

# A Glossary of Terms for Next Gen API App ATMs



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*For Next Gen API App ATMs*



Produced by the ATM Industry Association

VERSION 1.0

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## GLOBAL SPONSORS



# Foreword

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The Consortium for Next Generation ATMs is a global future-proofing project aimed at implementing a ten-step plan to bring about a new API App model for ATMs. This process will create a new ATM ecosystem, along with some new technologies and terms. The idea of this Glossary is to standardize these “next gen” terms. At the same time, it provides an opportunity to update industry language.

The ATM industry is very diverse, made up of a wide range of advanced and emerging markets. It is beneficial to be united behind a common set of industry terms to prevent misunderstandings or misinterpretations. This standard set of terms will also help the industry to comprehend how the API App model will work in practice.

Just as the acronym ATM has itself become universal and recognizable around the world, so it is our hope that we will all use a common, clearly understood set of terms when talking about next generation ATMs. Since this new era is just around the corner for our industry, the Glossary is timely.

Warmest regards,

Mike Lee, CEO ATMIA

April 2018

# A Glossary of Next Gen Terms

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## A

Alerts management	Rules for alerts in an Operations Management System. Alerts can indicate an error state or a more critical issue.
API	Application Programming Interface. A set of functions and procedures that enable applications to access the features or data of an operating system, application, or other service.
API management	The process of overseeing application programming interfaces (APIs) in a secure, scalable environment.
API security	Authenticates programs or users who are invoking a web API. With ease of API integrations comes the difficult part of ensuring proper authentication (AUTHN) and authorization (AUTHZ).
App	An application, especially one which is downloadable by a user to a mobile device. A mobile app is a computer program designed to run on a mobile device, such as a phone/tablet or watch. Mobile applications may be contrasted with desktop applications, which run on desktop computers, and with web applications, which run in mobile web browsers rather than directly on the mobile device.
App analytics	Assess user engagement metrics, including number of sessions, active devices, and retention. With these metrics, changes can be made to improve engagement with the app.
App enumeration	A process which tracks the use of a web browser and interface by an end user, from the input of user credentials to the domain controller and Local Host Cache (LHC) and the return of the user's worker group preference policy to the Web interface, which returns the Web page to the Web browser.

App loading	When content is loading, informs the user that the app is being downloaded to the Customer Owned Device (COD), as a blank or static screen may cause the user to interrupt the loading due to uncertainty about what is happening.
App/Appliance management	Manages updates to, and monitoring of, mobile apps.
App server/Appliance server	A software framework that provides both facilities to create web applications and a server environment to run them.
App store	A digital distribution platform which allows users to browse and download apps.
Appliance/App update	Provides the latest features or versions for the customer using the app.
ATM customer/ATM user	A person who uses an ATM for a financial transaction.
ATM driving	ATM terminal driving for a range of processing of ATM cash and non-cash transactions. It includes transaction support, PIN change capabilities, custom text and graphics, foreign language screens, voice-enabled support, software distribution, and transaction reporting provided by an ATM software vendor or ATM-as-a-Service supplier. ATM driving does not include first and second-line ATM maintenance, cash replenishment, environmental control management, physical security or power related to the deployment, installation and operation of ATMs.
ATM ecosystem	The complete software and hardware next gen architecture, including the Customer Owned Devices used to perform transactions at ATMs.
ATM ecosystem security	Secures all components of the ATM ecosystem as well as the processes of transactions in the ecosystem.
ATM end point	The software on the ATM itself, with the low level software provided by the hardware vendor and the rest of the software stack provided by the next gen architecture and infrastructure.
Audio jack point	The socket into which the headphones of an ATM user (usually visually-challenged) must be inserted, so they can receive audio instructions assisting their completion of the transaction.
Authentication	Proof of identity. Proving or showing something to be true, genuine or valid. Verifying the identity of a user or process.

