Quickborn Application Monitoring **Solution**

QUICKBORN
light to success

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Quickborn Application Monitoring Solution

Quickborn Application Monitoring Solution is a tool that automates the monitoring of mission critical system resources, efficiently detecting potential problems and their context, and responding to these events. Any type of monitoring can be configured into the Quickborn monitoring tool.

Quickborn Application Monitoring Solution enables the accurate and timely execution of your IT processes by eliminating costly errors, reducing latency and minimizing risks in critical business processes. Quickborn Application Monitoring Solution helps you to enhance the efficiency and performance of your IT department and improves your business agility by allowing immediate access to critical information.

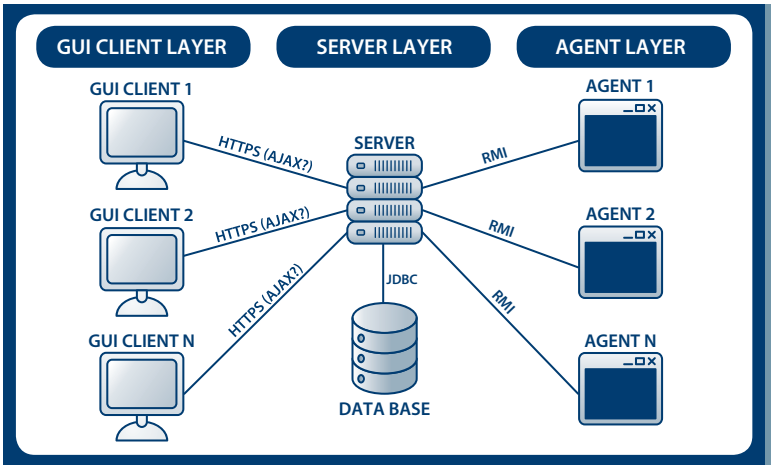
FUNCTIONAL BENEFITS:

- More efficient monitoring of mission critical systems
- Faster error detection
- More complete error scope understanding by the operator
- Shorter learning time for new operators (the monitoring tool carries the necessary know-how, not the operator)
- Shorter system downtimes as problems are detected and fixed faster and with context (the GUI Client visualization shows also connecting components)
- Easier implementation of automated workarounds

TECHNICAL BENEFITS:

- Flexible/configurable client server architecture system built on operating system independent Java technology.
- Revolutionary and fully configurable information visualization system allowing the operator to quickly understand problems within their full context.
- Can monitor on any host and operating system that supports Java technology
- Best programming techniques applied to ensure each component is small, efficient and uses minimum system resources during operation, minimizing impact on monitored systems.
- Fully configurable to monitor virtually any system and collect any variety and amount of information
- Fully configurable to run / execute a program or send automated warning message to operator in email, SMS, phone call or pager based on configurable trigger events

TECHNICAL ARCHITECTURE:



For more information, visit www.qbcs.com

Quickborn RIB Monitoring Solution

Quickborn RIB Monitoring Solution is a tool built upon the Quickborn Application Monitoring tool and is specifically designed to facilitate the monitoring and analysis of operational activities of the Retail Integration Bus (RIB) integration product of Oracle Inc.

Quickborn Consulting has been working with Oracle Retail (formerly called Retek) technologies, for more than a decade and has extensive technical and functional expertise in house for the RIB and the point solutions from the Oracle Retail family of solutions that the RIB integrates. Using this knowledge and its technical expertise in programming, and its full depth knowledge of monitoring methodologies, Quickborn has created a special configuration in its monitoring solution to be specifically used to monitor and analyze the components of the RIB.

