E-Invoice Documentation

PDF Manual

MODULE

e-invoice

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E-Invoice Documentation

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Generate EU-compliant electronic invoices automatically when Magento invoices are created. The extension supports **invoices** and (optionally) **credit memos**.

Supported Formats

Format	Region	Type	Use Case
ZUGFeRD 2.3.x	Germany	Hybrid PDF/A-3	B2B invoicing
Factur-X 1.07.x	France	Hybrid PDF/A-3	B2B invoicing
XRechnung 2.2/2.3/3.0	Germany	Pure XML	XRechnung XML export
EN16931	EU	Pure XML	EU standard format
PEPPOL BIS Billing 3.0	NL, BE, AT, Nordics, cross-border EU	Pure UBL XML	PEPPOL delivery

Credit memo generation is supported for **ZUGFeRD**, **XRechnung**, and **PEPPOL BIS** (enable it in configuration).

Quick Start

1. Install the extension
2. Configure it
3. Choose your format: ZUGFeRD, Factur-X, XRechnung, EN16931, or PEPPOL BIS
4. Create an invoice - e-invoice is generated automatically

Key Features

- **Automatic Generation**: E-invoices created on invoice save
- **Multi-Format Support**: All major EU formats from one extension
- **Hybrid Documents**: PDF/A-3 with embedded XML for ZUGFeRD/Factur-X
- **Smart VAT Classification**: Automatic EN16931 BT-151 category (S/Z/E/AE/K/G/O) based on buyer country, VAT ID, and product type
- **Multi-Purpose Voucher Handling**: Gift cards flagged as out-of-scope (§3 Abs. 15 UStG)
- **Extended Seller Identity**: GLN, DUNS, trading name, Leitweg-ID, fiscal representative
- **Status Tracking**: Track pending, generated, and failed e-invoices
- **Error Notifications**: Email alerts for generation failures
- **XSD Validation**: Schema validation before delivery
- **Amount Verification CLI**: Cross-check XML totals against Magento before sending

Documentation Sections

Getting Started

- Installation Guide
- Configuration

E-Invoice Formats

- ZUGFeRD
- Factur-X
- XRechnung
- EN16931
- PEPPOL BIS Billing 3.0

Features

- Generation Modes
- Status Tracking
- Error Handling
- VAT Classification
- Gift Cards & Vouchers
- Seller Identity

Reference

- REST API
- CLI Commands
- Troubleshooting

Requirements

- Magento 2.4.7 - 2.4.8
- PHP 8.1 - 8.5

Installation

E-Invoice Documentation · /e-invoice/getting-started/installation

Requirements

- Magento 2.4.x
- PHP 8.1+
- Composer 2.x

Installation via Composer

Step 1: Configure Composer access:

```
composer config bearer.repo.softwaresilo.io <token>
composer config repositories.softwaresilo composer
https://repo.softwaresilo.io/
```

Step 2: Install the package:

```
composer require mageb2b/e-invoice:*
```

Step 3: Enable the module:

```
php bin/magento module:enable MageB2B_EInvoice
```

Step 4: Run setup:

```
php bin/magento setup:upgrade
php bin/magento setup:di:compile
php bin/magento cache:flush
```

Verification

After installation, verify the module is enabled:

```
php bin/magento module:status | grep MageB2B_EInvoice
```

You should see:

```
MageB2B_EInvoice
```

What Installation Enables

After setup, the extension is ready to:

- generate E-Invoices for invoices

- optionally generate E-Invoices for credit memos
- store generation status and generated document references for download/API usage

Troubleshooting Installation

Module Not Found

If you get "Package not found" errors:

1. Verify repository credentials in `auth.json`
2. Run `composer clear-cache`
3. Try `composer update --no-cache`

Permission Issues

If you use **Permanent Storage**, ensure Magento can write to `pub/media/`:

```
chmod -R 775 pub/media
chown -R www-data:www-data pub/media
```

Setup Errors

If `setup:upgrade` fails:

1. Check `var/log/system.log` for errors
2. Verify database connection
3. Ensure all dependencies are met

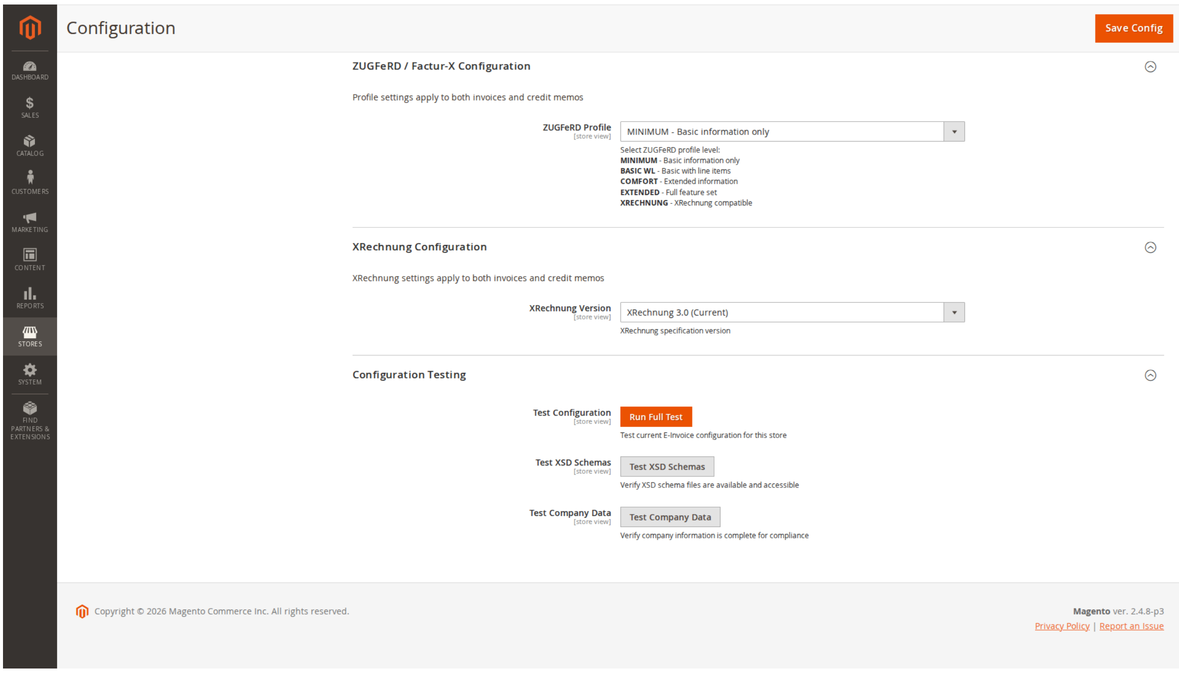
Next Steps

- Configure the E-Invoice Extension

Configuration

E-Invoice Documentation · /e-invoice/getting-started/configuration

Configure the extension at **Stores > Configuration > MageB2B > E-Invoice**.



General Settings

Setting	Default	Notes
Enable E-Invoicing	No	Master switch per store view
Default B2B Format	ZUGFeRD	Used as the default invoice format

Invoice Settings

Setting	Default	Notes
Generation Mode	Immediate	`disabled`, `immediate`, `queued`, `cron_hourly`, `cron_daily`
Generation Trigger	On Invoice Creation	`invoice_create`, `invoice_pay`, `manual_only`
Document Type Code	380	UN/CEFACT invoice document type
Block Invoice on E-Invoice Error	No	If enabled, invoice creation is blocked on generation failures

Setting	Default	Notes
Attach E-Invoice to Invoice Email	No	Attaches XML/PDF to the invoice email
Attachment Strategy	auto	`auto`, `xml_only`, `pdf_only`, `both`
Daily Cron Batch Size	100	Only relevant for `cron_daily`
Invoice Filename Pattern	`invoice-{invoice_increment_id}-{format}.{type}`	See "Filename Variables"

Credit Memo Settings

Credit memo generation is **disabled by default** and must be enabled per store view.

Setting	Default	Notes
Enable Credit Memo E-Invoicing	No	Required to show actions on credit memo view
Generation Mode	Immediate	Same options as invoices
Generation Trigger	On Credit Memo Creation	`creditmemo_create`, `manual_only`
Document Type Code	381	UN/CEFACT credit memo type
Block Credit Memo on E-Invoice Error	No	If enabled, credit memo creation is blocked on generation failures
Attach E-Invoice to Credit Memo Email	No	Attaches XML/PDF to the credit memo email
Attachment Strategy	auto	`auto`, `xml_only`, `pdf_only`, `both`
Daily Cron Batch Size	100	Only relevant for `cron_daily`
Credit Memo Filename Pattern	`creditmemo-{creditmemo_increment_id}-{format}.{type}`	See "Filename Variables"

Note: Credit memos support **ZUGFeRD** and **XRechnung** formats.

Document Storage

Setting	Default	Notes
Storage Strategy	Permanent Storage	`permanent` or `on_demand`

Setting	Default	Notes
File Storage Path	`einvoice`	Relative to `pub/media/`

Storage locations (default settings):

- Invoices: `pub/media/einvoice/`
- Credit memos: `pub/media/einvoice/creditmemo/`

Filename Variables

Use these variables in filename patterns:

Variable	Invoice	Credit Memo
`{invoice_increment_id}`	✓	-
`{creditmemo_increment_id}`	-	✓
`{order_increment_id}`	✓	✓
`{format}`	✓	✓
`{type}`	✓ (`xml`/`pdf`)	✓ (`xml`/`pdf`)
`{date}`	✓ (`YYYY-MM-DD`)	✓ (`YYYY-MM-DD`)

Company Information

These values are used for all formats (invoices and credit memos):

Field	Notes
VAT ID	Required
Tax Number	Required for German formats
Company Registration Number	HRB/HRA
SIRET Number	Required for Factur-X (France)
Bank IBAN / Bank BIC/SWIFT	Used in payment instructions
Default Payment Terms (Days)	Optional
Seller Contact (Name/Phone/Email)	Required for XRechnung (BR-DE-2)
Seller Trading Name (BT-28)	Optional alternative business name
Seller GLN	Global Location Number (ISO 6523 scheme 0088)
Seller DUNS Number	Dun & Bradstreet identifier (scheme 0060)
Seller Leitweg-ID	Only when the seller itself is a public entity (scheme 0204)

See Seller Identity for details.

Tax Representative

Non-EU sellers with EU VAT obligations can declare a fiscal representative (BG-11 / BT-63). Off by default.

Setting	Notes
Enable Tax Representative	Master switch
Representative Name	Legal entity name
Representative VAT ID	Mandatory when enabled
Street / Postcode / City / Country	Representative's address

VAT Classification

Controls the EN16931 BT-151 category (S / Z / E / AE / K / G / O) emitted per invoice line.

