- **Integration with automation tools:** AIOps tool's capability to integrate with automation platforms will be crucial. Existing tools such as IT process automation tools, continuous configuration and automation tools, and application release automation tools are critical for automation.

- **Training required:** The cost to company on training the employees to use AIOps tool.

- **Cost of implementation:** This would be one-time implementation hence cost is an important factor.

- **Availability of SaaS solution:** On – Premise solutions encounter problems as they scale because they become prohibitively expensive, hence SaaS based models are preferred.

- **Manual Intervention:** How much manual intervention is needed to improve algorithms?

- **Adopting one or more AIOps solution:** Sometimes companies employ multiple AIOps solutions for different use cases. A single platform approach is more advisable.

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