OPERATIONAL BENEFITS:

- **Fast detection of problems in the RIB** – parameters allow the precise setting of each check frequency per checked component of the RIB. This way the RIB is not over burdened with monitoring queries, however potential problems are still detected within pre-defined time limits if they occur.
- **Full context visualization of RIB topology** – Using the visual interface of the RIB monitoring tool, monitoring teams can see problems and component status in its context, with the visual representation of the RIB topology clearly showing connections between various components and thus signalling what other components and systems may be affected by a potential problem.
- **Easy to use visual interface** – the RIB monitoring GUI is intuitively designed and is easy to use by monitoring personnel
- **Decreased training time for RIB monitoring personnel** – with RIB topology visualization, teams monitoring the RIB do not necessarily need to be explicitly familiar with all components of the RIB and their respective connections to other components and roles in the overall RIB mechanism – the visualized topology already carries all this information in it.
- **Configurable user language** – language of the GUI and its alerts and messages can be localized into any language.
- **Configurable alert options** – multiple options exist for warning about a new problem when it is detected by the monitoring tool: audible or visual alert in the monitoring tool GUI, SMS, email or telephone call are all options (additional software modules may be required)
- **Information audit options** – gain insight into performance of the RIB via more accurate information and historical record on the state of the RIB over any given time period.
- **Multiple operators** can use the monitoring tool in parallel from different workstations.

TECHNICAL BENEFITS:

- **Easy to configure** – changes in the RIB topology or the monitoring rules are easy to implement and do not require programming of the monitoring tool itself, only require the configuration of desired functionality.
- **Can monitor distributed systems** residing on multiple servers via its agent – server architecture.
- **Easy to install and maintain,** uses very little CPU and memory on the monitored systems (depending on configuration)
- **Modern and international standards** used in the implementation – Java, Oracle DB, Jdbc, RMI.
- **Lean approach to querying** RIB application components for runtime information – RIB components are requested to report status information about itself in a way that does not interfere with normal operation and performance of the RIB.

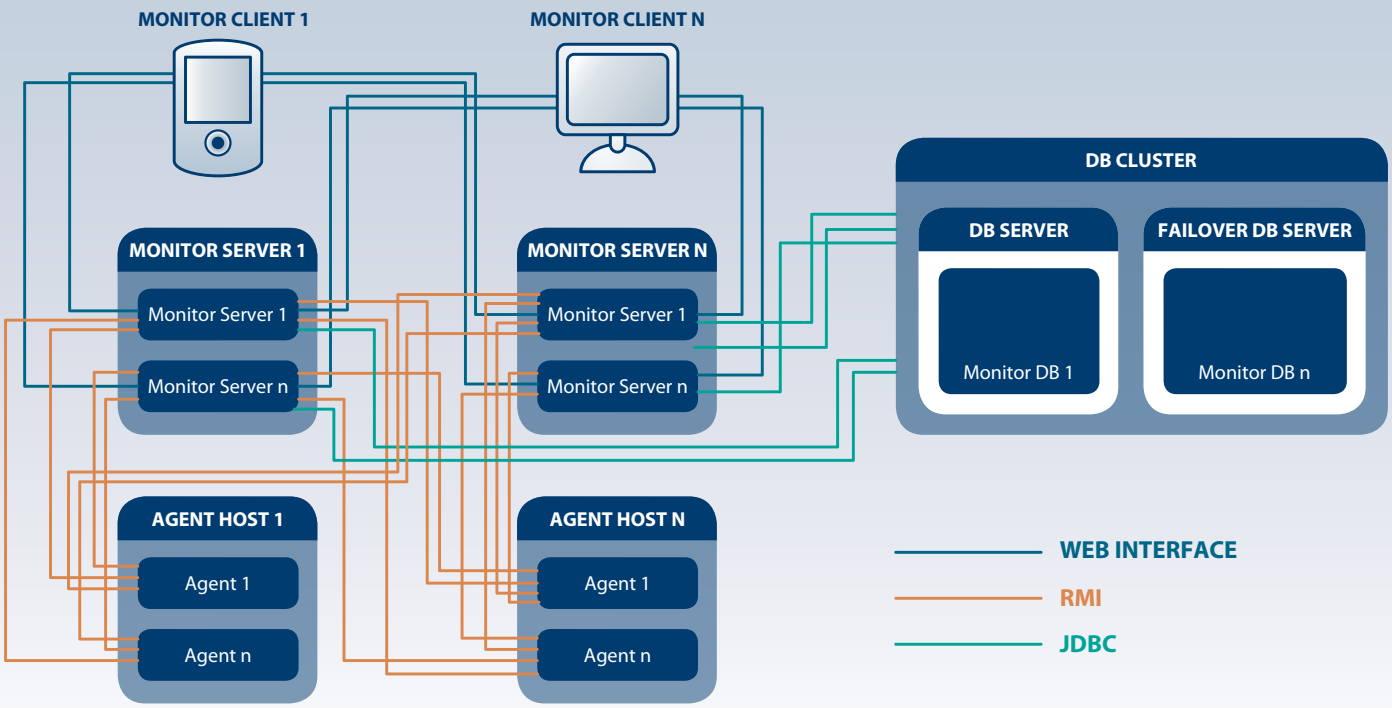
BUSINESS BENEFITS:

- **Less system downtime** – due to data inconsistency issues caused by undetected or late detected RIB failure
- **Less time required to train** new monitoring team members

TECHNICAL ARCHITECTURE

The RIB Monitoring tool is implemented as an efficient thin and mission critical monitoring system with three tiers in its software architecture:

- Client GUI: A Java application which connects to the monitoring server to query and display relevant and up to date information to the monitoring team member about monitored systems, displays alerts as needed and allows the user to confirm alerts and view alert and component related messages and information. Multiple clients can connect to the same monitoring server at the same time.
- Server: This layer collects and stores all information related to monitored components and client GUI layout. Failover capable both in its server application and in the database engine that is used to store information.
- Monitoring agent: This layer resides on the server where monitored processes are executed, this layer receives information from the server regarding how information needs to be collected. These information collection instructions are then executed and results are sent back to the monitoring server.



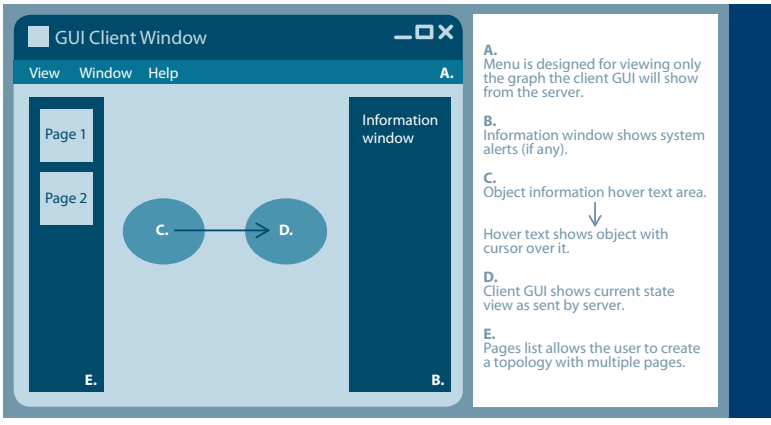
GUI LAYOUT DESIGN

The RIB Monitoring tool client user interface has the following layout and content:

The GUI layer in addition to displaying colors may also be able to play a sound based on pre-defined events.

The Information Window shows failures (in monitored objects or the monitoring tool components themselves).

As a feature the Client GUI can also monitor the monitoring tool itself and show its status, which shows and reports the status of all its agents and the server.



HOW DOES IT WORK ON A DAILY BASIS FOR THE USER?

After installation and configuration of the RIB monitoring tool, documentation describing the monitored components and settings for these monitoring actions are provided to the customer along with a general user guide for using the RIB Monitoring tool on an everyday basis.

