InformixHQ – Next Generation Informix Monitoring and Administration

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IBM

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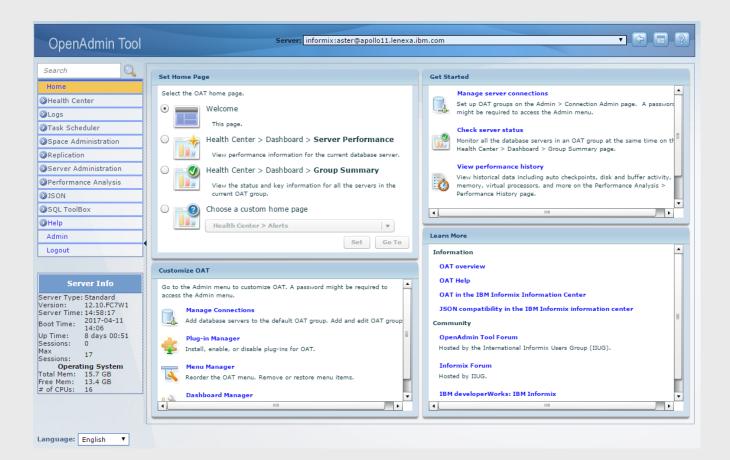
Where is InformixHQ?

- Marquee feature of Informix 14.10

- Elegant monitoring, and administration tool

- Released as a fully supported feature

- Licensed and distributed with the product

- Two simple .jar files

- Available in the future fixpacks of 12.10 as well

- Seeking key design partners

Let's Talk About OAT
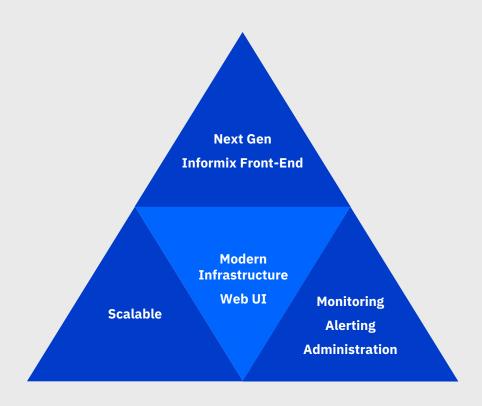
Perceived & Real Benefits of OAT

- Visual

- Web-based

- Simplifies using Informix

  – Lowers the requirements of understanding the terminology, functionality, commands, etc.

  – Running commands

  – Quickly understand the high-level concepts

- Supported by the Informix Team

- Free

Where does OAT fall short?

- Difficult to install in some cases

- Insecure

- Hasn't been enhanced since 2014

- Built on older technology

- Limited functionality, including

  - Doesn't connect to multiple servers simultaneously
  - User must be logged in to website to view current status
  - Lack of monitoring and alerting
  - ReST APIs
  - Integration with modern tools

Designing InformixHQ, ground-up!

Next Gen

Informix Front-End

Modern
Infrastructure

Web UI

Scalable

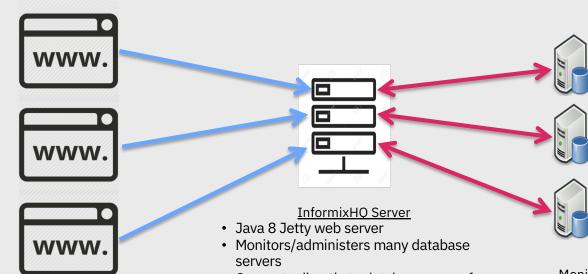Monitoring

Alerting

Administration

What is InformixHQ?