**B**

Big data analysis	Big data refers to data sets that are so voluminous and complex that traditional data-processing application software is inadequate to deal with them. Big data analytics examine large amounts of data to uncover hidden patterns, correlations, and other insights. By analyzing large amounts of information – both structured and unstructured – quickly, the diagnostic capacity of a system is significantly increased.
Biometric identification	Use of unique physical and behavioral characteristics, such as finger prints, iris scans, voice, etc., to identify individuals for access to a secure system. Various types of biometric identification, including finger vein, palm, face, retina, and voice, are being used at ATMs. These tools often supplement card and/or PIN entry rather than replace the PIN. The Fujitsu PalmSecure is particularly popular in Brazil. PalmSecure is a biometric authentication system based on palm vein pattern recognition technology.
Business rules	Rules that define or constrain some aspect of business and always resolve to either true or false. Business rules are intended to assert business structure or to control or influence the behavior of the business.
BVPs	Business Value Propositions. A value proposition states why a consumer should buy a product or use a service. This statement convinces a potential consumer that one particular product or service will add more value or better solve a problem than other similar offerings.

**C**

Cached apps	Cached means stored. Data can be stored in the computer memory, including data and disk operations. Sometimes there is a "Clear cache" button which can wipe a cache and any settings for an app.
Cardless	A cardless ATM transaction typically uses a mobile phone instead of a card. The transaction is initiated and authorized without any card being inserted into the ATM.
Card networks	Control where issued cards can be accepted and facilitate transactions between merchants and card issuers. The issuer is the bank or credit union that backs the card financially. Card organizations are sometimes also referred to as payment systems organizations – reflecting their increasing interest/influence in the wider payment methods/issues. The major credit card networks are UnionPay, Visa, MasterCard, American Express and Discover.
Cash management	Refers to a broad area of finance involving the collection, handling, and use of cash.
Cash recycler	ATMs which accept and recycle cash.
Consumer analysis	A process by which data from customer behavior is used to help make key business decisions via market segmentation and predictive analytics. This information is used by businesses for direct marketing, site selection, and customer relationship management.
Contactless	Transactions using technologies that allow a smart card, mobile phone, and other devices to connect wirelessly to an electronic reader, usually to effect a payment. Contactless cash withdrawals may use a bank card, but the card is not inserted into a card reader. Normally, the communication between the card and the ATM is made using Near Field Communications (NFC).
Controllability	"A dialogue is controllable when the user is able to initiate and control the direction and pace of the interaction until the point at which the goal has been met." [ISO 9241-110:2006]

Core platform	Any hardware or software used to host an application or service. An application platform, for example, consists of hardware, an operating system and coordinating programs. The platform creates a foundation that ensures object code will execute successfully.
CRM	Customer Relationship Management.
Customer Owned Devices (CODs)*	Customer devices, such as smartphones, tablets and laptops, which can be used for transactions in financial services.  *Also known as Consumer Operated Devices (CODs).
<b>D</b>	
DCC	Dynamic Currency Conversion at ATMs. A process whereby the amount of a card transaction is converted at an ATM to another foreign currency.
Deployer	Owner or operator of ATMs, whether a bank or independent ATM operator.
Deployer custom interface	The front-facing, visual part of a computer application or operating system through which a user interacts with a computer or software. The interface determines how commands are given to the computer or the program and how information is displayed on the screen.
Device firmware	A software program permanently etched into a hardware device, such as keyboards, hard drive, BIOS, or video cards. Firmware is typically stored in the flash ROM (read only memory) of a hardware device.
Device hardware	All the physical components of a computer or electronic system or technology, including the computer case, monitor, keyboard, and mouse. It also includes all the parts inside the computer case, such as the hard disk drive, motherboard, video card, and others.
Device monitoring	A system for displaying indicators of performance to assist with managing a device.



**E**

End User	Customer/consumer using an ATM.
EPP	Encrypting PIN pad (See also PIN pad).

**F**

Fascia	Front panel of the ATM, including monitor.
FDKs	Function Definition Keys; function keys.
Financial institution (FI)	Banks, credit unions, and other companies engaged in the business of dealing with monetary transactions, such as deposits, loans, investments, and currency exchange.
Flash	Adobe multimedia software.
Fleet management and inventory	Fleet management software enables supervision of specific tasks in the management of any or all aspects relating to a fleet of vehicles, machines, devices, etc. Inventory management is the supervision of assets (inventory) and stock items. A component of supply chain management, inventory management supervises the flow of goods from manufacturers to warehouses and from these facilities to point of sale.