Setting	Default	Notes
Kleinunternehmer (§19 UStG)	No	When enabled, every line is classified as `E` regardless of tax
Default Category for 0% Lines	Z	Used when a 0% line does not match intra-community (K) or export (G) rules
Treat Magento Giftcards as Multi-Purpose Voucher	Yes	Adobe Commerce `giftcard` products → `O`
Voucher Override Product Attribute	(empty)	Product attribute code whose value `multi_purpose` / `single_purpose` overrides detection
Exemption Reason: Intra-Community (K)	Innergemeinschaftliche Lieferung (§4 Nr. 1b UStG)	Override text for BT-120
Exemption Reason: Export (G)	Ausfuhrlieferung (§4 Nr. 1a UStG)	Override text for BT-120
Exemption Reason: Exempt (E)	Kleinunternehmer (§19 UStG)	Override text for BT-120
Exemption Reason: Reverse Charge (AE)	Steuerschuldnerschaft des Leistungsempfängers (§13b UStG)	Override text for BT-120
Exemption Reason: Out of Scope (O)	Mehrzweck-Gutschein (§3 Abs. 15 UStG)	Override text for BT-120

See VAT Classification for the full decision tree.

The intra-community / export rules rely on Magento's built-in EU country list under **Stores > Configuration > General > Countries Options**.

Payment Terms Mapping

Use this section to map payment-method-specific terms and payment means codes.

Setting	Notes
Default Payment Terms Template	Supports `{due_days}`, `{due_date}`, `{invoice_date}`, `{payment_method}`
Default Payment Means Code	Example: `58` (SEPA transfer), `59` (SEPA direct debit)

Setting	Notes
Default Payment Means Code (No IBAN)	Fallback when no IBAN is configured (example: `1`)
Payment Method Mapping	Override terms and means code per payment method

Accounting

Use this section to provide line-level accounting references (BT-133).

Setting	Notes
Accounting Source Type	`none`, `order_item_field`, `product_attribute`, `customer_attribute`
Order Item Field	Selectable when source type is `order_item_field`
Product Attribute	Selectable when source type is `product_attribute`
Customer Attribute	Selectable when source type is `customer_attribute`

Validation & Error Handling

Setting	Default	Notes
Validation Level	Standard	`minimal`, `standard`, `strict`
Strict XSD Validation	No	Enables strict schema validation
Enable Error Notifications	No	Sends emails on failures
Error Notification Email	(empty)	Required when notifications are enabled
Error Notification Threshold	3	Consecutive failures before sending
Retry Failed Generations	Yes	Retries failures via cron job
Max Retry Attempts	3	Per invoice/credit memo

REST API Settings

Setting	Default	Notes
Include E-Invoice in Invoice API	No	Adds `einvoice_xml` and `einvoice_pdf` to `GET /V1/invoices/{id}`
Include E-Invoice in Credit Memo API	No	Adds `einvoice_xml` and `einvoice_pdf` to `GET /V1/creditmemos/{id}`

See: REST API

ZUGFeRD / Factur-X Configuration

Setting	Notes
ZUGFeRD Profile	Applies to invoices and credit memos

PEPPOL BIS Billing 3.0

Settings for UBL-based PEPPOL delivery. Applied when **Default B2B Format** is PEPPOL BIS.

Setting	Notes
Seller Endpoint Scheme (EAS)	70+ PEPPOL codes (9930 DE VAT, 0088 GLN, 9914 AT VAT, 0204 Leitweg-ID, …)
Seller Endpoint ID	Identifier matching the selected scheme
CustomizationID override	Leave empty for PEPPOL BIS Billing 3.0 default
ProfileID override	Leave empty for `billing:01:1.0` default

See PEPPOL BIS Billing 3.0.

XRechnung Configuration

Setting	Default	Notes
XRechnung Version	3.0	`2.2`, `2.3`, `3.0`

Configuration Testing

Use the built-in buttons:

- **Test Configuration**
- **Test XSD Schemas**
- **Test Company Data**

Error Handling

E-Invoice Documentation · /e-invoice/features/error-handling

Configure how the extension handles E-Invoice generation failures.

Blocking Document Creation on Error

The primary “hard stop” control is **blocking document creation** when E-Invoice generation fails.

Configuration

Go to **Stores > Configuration > MageB2B > E-Invoice**:

Setting	Behavior
Invoice Settings → Block Invoice on E-Invoice Error	Prevent invoice creation if generation fails
Credit Memo Settings → Block Credit Memo on E-Invoice Error	Prevent credit memo creation if generation fails

Error Types

Validation Errors

E-Invoice doesn't meet format requirements:

- Missing required fields (VAT ID, etc.)
- Invalid data formats
- XSD schema violations

Generation Errors

Technical failures during generation:

- PDF generation failed
- XML creation error
- File storage error

Configuration Errors

Missing or invalid configuration:

- Company data incomplete
- Invalid IBAN/BIC format
- Missing seller contact details (XRechnung BR-DE-2)

Error Notifications

Enable Notifications

Stores > Configuration > MageB2B > E-Invoice > Validation & Error Handling:

Setting	Description	Default
Enable Error Notifications	Send email on failures	No
Error Notification Email	Recipient address	-
Error Notification Threshold	Send after X consecutive failures	3

Notification Contents

Email includes:

- Invoice increment ID
- Error message
- Timestamp
- Store view
- Link to invoice in admin

Batch Error Notifications

For cron/queue modes, batch notifications are sent:

- After configured threshold is reached
- Summary of all failed invoices
- Individual error details

Error Recovery

Manual Retry

1. Go to **Sales > Invoices**
2. Open the failed invoice
3. Click **Generate E-Invoice**

For credit memos, use **Sales > Credit Memos** and run **Generate E-Invoice** from the document view.

Mass Retry

1. Go to **Sales > Invoices**
2. Filter by status "error"
3. Select invoices
4. Choose **Generate E-Invoice** (mass action)

Common Errors

"VAT ID is required"

Cause: Company VAT ID not configured

Solution: Configure VAT ID in E-Invoice settings

"Invalid IBAN format"

Cause: IBAN doesn't pass validation

Solution: Verify IBAN is correct with country prefix

"Leitweg-ID missing"

Cause: This extension does not require a Leitweg-ID for XRechnung generation (B2B usage). If you need B2G submission requirements (Leitweg-ID, routing, portals), handle that in your integration layer.

