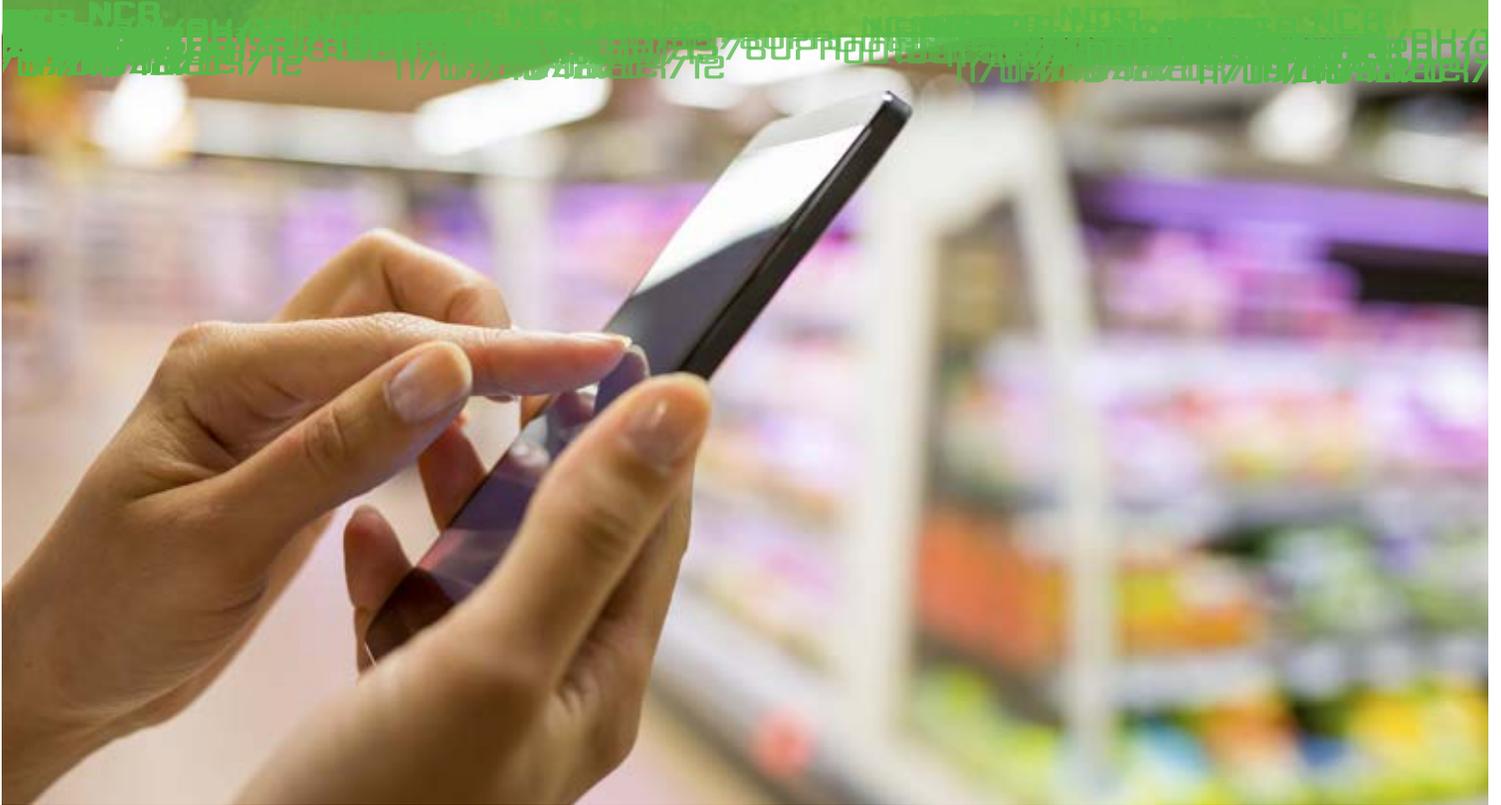


MESSAGE MAPPER

Rapid integration for payment systems



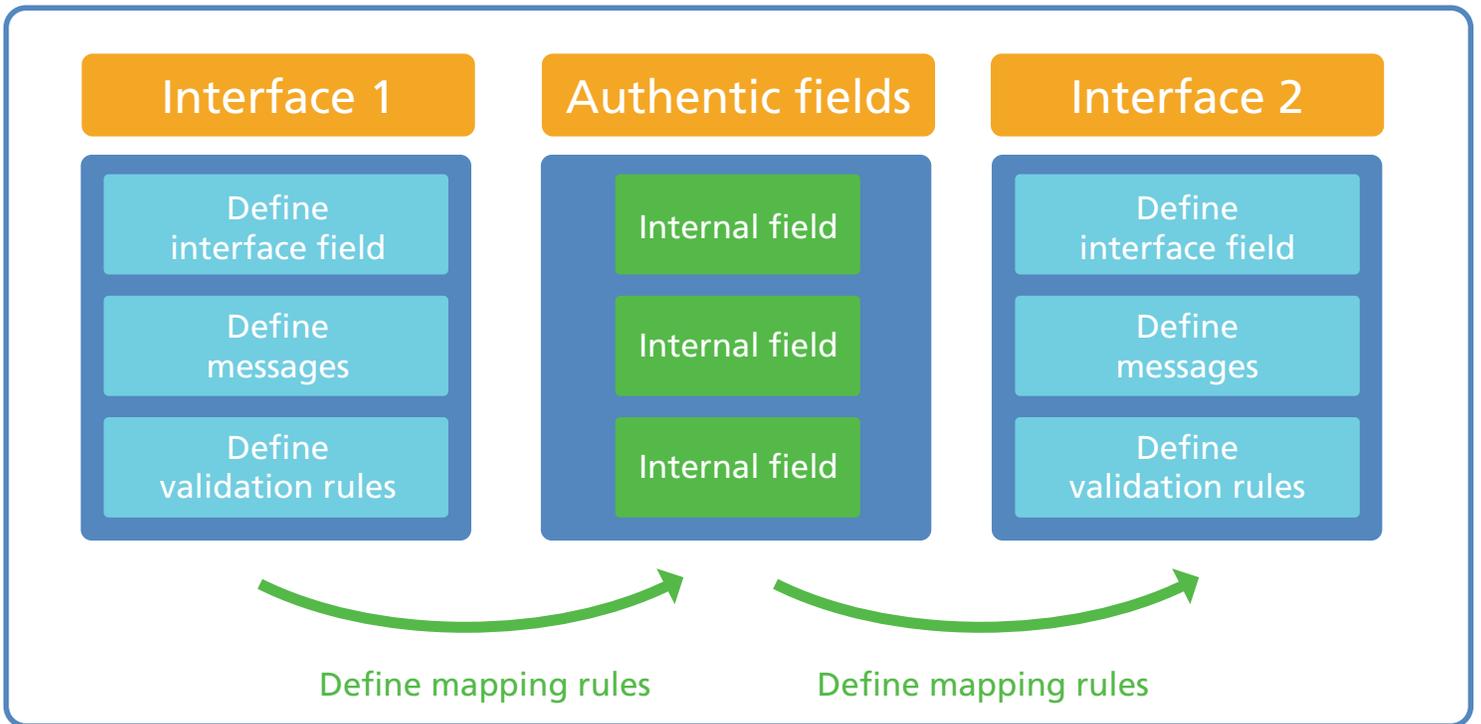
In a rapidly changing payments landscape, banks, payment service providers and merchants need agile systems that can respond to new business demands and technological challenges.

You may need to add services in a new country, extend existing services with a new card scheme, or respond to customer demand for new channels such as online and mobile.

You may need to add new devices, support new transactions or integrate with a new internal system, such as core banking or fraud detection.

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All of these scenarios involve messages passing between different systems to make them work. Although the messages contain similar data, and conform to internationally recognized standards, the way that standard is applied can vary.

As a result, some part of the message may need to be transformed so that the receiving system can understand it. Because this transformation is often hard coded for each message, it can be costly and time-consuming to make the changes you want.

NCR has developed Message Mapper to solve this problem. Message Mapper provides a configurable message validation and transformation layer that allows you to integrate payment systems with new business applications, adopt new device technologies, or conform to new messaging standards with ease. No expensive coding is needed, making integration a straight forward process.

The result is faster implementation of innovative new services and much simpler maintenance and support than the conventional software build approach.

