AUTHENTIC

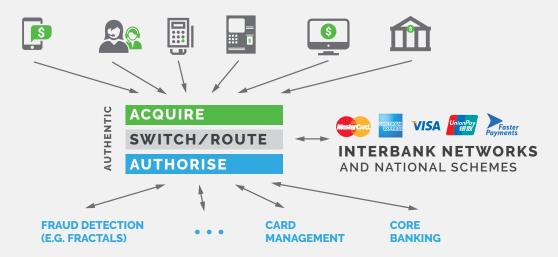
TRANSACTION PROCESSING IN A CHANGING WORLD



Authentic is an intelligent transaction processing platform designed for today's changing payment business. New payment types and channels have made innovation a priority. New regulations are adding to the cost of doing business. New technologies are challenging traditional business models—and transforming the way organizations interact with their customers.

In this fast-paced environment, retail banks, processors and merchants are turning to Authentic from NCR, to boost their competitiveness, control costs and meet the challenges of today's market.

Fast, flexible transaction processing





Authentic reduces costs, increases business agility, and improves your competitive edge. It has become the payments engine of choice for global networks, banks, merchants and large processors worldwide.

We designed Authentic to put you in control of your own payments environment, while giving you functionally rich, secure, resilient and scalable performance.

By deploying Authentic as your EFT system, you can operate a multi-faceted payments business from a single platform. Authentic accepts any type of transaction from any device, source or system, authorizes and authenticates it and then routes it to any destination. Whether you want to process payments from debit, credit, charge cards, electronic vouchers or pre-paid products, Authentic is the solution for you.

Authentic also supports a full range of payment applications. Around the world, it is used as a payment gateway, to power consumer payment service hubs, and to drive ATM and POS devices. Extending your payments system is simple and painless with Authentic: whether it's adding API access for Open Banking, implementing real time payments, or implementing an omnichannel experience.

It delivers conventional card switching services as well as online banking and mobile commerce.

Authentic also incorporates issuer authorization and stand-in functionality.

To help you get the most out of Authentic, we have developed Message Mapper to aid integration with other internal or external systems. As a result, Authentic can be easily integrated with regional, and international payment networks as well as internet and mobile channels.

Authentic also integrates with Fractals, NCR's smart antifraud solution (as well as other third-party systems) to give you real-time fraud detection and prevention.

Customization, configuration, control

The power of Authentic's functionality is matched by its extreme usability. You get the benefits of a bespoke payments solution plus the confidence and cost savings that come from a widely used, proven product.

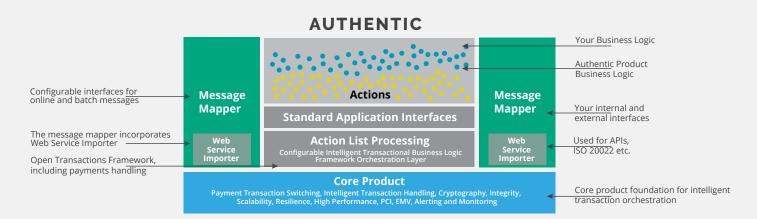
Flexibility and agility are the foundations of Authentic's success. Its component-based design means it is easy to configure Authentic to meet the specific requirements of your business, while its intuitive user-friendly interface makes it easy to respond to market demands and implement changes with no knowledge of the core processing engine. Your business users are no longer dependent on IT specialists: they can orchestrate the processing of new payment channels or payment types without programming skills.

Our professional services are equally flexible, giving you the level of operational independence that suits you best. With our partners, we offer a full range of services to support your deployment and ongoing use of Authentic. This includes training your staff, your service partners or your systems integrator.

As a result, ongoing service can be provided by your own team, your chosen partners, NCR's experts—or a combination of all three.

"We are very happy with Authentic, particularly its flexibility which allows us to radically differentiate ourselves from the competition in terms of rapid introduction of new products and services"

- Sanborns



Underpinning architecture

Authentic's flexibility is derived from its underlying architecture. Routing is a powerful element of the Authentic architecture. You can use any part of its message to determine the way a transaction is routed, enabling features such as channel, account, transaction or payment instrument routing. The selected routing may also include some level of processing within Authentic, which is delivered by the workflow engine. Routing to external systems for activities such as balance checking, fraud detection or additional data collection can also be interspersed with processing within Authentic.