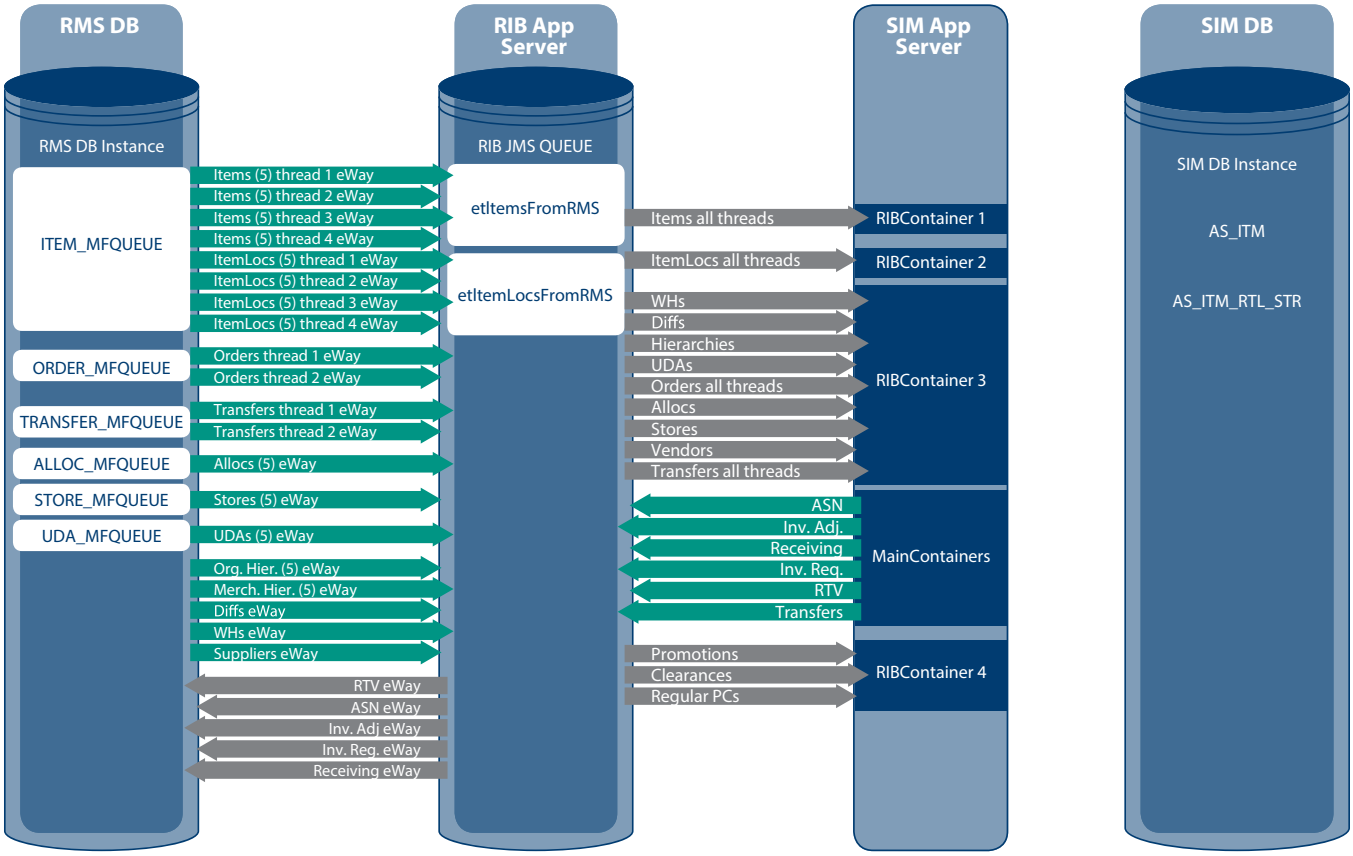
Following installation, handover of documentation and introductory demonstration and brief training, RIB monitoring team can execute daily monitoring activity by launching the RIB monitoring client application and following status in real time of the RIB in the client screen.

WHAT IS MONITORED EXACTLY?

All components of the Retail Integration Bus are monitored including the IQ, all topics and message flow attributes and characteristics and all messaging components, including the RIB hospital and the subscribing application side components like the message family queues and overall data integrity state.

EXAMPLE SCREENSHOT

Below RMS SIM RIB Integration Diagram shows an example layout for the RIB monitoring client screen, showing each monitored component entity of the RIB as a shape that has different colors to indicate whether that component is OK, not OK, or its status is unknown. When a component becomes not OK, an alert message is displayed to the user. Moving the mouse cursor over the shape the user is shown a message describing the reason a component is not OK (what the test was which failed). In this context the user can see the problematic component in context to the rest of the RIB topology and infrastructure and can immediately understand what other components this problem may affect.



Above image is illustration only, an actual RIB topology will be specific to client environment.