



Datasheet

AggreGate
Network Manager

Supported Platforms

- Windows 2000, XP, Vista, 2003 Server, 2008 Server, and 7 (32-bit and 64-bit versions)
- Linux (32-bit and 64-bit versions)
- Mac OS X

2-in-1:

- Out-of-the-box Network Monitoring Solution
- White-labeled Network Management Platform

AggreGate Network Manager is an enterprise IT infrastructure management and monitoring system. It is used for data center management, monitoring network traffic and performance, bandwidth usage, routers and servers, applications and services, network printers, network-enabled sensors etc.

Monitoring is performed using standard protocols, such as SNMP or WMI. AggreGate Network Manager has outstanding support for non-standard network equipment and integration with other systems, such as helpdesk or building automation.

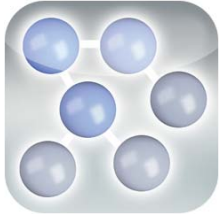
The screenshot displays the AggreGate Network Manager v4.25.05 interface. The main window is divided into several panes:

- Left Pane:** A tree view showing the network topology, including 'System', 'WLAN Network', and various 'Aperto' devices (Aperto 1 through Aperto 18) and 'D-Link' devices.
- Top Center Pane:** 'Device Configuration - Aperto Base (SNMP)'. It shows a list of properties and their values for the selected device. For example, 'anibuStatusBootState' is 'operational', 'anibuStatusSysUpTime' is '54d 5h 32m 28sec', and 'anibuStatusRadioFrequency' is '5300.00'.
- Right Pane:** 'Favourites' and 'Trackers'. The 'Trackers' section shows a table of monitored metrics for 'My Test Server (localhost:646...)'.
- Bottom Center Pane:** 'Event Log' showing a list of events with columns for 'Server Timestamp', 'Context', 'Event', 'Level', and 'Data'. The data shows 'Info=Failed to connect to Device: No response' for several Aperto devices.
- Bottom Right Pane:** Performance charts. One chart shows 'CPU Load - admin.dennis (SNMP)' with a line graph of CPU 0 load (%) and CPU 1 load (%) over time. Another chart shows 'Ping Response Time - admin.tbl...' with a line graph of average, minimum, and maximum round-trip times.

Feature Highlights

- Monitoring of networks, systems, servers, applications, and services
- Comprehensive network discovery and dynamic mapping
- Built-in fault management and network performance/traffic analysis tools
- The industry's leading data processing capabilities for non-standard network equipment
- VoIP, wireless, and virtualized environment monitoring
- Advanced alerting, charting and reporting
- Enterprise scalability and role-based access control
- Integrated GUI Builder and Report Editor
- Asset management, user-defined asset properties and events
- SNMP Traps, Syslog, and Windows Event Log consolidation
- Distributed monitoring and failover clustering
- Integration with third party systems via open-source APIs
- Extendibility via driver/plugin SDK

Network Monitoring



Scaling from monitoring SOHO networks to managing multiple ISP/MSP datacenters. Comprehensive discovery and dynamic mapping. Advanced event management and alerting, real-time operation dashboards. Reporting, charting, grouped operations and more.

Server Monitoring



Keeping track of availability, CPU load, disk space and memory usage, processes/services status, and custom metrics of servers running under any operating system. Aggregating SNMP traps, Syslog messages and Windows Event Log events. Pre-defined alerts and corrective actions for important server events. File/folder monitoring and remote script execution.

Router/Switch Monitoring



Monitoring status, performance and bandwidth usage of individual router/switch interfaces. All popular network hardware vendors including Cisco, 3Com, Alcatel, Nortel, and Juniper are supported. Integrated charts, reports, alerts for both standard and custom metrics (e.g. WiMAX signal strength).

Application/Service Monitoring



Discovery and smart monitoring of widespread server applications: web, mail, DNS, FTP, DHCP, SSH, LDAP, Radius, and more. Authentication/authorization, status checking and configurable injection of application data into AggreGate core for deeper analysis. Monitoring of arbitrary TCP/UDP ports. Preset alerts for typical application problems and network-wide service status dashboard.

