

1 SEPA: Overview

🌐 Language: [Deutsch](#) · [English](#)

💡 1 SEPA: Overview

The SEPA Nuclet generates SEPA direct debits and credit transfers automatically and exports them as PAIN XML files.

CONCEPT

INTEGRATORS

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APPLIES TO NUCLOS 4.2026.X

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Machine-translated – under review

This page was machine-translated from German as a first draft and is currently under review. The authoritative source remains the **German original** (see the language switch above).

Short description

With the SEPA Nuclet it is possible to generate direct debits and credit transfers (from version 2.0.0) for SEPA payment transactions automatically.

The SEPA messages are exported as XML files in the so-called PAIN format (pain.008.001.02 for direct debits, pain.001.001.03 for credit transfers).

More about the feature scope and implemented processes of this Nuclet can be found in [section 2](#).

General information on the SEPA procedure can be found [at the Deutsche Bundesbank](#).

Nuclet components

Within the .nuclet file, the SEPA Nuclet comprises

- seven business objects (for SEPA exports, SEPA transactions and SEPA master data),
- six layouts,
- one state model (for the SEPA exports),
- one work step (for cloning SEPA exports),
- two actions (to distinguish direct debits and credit transfers),
- one attribute group,
- two dynamic business objects (to map the referenced records in a SEPA export),
- two value list providers (to pre-fill order and payment types),
- various Java rules (distributed across packages),
- eleven Nuclet parameters,
- one job control (to control the import job),
- one Nuclet dependency,
- and five structure definitions (for importing master data).

In addition, the following components are supplied in the ZIP file:

- the JAR file org.nuclet.sepa.jaxb-2.3.0.jar as a Nuclos server extension and
- six CSV files for object imports.

Type	Name, English	Name, German	Short description
Business object	IBAN Registry	IBAN-Registatur	definition of country-specific IBAN formats for IBAN validation
	SEPA Export	SEPA-Export	BO for creating and running SEPA exports
	SEPA File Export	SEPA-Dateiexport	sub-form objects for buffering file exports (file), depending on the SEPA sequence type
	SEPA Order Type	SEPA-Auftragsart	order types: direct debits, credit transfers
	SEPA Payment Type	SEPA-Zahlungsart	
	SEPA Sequence Type	SEPA-Laufzeit	

	SEPA Time Zone	SEPA-Zeitzone	
	SEPA Transaction	SEPA-Transaktion	
Layout	SEPA Export (Credit Transfer Initiation)		layout for business object "SEPA Export" (for credit transfers)
	SEPA Export (Direct Debit Initiation)		layout for business object "SEPA Export" (for direct debits)
	SEPA Payment Type		layout for the business object "SEPA Payment Type"
	SEPA Sequence Type		layout for business object "SEPA Sequence Type"
	SEPA Time Zone		layout for business object "SEPA Time Zone"
State model	SEPA Export		state model for the business object "SEPA Export"
Object generator	SEPA Export Clone		work step for cloning SEPA exports
Attribute group	SEPA		
Dynamic business object	CreditorReferences2SEPAExport		to map the referenced records in a SEPA export (for credit transfers)
	DebitorReferences2SEPAExport		to map the referenced records in a SEPA export (for direct debits)
Value list provider	VLP Order Type		VLP for pre-filling the order type in the SEPA export
	VLP Payment Type		VLP for pre-filling the payment type in the SEPA export
Java package	org.nuclet.sepa.exception		error and exception classes
	org.nuclet.sepa.jaxb		classes for structuring and generating the XML export format
	org.nuclet.sepa.job		Java rules for controlling jobs ("job control")
	org.nuclet.sepa.logic		business logic
	org.nuclet.sepa.rule		Java rules for controlling insert, update and delete events
	org.nuclet.sepa.validation		Java rules for validation
	org.nuclet.sepa.wrapper		wrapper classes as the Nuclet interface
Parameter	SEPA Batch Booking		defines whether the SEPA exports are processed as batch orders by default
	SEPA Credit Transfer Export Prefix		defines the prefix for SEPA credit-transfer exports
	SEPA Credit Transfer Filename Prefix		defines the filename prefix for SEPA credit-transfer exports
	SEPA Direct Debit Export Prefix		defines the prefix for SEPA direct-debit exports
	SEPA Direct Debit Filename Prefix		defines the filename prefix for SEPA direct-debit exports
	SEPA Direct Debit Payment Type		defines the payment type to be used by default
	SEPA Export Directory		defines the export directory
	SEPA Initiator		defines the initiator used by default for SEPA exports
	SEPA Message Id Scheme		defines a scheme for the IDs of SEPA messages
	SEPA Payment Information Id Scheme		defines a scheme for the SEPA IDs of payment information
	SEPA Time Zone		defines the time zone used by default for SEPA exports
Job control	SEPA Direct Debit Export		deadline job for the automated SEPA export of direct debits
Structure definition	SEPA Order Type		import structure for business object "SEPA Order Type"
	SEPA Payment Type		import structure for business object "SEPA Payment Type"
	SEPA Sequence Type		import structure for business object "SEPA Sequence Type"
	SEPA Time Zone		import structure for business object "SEPA Time Zone"
Nuclet dependency	org.nuclet.Common		general helper functionality
Java server extension	org.nuclet.sepa.jaxb		contained in "org.nuclet.sepa.jaxb-1.3.0.jar", for mapping the XML structures
Object imports	IBAN_Registry_DE.csv		master data records for the IBAN registry (German)
	IBAN_Registry_EN.csv		master data records for the IBAN registry (English)
	SEPA_Order_Type.csv		master data records for business object "SEPA Order Type"
	SEPA_Payment_Type.csv		master data records for business object "SEPA Payment Type"
	SEPA_Sequence_Type.csv		master data records for business object "SEPA Sequence Type"

	SEPA_Time_Zone.csv		master data records for business object "SEPA Time Zone"
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Table 1: Nuclet components

**Caution:** please note that, due to the Nuclet dependency on [org.nuclet.Common](#), further components are imported into the system when the Nuclet is integrated, which are not listed individually here. Details on the components of the [Common Nuclet](#) can be found in the documentation of that Nuclet.

Java package structure

The Java rules are divided into six packages:

- rules for screen-controlled events (org.nuclet.sepa.rule)
- rules for controlling system jobs (org.nuclet.sepa.job)
- rules for the business logic (org.nuclet.sepa.logic)
- rules for structuring and generating SEPA messages (org.nuclet.sepa.jaxb, contained in the server extension "org.nuclet.sepa.jaxb-1.3.0.jar")
- wrapper classes as the Nuclet interface (org.nuclet.sepa.wrapper)
- business object facades for defining attributes and classes as well as for database access (org.nuclet.sepa.facade)

Application-specific adjustments should only be implemented, either

- in the concrete, already existing classes (see table) or
- by new, own concrete implementations

The Java source code is marked with @replace! tags at all those places where application-specific behaviour can be added. More on this in [section 4](#).

Related pages

**Nuclet: SEPA**

SEPA Nuclet data sheet

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**Interfaces**

All integrations

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