**G**

GUI	Graphical User Interface.
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**H**

Haptic	The creation of physical sensations or feedback when using a touchscreen that assists navigation of the transaction by the visually-challenged.
Hardware-specific software components	Software components with dependencies on the devices they help to operate and which require specific hardware configurations.
HTML	Hyper Text Markup Language.

**I**

IAD	Independent ATM Deployer. Non-bank operators/owners of ATMs deploying ATMs as a business.
Identification	Proof of identity (see Authentication).
Infrastructure	The physical and organizational structures, facilities and technologies needed for the operation of an enterprise or a system.
Infrastructure monitoring	Systems and processes which provide management the data on the status of the infrastructure and have the capability to quantify progress towards organizational objectives.
Infrastructure management (IM)	The management of essential operational components, from policies and processes to equipment, data, human resources, and external contacts. Its purpose is to maintain overall effectiveness.
Intelligent deposit	ATM function and capability of accepting and recognizing cash or checks.
ISO9564	International standard for PIN management and security.
Issuers	The banks or financial institutions which back a bank card financially, approving card applications, setting their terms, paying for transactions on behalf of the cardholder, collecting payments from the cardholder, etc.

**J**

JavaScript	A high-level, leading programming language (often abbreviated as JS). APIs can be written in JavaScript code (see API).
Journal collection	Retrieving the ATM's electronic journal (EJ) history and log, usually remotely. Journals include customer transaction records and the internal record journal used to track daily ATM activity.

**L**

Legacy protocol

A legacy network is the generic name assigned to any old network, mostly proprietary to individual vendors. Legacy protocol typically refers to a network protocol other than IP (TCP/IP). An important computer protocol is Open Systems Interconnection (OSI), a set of guidelines for implementing networking communications between computers. Among the most important sets of Internet protocols are TCP/IP, HTTPS, SMTP, and DNS.

**M**

Machine learning

Another term for artificial intelligence (AI). Machine learning is an application of AI that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. Machine learning focuses on the development of computer programs that can access data and use it to learn for themselves.

Manufacturers/Suppliers of ATMs

Companies like NCR, Diebold-Nixdorf, GRG, Nautilus Hyosung, and others, which make or produce ATM machines, including producers of operating software.

Multi-touch

Ability of touchscreen displays to register three or more distinct positions of input touches simultaneously.

Multi-vendor software

ATM application which can run on several makes of ATM hardware (see Vendor-agnostic).

**N**

Networks	Most ATMs are connected to interbank networks, enabling people to withdraw and deposit money from machines not belonging to the bank where they have their accounts or in the countries where their accounts are held, e.g., NYCE, PULSE, PLUS, Cirrus, LINK Interchange Network, Interswitch, and SIBS.
Network gateway	A node (router) in a computer network, a key stopping point for data on its way to or from other networks. The Internet depends on gateways for the exchange of data. A payment gateway is a merchant service provided by an e-commerce application service provider that authorizes card or direct payments processing.
Next Gen ATM	ATMs operating within an architectural ecosystem based on an API App model.
NFC	Near Field Communication. A short-range wireless connectivity standard (Ecma-340, ISO/IEC 18092) that uses magnetic field induction to enable communication between devices when they're touched together or brought within a few centimeters of each other.
NFC mobile devices	Mobiles which are NFC-capable.

**O**

On us transaction	A transaction destined for the bank that owns that particular host. (The host determines whether the message is an "on us" or "off us" transaction.) The host then checks the amount of cash requested, confirms whether the customer has the money, and then authorizes or denies the transaction. An on us transaction is initiated by an own-bank customer.
Off us transaction	A transaction which is possible when the acquirer and the issuer are different but have interoperable systems. An off us transaction is initiated by a non-own-bank customer.
Operators	Banks or independents who own and/or deploy ATMs.
Operating environments for ATMs	Range of locations used as sites for installing and operating ATMs.
OS	Operating system, for example, W7, WinCE or W10.
OS kernel	The central part of an operating system. It manages the operations of the computer and the hardware - most notably memory and CPU time. There are two types of kernels: A microkernel, which only contains basic functionality, and a monolithic kernel, which contains many device drivers.
OTP	One Time Password.