Authentic's workflow engine, known as action list processing, defines the functions to be applied to a transaction at each stage. Authentic includes an extensive library of standard functions, such as PIN check, daily usage check, EMV ARQC validation, account status check, reversal generation and transaction logging. You or your partners can create additional functions using the Software Development Kit (SDK). Action lists can also include requests to external systems such as a fraud detection engine to provide additional data that can be used in processing the transaction. Action lists are defined for classes of transaction from a particular channel or for a particular card type. You can also set action lists for each specific transaction type.

This combination of routing and action lists gives you a rich orchestration capability with the flexibility to determine how each transaction should be processed. The same technique is also applied to batch file processing and extracting data.

Authentic in your IT infrastructure

Authentic is designed for continuous availability and 24x365 operations. It is a linearly scalable solution written entirely in Java, using open systems standards and object orientated design. You can proactively manage Authentic from a single console that offers systems and device monitoring, automated end-of-day cutover, and command and control.

It is also platform independent. You can run Authentic on Oracle, Stratus, HP and IBM servers with Linux, Windows, HP-UX or AIX operating systems. We recommend that. Authentic is run on a reliable and extensible database such as Oracle, Cassandra or Microsoft SQL Server.

Ease of Migration

Meeting business and market-driven changes is often slow and expensive. Deploying a new payment engine is a challenging project. To overcome this problem, NCR has adopted a 'legacy wrapping' approach to migrating systems.

By enclosing existing systems in a new technology wrapper that handles the integration with both internal legacy applications and external systems, Authentic can deliver new services while gradually taking over existing functions.

The wrapper creates a configurable, service-oriented and scalable platform that allows you to implement future changes quickly and efficiently. At the same time, the legacy system is insulated from future changes and so retains its value. You can drive your business forward without further dead-end investment in a legacy platform—and without the associated risks.

"With the help of Authentic, Cuscal will truly own its payments platform and will be able to independently control the future functionality of the switch without recourse to the system vendor."

Cuscal



AUTHENTIC AT A GLANCE:

- Providing industry leading standards, allowing you to extend your systems and services
- Integration with transaction risk analysis and real-time fraud engine
- Multi-institution, multi-currency, multi-language and multi-channel support
- ATM and POS support for all major devices
- Off-the-shelf card scheme support
- PCLPA-DSS certification
- Compliance with EMV standards, including contactless
- Transparent and re-configurable business logic
- Real-time risk management rules
- Easy configuration for new network and host interfaces
- Scalability—from small gateway systems to global networks
- 24x7, 99.99999% resilience, designed for high availability
- Benchmarked to over 10,000 transactions per second

AUTHENTIC ENABLES YOU TO

- Replace rigid legacy systems with flexible vendor independent solution
- Reduce total-cost-of-ownership by moving from proprietary hardware/software
- Add and upgrade channels
- Move away from legacy EFT to ISO 20022, JSON interfaces, and APIs
- Orchestrate, customize, and define customer journeys to provide amazing customer experiences
- Connect to new networks to provide new services
- Run a multi-institution environment
- Adapt quickly to compliance and regulation
- Provide a cross-channel customer experience
- Respond to new opportunities quickly, accurately, and cost-effectively
- Streamline operations, while maximizing return on investment in existing systems
- Maintain exceptional performance levels from a costeffective commodity platform
- Control budgets, enhance profitability and benefit from a low total cost of ownership

WHY NCR?

NCR Corporation (NYSE: NCR) is a leader in omni-channel

NCR is headquartered in Atlanta, Ga., with over 30,000 employees and does business in 180 countries. NCR is a trademark of NCR Corporation in the United States and

NCR continually improves products as new technologies and components become available. NCR, therefore, reserves the right to change specifications without prior notice.

All features, functions and operations described herein may not be marketed by NCR in all parts of the world. Consult your NCR representative or NCR office for the latest information.





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