Solution: Verify required company/contact data and validate the generated XML with your target receiver rules.

"PDF generation failed"

Cause: Magento PDF renderer error

Solution:

- Check Magento's standard PDF works
- Verify all fonts are available
- Check PHP memory limits

"XSD validation failed"

Cause: XML doesn't match schema

Solution:

- Check all required fields are filled
- Verify data formats
- Review validation error details

Logging

Log Location

The extension writes to Magento’s standard logs:

- `var/log/system.log`
- `var/log/exception.log`

Log Contents

- Generation start/end
- Validation steps
- File operations
- Error stack traces (when exceptions occur)

Best Practices

1. Keep **Block on Error** disabled while you validate your setup
2. Enable **notifications** in production

3. Enable **Retry Failed Generations** to auto-recover transient issues

Related

- Generation Modes
- Status Tracking
- Troubleshooting

Generation Modes

E-Invoice Documentation · /e-invoice/features/generation-modes

The E-Invoice extension supports multiple generation modes to fit different business scenarios. These modes apply to invoices and, when enabled, to credit memos.

Overview

Mode	Processing	Best For
Disabled (Manual Only)	No automatic generation	Fully manual workflows
Immediate	During invoice save	Low volume, real-time needs
Queued	Message queue background	Medium volume, async processing
Cron Hourly	Scheduled batch processing	High volume, continuous batching
Cron Daily	Scheduled batch processing	Batch windows (e.g. nightly)

Immediate Mode

E-invoices are generated **synchronously** when an invoice is created.

How It Works

1. Admin creates invoice
2. E-invoice is generated immediately
3. Files are saved to storage
4. Invoice status is updated
5. Invoice save completes

Pros & Cons

Pros	Cons
Instant feedback	Slows invoice creation
Real-time status	Not suitable for high volume
Simple setup	Errors block invoice (if configured)

Configuration

```
Stores > Configuration > MageB2B > E-Invoice > Invoice Settings
Generation Mode: Immediate
```

Queued Mode

E-invoices are added to a **message queue** for background processing.

How It Works

1. Admin creates invoice
2. Generation request is queued
3. Invoice save completes immediately
4. Background consumer processes queue
5. Status is updated asynchronously

Requirements

- Magento Message Queue configured
- Queue consumer running:

```
php bin/magento queue:consumers:start mageb2b.einvoice.generate
```

Pros & Cons

Pros	Cons
Non-blocking invoice creation	Requires queue setup
Scalable	Delayed status updates
Error isolation	More complex monitoring

Configuration

```
Stores > Configuration > MageB2B > E-Invoice > Invoice Settings
Generation Mode: Queued
```

Cron Hourly Mode

E-invoices are generated in **batches** by a scheduled cron job.

How It Works

1. Admin creates invoice
2. Invoice is marked as "pending" e-invoice
3. Hourly cron runs
4. Pending invoices are processed in batch
5. Status is updated

Schedule

The cron runs every hour at minute 0:

```
0 * * * * # Every hour
```

Pros & Cons

Pros	Cons
Best for high volume	Up to 1 hour delay
No queue infrastructure	Less real-time visibility
Batch efficiency	Errors accumulate

Configuration

```
Stores > Configuration > MageB2B > E-Invoice > Invoice Settings
Generation Mode: Cron Hourly
```

Cron Daily Mode

Cron Daily is also a batch mode, but with a daily schedule (default: `0 2 * * *`).

- Useful when you want a controlled batch window (e.g. after business hours)
- Supports a **Daily Cron Batch Size** setting

Disabled / Manual Only

If you choose `Disabled - Manual Only`, the extension will not automatically generate E-Invoices.

You can still generate manually via:

- Admin document view action (“Generate E-Invoice”)
- Admin mass action (“Generate E-Invoice”)
- CLI command (`einvoice:generate`)
- REST API endpoint (`POST /V1/einvoice/invoice/{invoiceId}/generate`)

Choosing a Mode

Use Immediate When:

- Processing < 100 invoices/day
- Real-time status is important
- Errors should immediately block workflow

Use Queued When:

- Processing 100-1000 invoices/day
- You have message queue infrastructure
- Non-blocking invoice creation is important

Use Cron Hourly When:

- Processing > 1000 invoices/day
- Batch processing is acceptable
- Simple infrastructure is preferred

Status Values

Status	Meaning
`pending`	Waiting for generation (queued/cron modes)
`generated`	Successfully generated
`error`	Generation failed
`disabled`	E-invoicing disabled for this invoice

Monitoring

Check Pending Invoices

From admin: **Sales > Invoices** → Filter by e-invoice status "pending"

Logs

Check Magento logs for generation details:

- `var/log/system.log`
- `var/log/exception.log`

Related

- Status Tracking
- Error Handling

Gift Cards & Vouchers

E-Invoice Documentation · /e-invoice/features/gift-cards

The extension recognises vouchers and marks them as out-of-scope (`O`) according to §3 Abs. 15 UStG when appropriate. This prevents VAT from being charged on the sale of a multi-purpose voucher, as required by German tax law.

Background

German VAT law (§3 UStG) distinguishes two types of voucher:

Type	Definition	VAT treatment on sale
Single-purpose voucher (§3 Abs. 14)	Place of supply and VAT rate are known at issue	VAT applies immediately
Multi-purpose voucher (§3 Abs. 15)	VAT rate or place of supply is not known at issue	No VAT on sale; VAT applies on redemption

Detection Order

For each line the extension resolves, in order:

1. **Product attribute override** — if `einvoice/vat/voucher_product_attribute` is configured, the attribute value takes precedence:
   - `multi_purpose` → force out-of-scope (`O`)
   - `single_purpose` → force normal tax handling
2. **Adobe Commerce giftcard product type** — when the **Treat Magento Giftcards as Multi-Purpose Voucher** flag is enabled (default), any product with `product_type=giftcard` is treated as a multi-purpose voucher.
3. Otherwise not a voucher.