- A modern tool for monitoring and managing your Informix database servers

- Purpose built for ease-of-use, scaling out, and optimizing DevOps needs

- Provides critical performance management capabilities
  - Tracking how metrics change over time
  - Monitors your database servers even when you've stepped away from your screen

- Provides a customizable alerting system
  - Integration with email, Twilio, or PagerDuty

- A single tool that can be shared by the DBAs, app developers, ops engineers, consultants, management

- Accessible from any desktop, laptop, or mobile device

- It's a path forward from OAT

InformixHQ Achitecture

InformixHQ Server
- Java 8 Jetty web server
- Monitors/administers many database servers
- Connects directly to database server for
  - Live Data
  - Administration
- Connects to Monitoring agent for
  - Monitored data
  - Events
- REST API
  - For website, tools, 3rd parties

Monitoring Agent
- Java 8 agent
- Installed on each production database server
- Requires only read access to system
- Native command execution to gather OS statistics

User Interface (Web)
- Redesigned for smoother experience
- Modernized tech and design
- Written in Angular 2 (Javascript)

InformixHQ Architecture – Agent

- Lightweight Java 8 jar

  – Easy connectivity to the server through JDBC

  – Super easy upgrade path

  – Supports all platforms natively

- Installed on each Informix database server that you want to monitor

- Requires only read access to system

- Queries server at intervals to collect data for monitoring

- OS commands allow for system level monitoring

- Monitoring data stored in a repository database configured by the user

InformixHQ Architecture – Server

- Java 8 Jetty Web server
  - Hosts REST API's
    - API's for administering the server
    - API's for configuring monitoring
    - API's for setting up alerts
  - Hosts web user interface (UI)
- Monitors and administers many database servers
- Connects directly to database server for
  - Live Data
  - Administration

- Connects to Monitoring agent for
  - Monitored data
  - Events

- Monitoring/Alerting system
  - Manages monitoring and alerting profiles for groups and servers
  - Evaluates and generates alerts for problem areas
    - Based on monitored data collected by agents

InformixHQ Architecture – Web UI

- Built on latest technology/standards
  - Angular 2 Framework
  - Typescript 2
  - HTML5
- Scalable to mobile devices
  - No need for special apps
- Brand new design/interface to administration and monitoring
  - Single unified design approach to viewing problems on a system and taking actions
  - Monitored data/live data/alerts all presented in an easy to view screen
- Connects to the REST API on the server
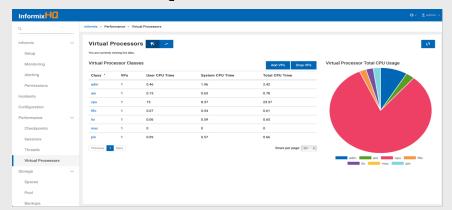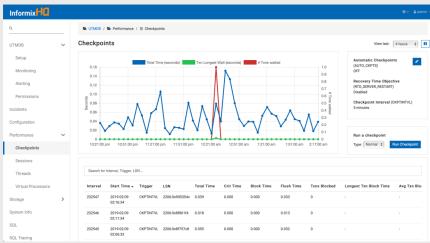
Key Functionality

- Metrics Monitoring
  - Easier, customizable
  - Can alert on any metric of data in the server
  - Runs system commands to pull system level metrics (CPU, disk i/o)
  - UI presents monitored data graphically to highlight trends
- Live data
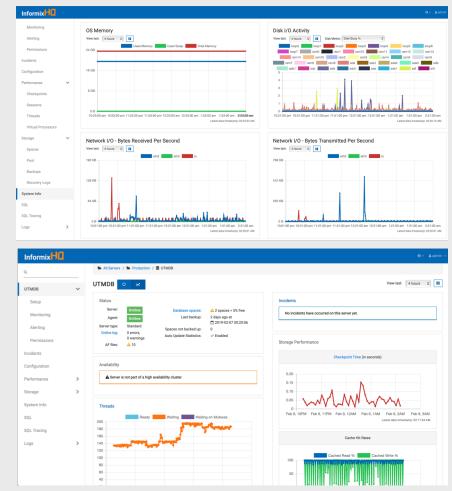 - Can get current data about the system

- Administration
  - Taking the best of OAT, prioritizing based on usage/feedback
- Scalable
  - Group monitoring and alerting
- ReST APIs and integration with modern IT ops
  - Pager Duty, Twilio, Email

InformixHQ v1.0.0

Thank You

Questions

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