Performance Monitoring



Tracking network links quality by measuring and analyzing response times, packet loss rates, and downtimes. Host capacity planning assistance by long-term historical trending for CPU load, disk/memory usage, and service response time. Performance degradation alerting and "Top 10" dashboards.

Traffic Monitoring



Facilitation of bandwidth problem troubleshooting, SLA verification, and capacity planning. Historical charts and reports for traffic/bandwidth. Network traffic analysis and detailed information on traffic composition (NetFlow, sFlow). Visual network traffic view builder and alerting when network talks matching specific criteria are detected.

System Requirements

Up to 100 devices:

- CPU Cores: 1
- RAM: 1 Gb
- Disk space: 10 Gb

Up to 1000 devices:

- CPU Cores: 4
- RAM: 4 Gb
- Disk space: 100 Gb

Up to 3000 devices:

- CPU Cores: 8
- RAM: 8 Gb
- Disk space: 200 Gb

3000+ devices:

- CPU Cores: 16 or more
- RAM: 16 Gb or more
- Disk space: 500 Gb

Order Information

License	Item Code
25 devices	agg-nm-25
50 devices	agg-nm-50
100 devices	agg-nm-100
200 devices	agg-nm-200
500 devices	agg-nm-500
1000 devices	agg-nm-1000
Unlimited	agg-nm-unlim

Virtualized Infrastructure Monitoring



Planning, consolidating, monitoring, optimizing, and automating the virtual infrastructure. Monitoring VMWare ESX/ESXi servers and guest virtual machines. Out-of-the-box alerts for guest VM state change, high memory usage, high CPU load and extensive disk I/O.

Wireless Infrastructure Monitoring



Browsing detailed information on access point's wireless network interfaces, including MAC addresses, number of connected clients, bridges and repeaters, SSID data, etc. Viewing information on wireless clients connected to an access point, including types/roles, signal strength, IP/MAC addresses, uptime and traffic stats.

VoIP Monitoring and IPSLA Verification



Assuring the Quality of Service for your VoIP links by employing Cisco IOS IP Service Level Agreement technology. Measuring packet loss, latency, jitter, Round-Trip Time, and Mean Opinion Score.

Printer Monitoring



Receiving and processing notifications upon printer problems, like paper jams, out of paper, supply shortages (ink/toner/developer), overfull trays, etc. Centrally collecting and customizing printer asset information, such as models, descriptions, capabilities, and user-defined properties. Remote monitoring of printer status in the real-time.

Database Monitoring



Remotely connecting to any ODBC/JDBC-compliant database server (MySQL, Microsoft SQL Server, Oracle, PostgreSQL, etc.) for monitoring its availability and status. Executing dynamically constructed SQL queries and injecting query results into system core for analysis using integrated data mining tools. Optional execution of dynamically generated insert/update/delete queries upon system events.

Datacenter Environment Monitoring



Monitoring temperature, humidity, water flooding, smoke, motion, and air flow in control rooms and data centers using sensors of any types. Industry's best set of sensor device drivers. Configurable alerting thresholds and flexible notification/escalation rules.

Java Monitoring



Control and monitor Java-based applications, services and Application Servers using JMX. Access both standard and application-specific MBeans. View, log and change MBean attributes. Execute MBean operations on-demand, on schedule, or in response to alerts. Collect, store and react to MBean event notifications, use the full range of integrated data mining tools for processing JMX data.

IT Asset Tracking



Recipe data is a collection of control setpoints that define the parameters required to make a specific product or control a specific process. Prodigy allows any number of such recipes to be created and called up via user defined forms.

SNMP Management



visual editors, and third-party systems.

Collecting, storing, and analyzing custom metrics from all types of SNMP-enabled devices, such as fan status, environment temperature/humidity, or wireless signal strength. Aggregating, browsing and filtering SNMP traps. Loading MIB files from different vendors into an internal MIB database, support for syntax-highlighted MIB editing. Making SNMP device settings and traps available for integrated data processing tools,

Network Management Framework



Build and deliver branded OEM software based on AggreGate Platform and its network management extensions. Make all metrics and events collected from diverse network equipment available for third-party applications using open-source APIs and web services. Create dynamic maps, forms, widgets and reports in integrated visual editors. Customize and extend the system by building new plugins using open-source SDK.