Configuration

Stores > Configuration > MageB2B > E-Invoice > VAT Classification

Setting	Default	Notes
Treat Magento Giftcards as Multi-Purpose Voucher	Yes	Adobe Commerce `giftcard` products automatically flagged
Voucher Override Product Attribute	(empty)	Product attribute code whose value (`multi_purpose` / `single_purpose`) overrides detection
Exemption Reason: Out of Scope (O)	Mehrzweck-Gutschein (§3 Abs. 15 UStG)	BT-120 text used for voucher lines

Custom Product Attribute

If you sell vouchers via third-party modules or custom product types, create a product attribute (e.g. `einvoice_voucher_type`) with values `multi_purpose` or `single_purpose`, and enter the attribute code in the **Voucher Override Product Attribute** field.

Effect on Invoice

Multi-purpose voucher lines:

- Use category **0 (Out of scope)** in BT-151
- Use rate **0 %** in BT-152
- Emit a BT-120 exemption reason (default German wording, override in admin)
- Contribute to the base total **but not** to the tax amount of the invoice

Example

A cart with one standard product (€100, 19 %) and one multi-purpose voucher (€50) produces two tax subtotals:

Category	Base	Tax
S	100.00	19.00
0	50.00	0.00

Grand total: **169.00 €** (100 + 19 + 50).

Related

- VAT Classification
- EN16931 Format

Seller Identity

E-Invoice Documentation · /e-invoice/features/seller-identity

Beyond VAT ID and tax number, e-invoices can carry additional seller identifiers that improve routing and compliance in international B2B and public-sector scenarios.

Fields

Stores > Configuration > MageB2B > E-Invoice > Company Information

Field	Scheme	Use Case	Where it lands
VAT ID	—	Always required in EN16931	`Seller / SpecifiedTaxRegistration` (VA)
Tax Number	—	German Steuernummer	`Seller / SpecifiedTaxRegistration` (FC)
Company Registration Number	—	HRB / HRA	`Seller / LegalOrganization / ID`
SIRET Number	—	French businesses (Factur-X)	`Seller / SpecifiedTaxRegistration` (FC)
Seller Trading Name (BT-28)	—	Alternative business name	`Seller / LegalOrganization / TradingBusinessName` (CII) / `LegalEntity / RegistrationName` (UBL)
Seller GLN	`0088`	GS1 Global Location Number for logistics/PEPPOL	`Seller / GlobalID`
Seller DUNS Number	`0060`	Dun & Bradstreet identifier for international B2B	`Seller / GlobalID`
Seller Leitweg-ID	`0204`	Used when the seller itself is a public entity	`Seller / GlobalID` (XRechnung only)
Seller Contact (Name/Phone/Email)	—	Required for XRechnung (BR-DE-2, PEPPOL-R020)	`Seller / DefinedTradeContact`

All fields are optional unless your target format requires them (e.g. SIRET for Factur-X, seller contact for XRechnung).

Tax Representative (BG-11 / BT-63)

Non-EU sellers with EU VAT obligations can declare a fiscal representative. This typically applies to:

- UK, Swiss, US, or other non-EU sellers fulfilling into the EU
- Companies required under Article 204 of the EU VAT Directive

Stores > Configuration > MageB2B > E-Invoice > Tax Representative

Setting	Notes
Enable Tax Representative	Master switch — off by default
Representative Name	Legal entity name
Representative VAT ID (BT-63)	Mandatory
Street / Postcode / City / Country	Address of the representative

The tax representative is only emitted for profiles that support BG-11:

Format	Supports BG-11?
EN16931	Yes
XRechnung	Yes
ZUGFeRD EN16931 / Extended	Yes
Factur-X EN16931 / Extended	Yes
ZUGFeRD Minimum / Basic / BASIC WL	No (not in schema)
PEPPOL BIS Billing 3.0	Yes

Best Practices

1. Leave GLN and DUNS empty unless a counterpart explicitly asks for them; VAT-ID routing covers most EU cases.
2. Fill in **Seller Trading Name** if your marketing name differs from the legal name on the commercial register.
3. If you already use a Leitweg-ID for buyers and occasionally sell as a public entity yourself, set the seller-side Leitweg-ID under this section.
4. Fiscal representative data is visible on every invoice — only enable it when you actually have one.

Related

- PEPPOL BIS Billing 3.0
- XRechnung Format
- Configuration

Status Tracking

E-Invoice Documentation · /e-invoice/features/status-tracking

E-Invoice status is stored directly on the **invoice** (and optionally on the **credit memo**) so you can track generation results and download the generated files.

Status Values

Status	Description	Next Steps
`pending`	Waiting for generation	Will be processed by queue/cron
`generated`	Successfully created	Download available
`error`	Generation failed	Check error message
`disabled`	E-invoicing skipped	Manual trigger available

Where You See It (Admin)

Invoice View

On **Sales > Invoices > View**, the extension adds an **E-Invoice Information** section that shows:

- Status + error message (if any)
- Format + file type information
- Generated timestamp
- Validation results (after validation)
- Actions (generate/download/validate/view XML)

Credit Memo View

If credit memo generation is enabled, the extension also adds an **E-Invoice Information** section on **Sales > Credit Memos > View** with status, format, timestamp, and download actions.