**P**

PCI	Payments Cards Industry.
PIN pad	Device for entering a user's PIN (see EPP).
PIN pad layout	Arrangement or structure of the PIN pad.
POS	Point of Sale. The place/device at which a retail transaction is carried out.
Pre-staging	Setting up an ATM transaction on a mobile phone or other device prior to reaching the ATM.
Proprietary Interface – Vendor Specific	A proprietary application programming interface (API). A software library interface specific to one device or, more likely, to a number of devices within a particular manufacturer's product range.
PTS	PIN Transaction Security.

**R**

Remote Key Loading	The process of distributing the terminal master key from a central administration point to the Encrypted PIN Pad (EPP) or PIN Entry Device (PED). Installs asymmetric encryption keys into a remotely-located device from a central administrative site. After an ATM is in operation, new keys can be installed as needed by sending them enciphered under a Key Encryption Key (KEK) installed previously.
Reporting	An application or program which gathers all the transaction data from different ATM machines, such as ATM availability, transaction types and volume, on-us and not on-us transactions, and average withdrawal amounts, to allow management to view the information in a readily-available format. Much of the reported information comes from data in the transaction log.

**S**

Scroll	To cause displayed text or graphics to move up, down or across the screen.
Sidecar	An additional piece of hardware or machine, connected to and located alongside an ATM, offering additional physical capacity required by certain self-service functions, for example, coin handling.
Standard interface – vendor-agnostic	An interface standard that may include operational characteristics and acceptable levels of performance. It provides for interoperability of a given system, which must meet the specifications of the standard to which all users subscribe and which allows for technology to be vendor-agnostic.

**T**

Tamper	To compromise physical security.
Testing and certification services	A product certification process that involves product testing and, for many programs, ongoing assessment of the manufacturing site to ensure that the product continues to comply with a nominal standard.
Touchpoint	Customer point of contact, interface of a service.
Touchscreen	Monitor screen that can detect and respond to a finger, stylus or other instrument pressing on it.
Transaction	Transmission and processing of data; act of operating a function.
Transaction analytics	System for gathering data on ATM customer transaction volumes and types in order to improve service and customer retention.
Transaction authorization	Authorization by the issuer of a customer transaction.
Transaction flow	Transaction business process/block diagram/flowchart.

Transaction routing	<p>Routes followed by customer transactions and data on interbank networks as the transaction is processed from initiation to authorization and dispensing. This work may include switching and routing transaction information to and from the parties involved. It also may include data processing, billing, account balancing, clearing and settlement of ATM transactions. The processor that accepts the transaction request from the ATM is called the acquirer, while the issuer authorizes the transaction. A processor, or perhaps a network, also may be called a "switch," an industry term that means the entity that switches the transaction in and out of the networks as necessary.</p> <p>In next gen ATM architecture, cardless transactions interoperability is possible through account aggregators, for example, which can skip the card networks.</p>
TTW	Through-the-Wall ATM.
<b>U</b>	
UI	User Interface.
<b>V</b>	
Value-added banking services	<p>Value-added banking services can attract new customers and assist with customer retention by increasing customer value through added convenience and a wider range of services and products on offer. Examples include added functionality on ATMs, such as bill and tax payments, video banking services, personalized greetings, added security measures, and other services.</p>
Vendor-agnostic	<p>Not tied to the products of a specific manufacturer. The vendor-agnostic solution could be implemented with any off-the-shelf hardware (see Multi-vendor software).</p>



**W**

## Web service

A service offered by one electronic device to another electronic device, communicating with each other via the World Wide Web. In a web service the Web technology, such as HTTP, is used for machine-to-machine communication, more specifically for transferring machine-readable file formats, such as XML and JSON. In practice, a web service typically provides an object-oriented, web-based interface to a database server, used, for example, by another web server or by a mobile app that provides a user interface to the end user.