AggreGate Technology

Rich Connectivity



Out-of-the-box support for standard protocols (SNMP, WMI, JMX, and more). Monitoring of non-standard devices using custom drivers.

Supported Databases

- MySQL
- MS SQL Server
- Oracle
- PostgreSQL
- Firebird
- And more

Patent-pending Technology



AggreGate Platform introduces many innovations in network monitoring technology. It provides a unique data model that comprises normalized representations of diverse network elements and exposes model data for the internal data processing tools and external systems.

Integrated Security



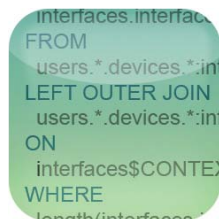
From the ground up, AggreGate was designed for multiple users. Granular permissions and role-based access control are inseparably woven into all aspects of the system.

Multiple User Interfaces



Working mainly from one or two computers? Use the advanced desktop client software. Need access from a thin terminal, or don't want to install anything? Web access is here for you. Finally, if you're not even near a workstation, use the mobile client!

Domain-specific Languages



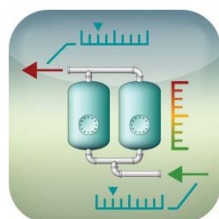
AggreGate features integrated expression and query languages that were designed for the “natural” understanding of normalized data coming from hardware devices and circulating inside the system. They greatly simplify complex data processing required in modern monitoring systems.

Data Management Tools



Devices in a distributed system can sometimes generate millions of events per hour; AggreGate lets you swim in this sea of information, rather than drown. Use alerts, event filters, reports, trackers and other tools to figure out what's important for you, and let the rest fade into the background.

Custom Widgets



Sure, you can get everything done using the stock UI; but if you want to create a custom data entry form, physical device map, or even a complete Human-Machine Interface, our widgets are right for that, allowing to combine different interface components into complex layouts.

Visual Editors



AggreGate desktop client is bundled with two integrated visual editors: graphical UI Builder and Report Editor. These editors are for building forms, charts, reports, tables, custom interfaces, and maps using the mouse. No programming is required, even for binding UI components with the data model.

Failover Clustering



Ensure high availability services by building a multi-node failover cluster for AggreGate Server and underlying database. Our home-grown clustering technology does not depend to any third party software or clustering support of the operating system.

Distributed Architecture



The unique multi-tier architecture guarantees unlimited scalability by balancing system functionality between multiple servers divided into several layers. This concept is the foundation for multifunction installations, such as smart city HQ.

Open-source APIs



Already have an enterprise-wide application, and want to add AggreGate to the mix? Use our open-source Java and .NET APIs to transparently integrate AggreGate into any system you may have. Your users won't ever see our interface, and yet enjoy a wealth of new device intelligence.

Cross-platform Database-agnostic Architecture



All system components work under any Java-enabled OS including Windows, Linux and Mac OS. Supported databases: embedded, MySQL, MSSQL, PostgreSQL, Oracle, or any other JDBC-compliant RDMBS.

Intelligent Building Control Center

AggreGate Network Manager is natively integrated with other AggreGate solutions for creating a building/facility control center. Such integration would allow to manage local network, physical access control, time and attendance, HVAC, lighting, and other systems from a single control room. Technology Highlights

About Tibbo

Located in Taipei, Taiwan, Tibbo Technology Inc. brings simplicity to the embedded world defined by the enormous complexity of operating systems, programming languages, and design tools. Tibbo's hardware, Tibbo-BASIC programming language with its Tibbo IDE software, and the AggreGate Platform offer a complete rapid development solution for data collection, automation, security, and monitoring devices and systems.

Try it now!

Download 30-days trial or free version for 10 devices:
http://aggregate.tibbo.com/network_management/

Tibbo Technology

Tel: +886-2-26925443

Fax: +886-2-26923139

9F-3, No.31, Lane 169, Kang-Ning St., Hsi-Chih, Taipei, Taiwan

www.tibbo.com

sales@tibbo.com



8

AggreGate
Network Manager

©2001-2011 Tibbo Technology Inc. All rights reserved.
AggreGate is a registered trademark of Tibbo Technology Inc.