

Product ERP ConnectService Specification



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1 Introduction

This document contains a list of all services, including description, that are included in the order for the ERP Connect product.

In the corresponding chapters, the prerequisites and obligations for the provision and operation of the individual services are also documented.

The product ERP Connect is a software solution hosted by nexmart that connects the customer's ERP system with nexmart products. This enables additional information to be retrieved in online Market, sales App, data Cloud, processing in EDI Connect, documents to EDI via an order request, order-relevant information to be validated, orders to be entered directly and information about their booked orders to be made available to trading partners. The connection can be established asynchronously via the push Connect package or synchronously via the realtime Connect package.

The complete processing and transmission of orders and return messages by the customer is described in the referenced document <u>Service Specification EDI Connect</u> and is not part of ERP Connect.

2 Scope of Services ("in scope")

In the following, the scope of services for the ERP Connect product is described. The product distinguishes between the synchronous connection to the ERP system via the package realtime Connect and the asynchronous connection via the package push Connect. To use ERP Connect, exactly one of the packages must be selected.

2.1 Package realtime Connect

To enable synchronous connection, the nexmart systems must communicate directly and automatically with the customer's ERP system. This requires the definition and implementation of the transmission path as well as the transfer protocol and format. This will be defined and implemented within the framework of a joint project.

Within the scope of the synchronous connection, the scenarios order inquiry and the booking of the order itself are possible.

2.1.1 Technical connectivity options

The connection options distinguish a connection via a web service provided by the customer or an Enterprise Integration Server (hereinafter "EIS") connected in between.



2.1.1.1 Connection Webservice

The connection of the ERP system via a web-based XML interface provided by the client, which can be accessed via the Internet, can be addressed directly by nexmart in nexmart's own definition XML transfer object. In this case, the translation of the transfer object into the client's format is implemented by the client.

The connection of an interface, which can only process an individual format, must be commissioned by the client in an individual project and realized together.

2.1.1.2 Enterprise Integration Server (EIS)

nexmart provides a software component for the EIS, which is used for synchronous connection to the customer's SAP system. This option is useful if no external web service interface is available for the SAP system.

The EIS is located in the Demilitarized Zone (hereafter "DMZ") of the client's network and has a nexmart XML web service interface to nexmart.

The EIS can access the SAP system via the SAP BAPI interface. nexmart supports the standard BAPIs BAPI_SALESORDER_SIMULATE for the order request, BAPI_SALESORDER_CREATEFROMDAT2 for the order transmission and for the order overview BAPI_SALESORDER_GETLIST and BAPI_SALESORDER_GETSTATUS.

2.1.2 Order request (synchronous price and availability)

The order request is used to check the content of an order and enrich it with current information directly from the ERP system. This is transferred to the customer's ERP system, where it is checked and supplemented with customer-specific prices, availability - including partial quantities if supported by the ERP - and expected delivery dates. In addition, the bookability in the ERP system can be checked in advance.

It follows a feedback of the status and the display of the completed data for the trading partner, who can then trigger the order. The display of the data is not part of ERP Connect and takes place in the consuming nexmart products or must be implemented for data cloud in the trading partner's system.

Error codes supplied by the ERP are translated into a formulation that customers can understand for use in nexmart products.

2.1.3 Order transmission (synchronous transmission)

The package *realtime Connect* extends the asynchronous order transmission from EDI Connect by the possibility of a synchronous order transmission including an order request.

The previously executed order request ensures that the ERP system can successfully process the order. If it is processed without errors, the order is sent directly to the ERP system of the customer for processing.



If the ERP system returns an order number after successful processing, this can be used in the connected nexmart product as information for the trading partner.

If a transfer to the ERP system cannot be carried out, it is possible to fall back on the asynchronous transfer path that was set up separately as part of EDI Connect.

2.2 Package realtime Connect PRO

The package *realtime Connect PRO* enables the retrieval of order overviews and package tracking for the product online market. For this purpose, the trading partner in the online market can retrieve information about his orders from the customer via a synchronous connection to the customer's ERP system.

This overview includes all orders that can be retrieved from the customer's ERP for a trading partner, regardless of whether they were transmitted via nexmart.

Depending on the information provided in the interface by the customer, nexmart differentiates between the normal order overview for retrieving processing- and delivery-status and the delivery note number as well as tracking information.

2.3 Package push Connect

The order request via push Connect is a simple way for the client to inform nexmart about prices and availability without having to implement a synchronous connection to their own ERP system. The information can be provided via simple file formats defined by nexmart. nexmart takes care of data storage and management and correct display in the connected nexmart products.

Data supplied by the client at regular intervals and made available via FTP, which are stored at nexmart, serve as a basis. The data is updated hourly.

For a working solution, the list of availability and at least one price list must be available.

In the availability list and price lists, items are identified by a unique ID. The article ID supplied as part of the basic setup for article master data serves as a reference.

Orders placed by trading partners with the customer are then checked against this data, enriched with information and can be displayed in the connected nexmart products before the order is transferred.

2.3.1 Order check availability

One of four availabilities must be indicated per article. A distinction is made between available, partially available, not available and never available again.



If information on a requested product is missing in the data delivery, the trading partner is informed in the nexmart products that an availability check is not possible.