Admin Actions

Invoice Actions (single invoice)

- Generate E-Invoice
- Download PDF (hybrid formats)
- Download XML
- Validate E-Invoice
- View XML Content

Mass Actions (invoice/credit memo grids)

- **Sales > Invoices**: Generate E-Invoice and Download E-Invoices (ZIP)
- **Sales > Credit Memos**: Generate E-Invoice

Status Persistence

The module stores status, format, generated file references, timestamp, and error details on the sales document so Admin UI, downloads, and API responses stay consistent.

Audit Trail

All status changes are logged:

- Generation attempts (success/failure)
- File paths created
- Validation results
- Error messages

Check Magento logs for the full audit trail:

- `var/log/system.log`
- `var/log/exception.log`

API Access

If enabled in configuration, invoice and credit memo API responses include:

```
GET /rest/V1/invoices/{id}

Response includes:
- extension_attributes.einvoice_xml
- extension_attributes.einvoice_pdf
```

Notes:

- `einvoice_pdf` is base64-encoded PDF content (hybrid formats).
- `einvoice_xml` is the XML string (not base64).

Related

- Generation Modes
- Error Handling

VAT Classification

E-Invoice Documentation · /e-invoice/features/vat-classification

Every e-invoice line carries an EN16931 tax category code. The extension picks the correct code automatically from order data, so invoices stay compliant for cross-border sales, exempt transactions, and reverse-charge scenarios.

Supported Categories

Code	Name	When it applies
`S`	Standard rate	Any line with tax greater than 0
`Z`	Zero rated	Configured fallback for 0% lines in the same country
`E`	Exempt	Seller operates as Kleinunternehmer (§19 UStG)
`AE`	Reverse charge	§13b UStG — opt-in via customer or product attribute
`K`	Intra-community supply	EU B2B with 0% tax and a valid buyer VAT ID (§4 Nr. 1b UStG)
`G`	Free export	Destination outside the EU (§4 Nr. 1a UStG)
`O`	Out of scope	Multi-purpose voucher (§3 Abs. 15 UStG)

Classification Logic

For each invoice line the extension evaluates, in order:

1. **Kleinunternehmer flag** is on → `E`
2. Line is a **multi-purpose voucher** → `O` (see Gift Cards)
3. Line has tax greater than 0 → `S`
4. Buyer country differs from seller country:
    - Buyer is in the **EU list** and has a **VAT ID** → `K`
    - Buyer is outside the EU → `G`
5. Otherwise → configured default (default `Z`)

The EU list is read from Magento's built-in `general/country/eu_countries` setting, so edits under **Stores > Configuration > General > Countries Options** apply everywhere automatically.

Configuration

Stores > Configuration > MageB2B > E-Invoice > VAT Classification

Setting	Default	Notes
Kleinunternehmer (§19 UStG)	No	When enabled, every line is classified as `E` regardless of tax
Default Category for 0% Lines	`Z`	Used when a 0% line does not match `K` or `G` rules
Treat Magento Giftcards as Multi-Purpose Voucher	Yes	Adobe Commerce `giftcard` products → `O`

Setting	Default	Notes
Voucher Override Product Attribute	(empty)	Product attribute code whose value `multi_purpose` / `single_purpose` overrides detection
Exemption Reason: Intra-Community (K)	Innergemeinschaftliche Lieferung (§4 Nr. 1b UStG)	BT-120 text for `K`
Exemption Reason: Export (G)	Ausfuhrlieferung (§4 Nr. 1a UStG)	BT-120 text for `G`
Exemption Reason: Exempt (E)	Kleinunternehmer (§19 UStG)	BT-120 text for `E`
Exemption Reason: Reverse Charge (AE)	Steuerschuldnerschaft des Leistungsempfängers (§13b UStG)	BT-120 text for `AE`
Exemption Reason: Out of Scope (O)	Mehrzweck-Gutschein (§3 Abs. 15 UStG)	BT-120 text for `O`

Set exemption reasons to your own wording if you prefer English or a different template.

Exemption Reason (BT-120)

When the category is not `S` or `Z`, the invoice carries a human-readable exemption reason at both line and document level. Empty reasons fall back to the defaults above. Receivers use this text to understand *why* tax was not charged.

Tax Totals

The document-level tax section groups lines by `(category, rate)`. A single invoice can legitimately contain multiple categories, for example a standard-rated product plus a multi-purpose voucher:

Category	Rate	Base	Tax
`S`	19.00	100.00	19.00
`O`	0.00	50.00	0.00

Out-of-scope lines contribute to the base total but never to the tax amount, per §3 Abs. 15 UStG.

Verification

Use `bin/magento einvoice:verify-amounts --invoice-id=<id>` to verify that the XML totals match Magento's calculation after classification.

Upgrading from 1.0.x

Before 1.1.0 every line was classified as `S` regardless of the actual tax treatment. Invoices in plain single-country 19% scenarios continue to render identically; cross-border, exempt, or voucher invoices now carry the correct code and reason.

Related

- Gift Cards & Vouchers
- Seller Identity
- CLI Commands

EN16931

E-Invoice Documentation · /e-invoice/formats/en16931

EN16931 is the European standard for electronic invoicing, defining the semantic data model used across the EU.

Overview

Property	Value
Standard	EN 16931-1:2017
Type	Pure XML
Region	European Union
Use Case	Cross-border B2B/B2G

What is EN16931?

