The AT&T M2M Application Platform provides advanced cloud-based software for managing connected products and assets and implementing innovative M2M applications. The service provides you with a secure and scalable M2M data integration and application development platform, connectivity over the AT&T network, purpose-built device and asset management applications, and integration with AT&T’s dedicated M2M network provisioning and service delivery platforms to reduce the cost and complexity of implementing M2M solutions.

Machine-to-Machine (M2M) solutions wirelessly connect millions of diverse devices to permit communications between these devices and enterprise applications. From trucks and turbines to heart monitors and vending machines, M2M technologies allow network-ready devices to collect data from sensors and connect and exchange data over wireless and wired networks, enabling real time analysis and response from enterprise systems.

The benefits of M2M solutions are compelling, proven, and the economics of delivering M2M solutions have never been better. Companies integrate M2M data into existing mission-critical applications to lower costs and optimize processes. Even more significantly, companies are now leveraging their connected products and assets to create new applications that transform their businesses. But building M2M solutions can be time consuming, costly, challenging and risky without the appropriate technology and solution partner.

### Benefits
- Simplifies connectivity to remote products and assets with a variety of connectivity options and architectures
- Collects and processes data and messages reliably and securely
- Utilizes an extensive software development toolkit to transform raw M2M data into valuable business information
- Efficiently stores data in an easy-to-access high-performance M2M data model
- Processes data and events and triggers alarms and complex actions via a flexible and extensible rules engine
- Readily integrates useful M2M information into many common enterprise services

### Features
- Highly scalable and secure
- Powerful development tools and flexible APIs
- Flexible M2M connectivity services
- Hardware diversity
- Software agents and toolkits
- Monitor, manage and repair connected assets
The AT&T M2M Application Platform Powered by Axeda combines AT&T's global leadership and experience in M2M data management with an innovative, proven platform approach to creating value from that data, so you can quickly and assuredly realize the promise of M2M. With its powerful application services and prebuilt components, you can quickly build and integrate innovative new M2M applications.

**The AT&T M2M Application Platform**

The Platform is a complete M2M data integration and application development environment delivered as a cloud-based service. With high levels of scalability and security as well as powerful development tools and flexible APIs, you can quickly build and deliver custom M2M applications for the most demanding requirements and integrate M2M data into your key enterprise applications and systems.

The Platform includes:

**M2M Application Services**

- **Scripting API** – A rich programming interface to access the complete set of Platform data and functionality, all using an easy-to-customize script based on Groovy, which is 100% Java syntax compatible.

- **Web Services API** – A robust set of built-in Web Services for both SOAP and REST consumption to access the core Platform data and functionality. Provides authentication, authorization, and transportation security. Enables you to determine the status of an asset, query historical data for assets, search for assets, manage alarms and more.

- **Integration Framework** – An extensible framework built on standards-based message queue technology that accelerates integration between the Platform and enterprise systems including ERP (e.g., Oracle and SAP), CRM (e.g., Salesforce.com), billing and data warehouses.

**M2M Data Management**

- **M2M Rules Engine** – A flexible rules engine for processing incoming data, responding to events and alarms, and triggering actions on the Platform. Includes an intuitive UI to rapidly implement sophisticated rules with thresholds and expressions. You can run expression rules on the Platform or threshold rules remotely and natively on the edge device to reduce communication costs. You can also extend the rules engine using a Scripting API to “mash up” platform capabilities with other cloud-based services. Finally, rule timers enable you to create a timer to execute rules on a schedule and a flexible scheduler lets you trigger activities based on customized schedules.

- **M2M Data Model** – A proven and comprehensive M2M data model purpose-built for storing M2M data and managing device and asset types, M2M data items, locations, alarms, and files. Connected asset attributes include default attributes such as organization, location, contacts, groups, and conditions. Models are easily enhanced with extended database objects to accommodate customization.

- **M2M Server and Data Services** – An M2M processing engine that handles device data, files, alarms, events, locations, geo-fences and all processing for the platform. It includes extensive built-in security capabilities to manage, users, roles, user groups, and device groups. A configuration console enables you to manage rules and model definitions, asset grouping, notifications, alarms, user groups, and permissions.

**M2M Connectivity**

The Platform includes M2M connectivity services, software agents and toolkits that enable you to establish connectivity between your devices or assets and the Platform, while allowing you to choose the communication method and hardware that suits the specific needs of your M2M solution. As a result, you can connect to any product using any device, over any communication channel (the AT&T network, the Internet, WiFi, or satellite), for any application. The M2M Connectivity includes three types of solutions depending on the class of device or asset you need to connect to:

- **Wireless Agent Toolkits** – A Java or ANSI-C library for embedding connectivity into your devices that can be compiled into your own software and executed on a wide array of computing hardware and platforms. The libraries use the Platform’s Wireless Protocol (AWP) which is optimized to use as few bytes as possible to lower network costs. When multiple channels can be used (such as the AT&T network, satellite, Internet, and WiFi), the Wireless Agent Toolkits support Least-Cost Routing, where information is sent over a channel based on the information’s value and the channel’s cost. This enables you to control the application’s communication costs, while remaining flexible to business demands.

- **Device Protocol Adapter** – A device communication server for connecting to any M2M message protocol. The communication server is extended with custom CODECs (coder/decoders) that translate the device’s native communication format into a form that the Platform can understand and process. The Platform device protocol adapter is an especially suitable connectivity option when you need to connect to deployed devices not running a Platform agent. This option also gives you a wider selection of devices to choose from since you can use M2M devices incapable of running a Platform Agent or Platform Wireless Protocol.

- **Firewall-Friendly™ Agents** – Software agents that run on Linux or Windows and install directly on your assets or a gateway computer tethered to your assets. These agents are used to collect asset data, process information, and communicate with the Platform using HTTPS. Firewall-Friendly™ Agents are configured using the configuration tool and use outbound-only communication to deliver a secure connection.
The AT&T M2M Application Platform – Connected Product Management Applications

The Cloud Service includes connected product management applications that enable you to monitor, manage, and repair your connected assets. With these applications, you can remotely access assets, process alarms, set up asset dashboards, troubleshoot problems, perform preventive maintenance, and automate software and content distribution. These applications include:

- **Service** – A remote service application with a Web-based graphical interface and a set of tools to remotely identify, diagnose, and repair issues with devices connected to the Platform. The key parameters in your connected products are continuously monitored to detect problems before they cause downtime.

- **Access** – A remote login and desktop sharing application to remotely and securely access products to troubleshoot problems, monitor and assist with user operations, perform over-the-shoulder training, and more.

- **Software Management** – A content distribution application to automate the distribution and installation of software, content, and security patches remotely to many assets. More than just transferring files, the software management tool automates efficient, secure, reliable, and cost-effective mass distribution of software and content, and allows for the rapid retrieval of log data and configuration files.

The AT&T M2M Application Platform provides cloud-based software for managing connected products and implementing innovative M2M applications.

For more information contact an AT&T Representative or visit [http://developer.axeda.com](http://developer.axeda.com), [http://developer.att.com](http://developer.att.com), or [http://att.com/m2m](http://att.com/m2m).