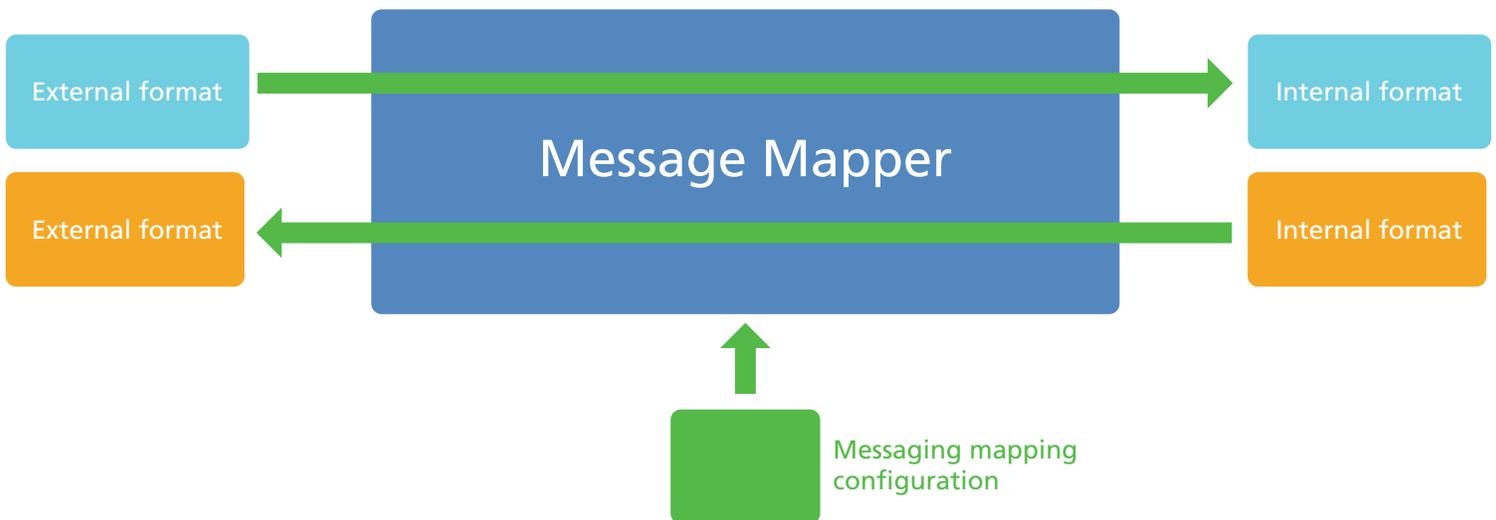
Mapping messages for individual interfaces

Message Mapper enables you to transform payment messages into new formats and makes it easier for different systems to communicate.

It translates messages to and from a system's interface format and can handle any message standard, protocol or specification. It has a straightforward 'point-and-click' user interface so you can quickly and easily define message formats, validations and transformations—generally without coding. If a data element requires complex transformation, Message Mapper allows you to incorporate a Java plug-in into the mapping process.

You can use Message Mapper to transform both real-time and batch messages. It supports all message formats commonly found in payments applications, including bitmapped formats like ISO 8583, as well as tagged formats like XML, and fixed-field formats.

Thanks to Message Mapper's extensive library of field formats, both Fractals and Authentic can be quickly integrated with your other internal or external systems, channels and networks. Message Mapper puts you in control. Intuitive and easy to use, Message Mapper gives you ownership of your connections so you can update and maintain them whenever you need.



Message Mapper in your IT infrastructure

Message Mapper is an ideal component for enhancing existing payment systems, preparing for SOA deployments and ISO 20022 messaging environments. Message Mapper is written in Java for ease of development and maintenance.

Message Mapper is designed for continuous 24x7 operation and open-ended scalability. Multiple copies of its run-time system components can be distributed across networked computers to share the processing load, giving you exceptional up-time.

Message Mapper is also completely platform independent. You can run Message Mapper on any platform that supports a Java run time environment and uses open databases such as Oracle. It supports UNIX, Windows and Linux operating systems so you can choose your preferred platform from Stratus, IBM, HP, Oracle and others.

Why NCR?

NCR Corporation (NYSE: NCR) is the global leader in consumer transaction technologies, turning everyday interactions with businesses into exceptional experiences. With its software, hardware, and portfolio of services, NCR enables more than 550 million transactions daily across retail, financial, travel, hospitality, telecom and technology, and small business. NCR solutions run the everyday transactions that make your life easier.

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Message Mapper at a glance:

- Transforms message formats for fast system integration
- Handles both real-time and batch message transformation
- Offers a clear and intuitive user interface for rapid configuration
- Provides out-of-the-box configuration sets for major payment networks and devices
- Includes extensive library of field formats for creating proprietary interfaces
- Supports bitmapped formats such as ISO 8583, as well as tagged (XML) and fixed-field formats
- Handles messages for payments and other banking services, as well as loyalty or CRM programmes
- Runs on any distributed, modern operating system and hardware environment
- Supports continuous 24x7 operation and open-ended scalability
- Is designed specifically for the payments market by payments experts

Message Mapper benefits:

- Maximizes investments in technology by extending functionality of legacy systems
- Creates agility within existing systems
- Minimizes cost and risk of change
- Enables message transformations without expensive programming or coding
- Transforms labor-intensive activity into a routine configuration exercise
- Simplifies adoption of changes mandated by payment networks
- Reduces development and testing time for new interfaces, applications and messaging standards
- Minimizes costs of message transformation and interface management

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

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