EN16931 is a **semantic standard** that defines:

- What information an e-invoice must contain
- How that information is structured
- Business rules for validation

It does **not** define the syntax (XML format). Instead, it has two syntax bindings:

Syntax	Description
UBL 2.1	Universal Business Language
CII D16B	UN/CEFACT Cross-Industry Invoice

Relationship to Other Formats

EN16931 is the **foundation** for:

Format	Based On	Additions
ZUGFeRD	EN16931 + CII	German extensions
Factur-X	EN16931 + CII	French extensions
XRechnung	EN16931	German B2G rules
Peppol BIS	EN16931 + UBL	EU interoperability

When to Use EN16931

Use pure EN16931 format when:

- Trading with EU partners who require the standard
- No country-specific format is required
- Maximum interoperability is needed

Configuration

Enable EN16931

Stores > Configuration > MageB2B > E-Invoice:

1. Set **Default B2B Format**: EN16931
2. Set **Validation Level**: Standard or Strict

Syntax Selection

The extension uses **CII (Cross-Industry Invoice)** syntax by default, which is compatible with ZUGFeRD/Factur-X.

Generated Files

File	Path Example
XML	`pub/media/einvoice/invoice-100000001-en16931.xml`

Note: in this module, credit memo generation supports **ZUGFeRD** and **XRechnung**.

Validation

EN16931 validation includes:

1. **Core data model** compliance
2. **Business rules** (BR-xx rules)
3. **Country-specific rules** (if applicable)

EU E-Invoicing Directive

EN16931 was created to fulfill EU Directive 2014/55/EU, which mandates:

- All EU public sector entities must accept EN16931 invoices
- Cross-border B2G invoicing uses this standard
- Member states can require additional national rules

Best Practices

1. **Use for cross-border** EU transactions
2. **Validate against BR rules** before sending
3. **Consider Peppol** for B2G delivery
4. **Test with recipient** systems

Related

- ZUGFeRD Format
- XRechnung Format

Factur-X

E-Invoice Documentation · /e-invoice/formats/facturx

Factur-X is the French e-invoicing standard, technically identical to ZUGFeRD but with French-specific requirements.

Overview

Property	Value
Version	1.07.x
Type	Hybrid (PDF/A-3 with embedded XML)
Region	France, Belgium
Use Case	B2B invoicing

Relationship to ZUGFeRD

Factur-X and ZUGFeRD are **technically the same format** with different naming:

The extension uses the same profile selector (**ZUGFeRD Profile**) for both ZUGFeRD and Factur-X.

Configuration

Enable Factur-X

Stores > Configuration > MageB2B > E-Invoice:

1. Set **Default B2B Format**: Factur-X
2. Set **ZUGFeRD Profile**: COMFORT (or as needed)

French-Specific Requirements

For French compliance, also configure:

Field	Description
SIRET Number	14-digit French company identifier
VAT ID	French VAT number (FR + 11 digits)

Profiles

Profile	Use Case
MINIMUM	Simple invoices, minimum data
BASIC WL	Invoices with line items
COMFORT	Standard B2B (recommended)
EXTENDED	Maximum data support

Profile	Use Case
XRECHNUNG	XRechnung-compatible profile in hybrid output

Generated Files

File	Path Example
XML	`pub/media/einvoice/invoice-100000001-facturx.xml`
PDF/A-3	`pub/media/einvoice/invoice-100000001-facturx.pdf`

Note: in this module, credit memo generation is available for **ZUGFeRD** and **XRechnung**.

Factur-X is one of the accepted formats in many French B2B invoicing workflows.

Best Practices

1. **Include SIRET** for French B2B transactions
2. **Use COMFORT** as the default profile for most projects
3. **Test with French accounting software** before go-live

Related

- ZUGFeRD Format
- EN16931 Format

PEPPOL BIS Billing 3.0

E-Invoice Documentation · /e-invoice/formats/peppol-bis

PEPPOL BIS Billing 3.0 is the cross-border European standard for B2B invoicing built on UBL (Universal Business Language). It is the de-facto exchange format in the Netherlands, Belgium, Austria, and the Nordic countries, and is the foundation of EU ViDA.

Overview

Property	Value
Version	Billing BIS 3.0
Syntax	UBL 2.1
Type	Pure XML (no hybrid PDF)
Region	NL, BE, AT, Nordics, cross-border EU
Use Case	B2B delivery via PEPPOL access points

Both invoices and credit notes are supported.

Configuration

Enable PEPPOL BIS

Stores > Configuration > MageB2B > E-Invoice:

1. Set **Default B2B Format**: PEPPOL BIS Billing 3.0 (UBL)
2. Go to the new **PEPPOL BIS Billing 3.0** section

Seller Endpoint

Every PEPPOL document must declare a routable seller identifier.

Setting	Notes
Seller Endpoint Scheme (EAS)	Pick from 70+ official Electronic Address Scheme codes
Seller Endpoint ID	The identifier that matches the scheme
CustomizationID override	Defaults to `urn:cen.eu:en16931:2017#compliant#urn:fdc:peppol.eu:2017:poacc:billing:3.0`
ProfileID override	Defaults to `urn:fdc:peppol.eu:2017:poacc:billing:01:1.0`

Common EAS Codes

Scheme	Country / Issuer	Example identifier
`0060`	DUNS	123456789
`0088`	GLN (GS1)	4012345678901

Scheme	Country / Issuer	Example identifier
`0106`	NL KvK	12345678
`0190`	NL OIN	00000001820001234000
`0204`	DE Leitweg-ID	04011000-12345-67
`0208`	BE Enterprise Number	0123456789
`9914`	AT VAT	ATU12345678
`9915`	AT Government	Federal identifier
`9930`	DE VAT	DE123456789
`9944`	NL VAT	NL123456789B01
`9957`	FR VAT	FR12345678901

The complete list is the official PEPPOL codelist at https://docs.peppol.eu/poacc/billing/3.0/codelist/eas/.

Buyer Endpoint

The buyer endpoint is resolved automatically in this order:

1. Order extension attribute `peppol_endpoint_id` + `peppol_endpoint_scheme`
2. Order data fields of the same names
3. Billing-address VAT ID mapped to the country's default VAT scheme
4. Customer `taxvat` mapped through the same table

For EU and EEA countries the mapping is built in. For non-EU buyers, set the customer attribute explicitly.