Optionally, the available quantity can be specified, which is taken into account during the order check. If an order quantity is requested that exceeds the available quantity, the status is displayed as partially available. There is no offsetting against orders placed since the last data delivery.

Optionally, an estimated delivery date for items can also be entered here, in order to provide information in order requests about when an item can be delivered.

2.3.2 Order verification prices

Prices can be provided customer-independent, for customers or for customer groups.

2.3.2.1 Price list customer independent

In the customer-independent price list, products are identified by an ID. This ID must match the interface for article master data set up in the basic setup. One price must be stored per ID.

Optionally, it is possible to specify tiered prices per quantity in order to map tiered prices. If a graduated quantity is reached in an order request, the corresponding graduated price is applied.

2.3.2.2 Price list for customers

In order to be able to show its customers not only the list prices but also the customerspecific prices, the client can also provide nexmart with lists of these prices for each customer. Each customer to whom such a data set has been supplied will be shown the prices applicable to them when they place their order.

For a correct assignment, the customer number must match the number from the data supply for customer master data from the basic setup.

2.3.2.3 Price list for groups

In addition to individual customers, customer groups can also be created, i.e. prices for such a group are defined and in a further list, which customers are included in this group.

A customer number can only be assigned to one group at a time.

If there is a separate price list for a customer number and the customer number is assigned to a group, the group price list is active.

If there is no separate price list for a customer number and if the customer number is assigned to a group for which there is no price list and if there is a customer-independent price list, it will be activated for the customer number.



2.4 Referenced documents

The documents listed below are provided to the client together with the service specification.

The latest version of the documents can be accessed online. The access data will be provided separately to the client.

2.4.1 Service Specific fation basic Setup

This document describes which services are part of setting up an interface to nexmart. It is only possible to use nexmart products once the basic setup has been set up.

2.4.2 Service Specificiation EDI Connect

This document describes which services are part of the setup of an EDI Connect interface. EDI Connect enables the asynchronous transmission of orders generated by the product described here to the customer.

2.4.3 push Connect documentation

This document describes the file formats with examples and the functionality of *push Connect*.

2.4.4 Definition XML transfer object

This document describes the nexmart-XML for synchronous data exchange within the *realtime Connect* package.

3 Exclusions ("Out of Scope")

Product ERP Connect does not cover the following services.

- The provision and maintenance of EIS is not part of ERP Connect.
- The transmission of the order to the client via the product EDI Connect is not part of this service. This must be ordered and set up in a separate project before using the synchronous order transmission in the *realtime Connect* package.
- The provision of interfaces in the client's system is carried out independently by the client.
- The protection of the ERP system against overload due to calls via the interface is not covered by ERP Connect and is the responsibility of the customer.



4 Assumptions on the provision of services

The assumptions described below regarding the provision of services must be ensured on the part of the customer in order to ensure the smooth operation of Product ERP Connect.

- The nexmart basic setup for setting up an interface for article master data has been successfully completed and regular and content-correct provision is guaranteed.
- The nexmart basic setup for setting up an interface for customer master data has been successfully completed and the regular and correct provision of customer master data is guaranteed.
- The content of mandatory fields in the master data is clearly available and can be clearly assigned in the data deliveries within *push Connect* or the interface to the ERP system within *realtime Connect* (customer number, article ID).
- High availability is guaranteed for the ERP system when using the *realtime Connect* and *realtime Connect PRO* packages.
- An inquiry to the customer's ERP system in the packages realtime Connect and realtime Connect PRO must be answered and completed by the ERP system within 3 minutes.
- The request in the context of a *realtime Connect* order transmission must be answered and completed by the ERP system within a maximum of 6 minutes.
- The package realtime Connect PRO requires the package realtime Connect.

5 Client's obligations to cooperate

The obligations to cooperate in the provision of services described below must be ensured on the part of the customer in order to ensure the smooth operation of ERP Connect.

ERP Connect requires full automation of order processing within the framework of *realtime Connect* and regular, automated data delivery within the framework of *push Connect* at the customer's site. For this purpose, the communication process and data content must be precisely defined. This is planned and realized in detail within the scope of a project. The customer is obliged to contribute to this as follows:

- The appointment of a project manager, who is responsible for the active planning, implementation and completion of the project at the client's site.
- The appointment of a technical responsible person for the active provision of technical interfaces, infrastructure and associated documentation, as well as active cooperation during the project with the project managers at nexmart. This includes among other things:



- o The provision of test data within the project.
- Providing the required information about the interfaces and exact data formats of the ERP system.
- o The provision of a list of possible error codes.
- Firewall activation between nexmart and the server for communication via a designated port in joint coordination during setup.
- Certificate assignment for the encrypted connections.
- For the package EIS the following requirements must be fulfilled by the client:
 - Provision and basic setup of a Windows server with current operating system in the client's DMZ.
 - Possibly necessary connections of third-party software, such as firewall activation between EIS and the ERP system.
 - The client ensures the technical availability of the EIS.
 - The client is responsible for the complete maintenance of the operating system on the EIS.
 - Guarantee of permanent access to the EIS via the Remote Desktop Protocol (RDP) by nexmart employees
- Definition of the formats and the exact access path together with nexmart within the project.
- The appointment of a responsible person to actively participate and support the tests within the project and especially in the test phase for project acceptance.

nexmart reserves the right to change the scope of functions described above in future versions, which may include the omission of existing functions.