



MiriMON[®] provides IPTV service providers, including Satellite and Terrestrial hybrid systems, with an unprecedented view of the customer experience. MiriMON reports when individual set top boxes, network segments or services exhibit problems, enabling quick fault diagnosis and reducing operational costs. This includes:

- QoE measurement for each and every consumer
- Fault & performance issues by customer
- Fault & performance issues by root cause
- Historical view for trending & analysis

Customer Care Information

Improve customer QoE, reducing support calls and enabling rapid problem resolution through:

- Proactive notification of customers experiencing problems, with analysis of likely cause
- Report of customers in danger of churning
- Real-time view of device, network and service health

Network and Service Management Information

MiriMON provides invaluable information for improving the customer QoE, reducing support calls and enabling rapid problem resolution.

- Accurate fault impact analysis
- Fault root-cause analysis (device sub-population analysis)

Marketing Information

MiriMON provides invaluable information for improving the customer QoE, reducing support calls and enabling rapid problem resolution.

- Channel, VOD & Advertisement Viewing Statistics
- Service Delivery Reports (QoS)
- Precise Service Usage Information for all consumers
- Changes in Service Usage (trending)

Service Measurements

- Channel change timings
- VOD request timings
- Content Play Out Disruption
- Meta Data Errors

Device Health Measurements

- CPU & Memory load
- Hard disk errors
- Reboot & Uptime
- DRM / CA errors
- Periodic Heartbeat

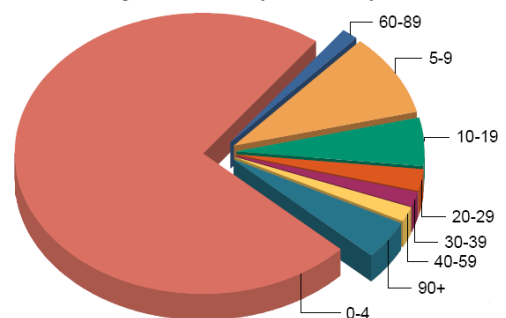
Network Measurements

- Bearer Connection Errors
- Packet loss & Jitter

Usage Measurements

- Linear Channel Statistics
- On-Demand Service Statistics
- User Requests

Percentage of viewing sessions by duration (minutes)



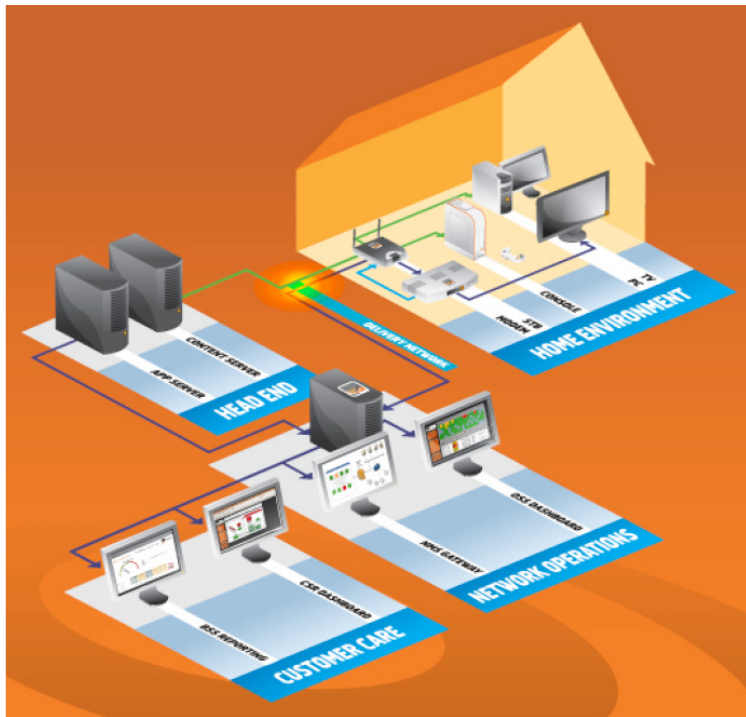
MiriMON gives you
the customer
perspective...





Solution Architecture

- Software agent on every STB reports to a central server
- Agent reports against rules and thresholds set in a configuration file, which can be customized for individual, or groups of set-top boxes.
- Server provides agent population analysis and reporting.



Privacy and Data Protection

MiriMON information is, by default, anonymous. The network operator can relate this information to an individual consumer by mapping the information to customer care or billing records, if this is acceptable.

Copyright © Miriforce Ltd. 2009. MiriMON is a Trademark of Miriforce Ltd. All other trademarks are property of their respective owners.

Server Hardware

Assuming conventional information requirements, a system monitoring less than 100k set-top boxes requires:

- 2 mid-range Sun servers

A larger system will require an additional server per 100k set-top boxes.

3rd Party Server Software

- Solaris 10
- MySQL database
- Apache
- Crystal reports

Agent Porting Requirements

- 100k persistent storage
- 70k memory footprint
- Negligible CPU Power
- Cooperation from set-top box manufacturer / vendors (source code access not essential).

Report Methods

- Web Pages
- Crystal Reports
- Database Query & Mining Tools

Integration with other systems

MiriMON can provide information to other management systems via:

- HTTP/XML/SOAP interface
- SNMP
- Database Access methods (ODBC etc)