Generated Files

PEPPOL BIS produces pure XML (no hybrid PDF):

File	Path example
XML	`pub/media/einvoice/invoice-100000001-peppol_bis.xml`
XML (credit note)	`pub/media/einvoice/creditmemo-100000001-peppol_bis.xml`

Credit notes use the UBL `<CreditNote>` root element and reference the original invoice via `BillingReference / InvoiceDocumentReference`.

Required Fields

Field	Source
VAT ID	Company Information
Seller Endpoint ID + Scheme	PEPPOL BIS section
BuyerReference (BT-10)	Order data, customer note, or invoice increment ID (fallback)
Billing address	Order
Currency	Order

Seller trading name, registration number, GLN and DUNS are emitted when configured.

Validation

PEPPOL BIS carries its own Schematron rules on top of EN16931. This module validates XML structure (XSD); full Schematron conformity testing is on the roadmap. Many PEPPOL access points validate inbound documents, so errors surface before delivery.

Submission

This extension **generates** PEPPOL BIS XML. Delivery over the PEPPOL network requires an external access point:

- Storecove
- Pagero
- Unifiedpost
- Edicom

Bridge modules or custom integrations can consume the generated XML via REST API (`GET /V1/invoices/{id}` with `einvoice_xml` in the response) or directly from `pub/media/einvoice/`.

Best Practices

1. Pick the scheme your counterpart expects. In DACH, `9930` (DE VAT) or `0088` (GLN) are common.
2. Always supply the **BuyerReference** — it is mandatory in PEPPOL BIS, unlike plain EN16931.
3. Fill in **Seller Trading Name** if your legal name differs from your trading name.
4. Use `VAT Classification → Default Category for 0% Lines` to control behaviour for shipments with unusual tax setups.

Troubleshooting

Missing Endpoint Error

Error: receiver rejects with "missing seller endpoint".

Solution:

- Configure **Seller Endpoint ID** and **Seller Endpoint Scheme** in the PEPPOL BIS section.
- Confirm the scheme matches the identifier format (e.g. scheme `9930` → `DE123456789`).

Missing Buyer Reference

Error: "BT-10 required".

Solution:

- Set a value on the order (`buyer_reference` data field) or via the customer note.
- Otherwise the extension falls back to the invoice increment ID.

Amounts Don't Match Magento Totals

Run `bin/magento einvoice:verify-amounts --invoice-id=<id>` to compare XML totals against Magento and identify rounding or mapping drift.

Related

- VAT Classification
- Seller Identity
- CLI Commands
- EN16931 Format

XRechnung

E-Invoice Documentation · /e-invoice/formats/xrechnung

XRechnung is a German e-invoicing specification. This extension generates XRechnung XML and supports selecting the target XRechnung version (2.2 / 2.3 / 3.0).

Overview

Property	Value
Version	2.2 / 2.3 / 3.0
Type	Pure XML
Region	Germany
Use Case	XRechnung XML export

If you need strict B2G submission requirements (Leitweg-ID, routing portals, etc.), validate and enrich the generated XML in your integration layer.

Configuration

Enable XRechnung

Stores > Configuration > MageB2B > E-Invoice:

1. Set **Default B2B Format**: XRechnung
2. Set **XRechnung Version** as required
3. (Recommended) Set **Validation Level** to **Strict**

Required Data

Field	Required	Description
VAT ID	Yes	German VAT number
Tax Number	Yes	Steuernummer
Seller Contact Name/Phone/Email	Recommended	Required by some XRechnung rule sets (BR-DE-2)

Generated Files

XRechnung produces pure XML (no PDF):

File	Path Example
XML	`pub/media/einvoice/invoice-100000001-xrechnung.xml`

Credit memo generation in this module also supports XRechnung (XML only).

Validation

XRechnung can be validated via the configured validation settings (and your receiver’s rule set).

Validation Levels

For XRechnung, **Strict** validation is recommended, especially if you integrate with external receivers that enforce additional business rules.

Submission Portals

This extension generates the XML. Submission (ZRE/OZG-RE/Peppol/…) is handled separately.

Best Practices

1. Select the required **XRechnung version** (2.2 / 2.3 / 3.0) per store view
2. Use **Strict** validation when integrating with external receivers
3. Keep seller contact data complete (name/phone/email)
4. Validate the generated XML with your receiver’s ruleset

Troubleshooting

Validation Failed

Error: "XRechnung validation failed"

Solution:

- Check all required fields are filled
- Verify VAT ID format includes country code
- Ensure billing address is complete

Related

- EN16931 Format
- Error Handling

ZUGFeRD

E-Invoice Documentation · /e-invoice/formats/zugferd

ZUGFeRD (Zentraler User Guide des Forums elektronische Rechnung Deutschland) is the German standard for electronic invoicing, widely used in B2B transactions.

Overview

Property	Value
Version	2.3.x
Type	Hybrid (PDF/A-3 with embedded XML)
Region	Germany, Austria, Switzerland
Use Case	B2B invoicing

How It Works

ZUGFeRD creates a **hybrid document**:

1. Human-readable PDF invoice (PDF/A-3 compliant)
2. Machine-readable XML embedded in the PDF
3. Both formats in a single file

Recipients can:

- View and print the PDF as normal
- Extract the XML for automated processing

Profiles

ZUGFeRD supports different conformance levels:

Profile	Description	Recommended For
MINIMUM	Basic header information only	Simple invoices
BASIC WL	Basic with line items	Standard B2B
COMFORT	Extended information (EN 16931)	Most B2B scenarios
EXTENDED	Full feature set	Maximum compatibility
XRECHNUNG	XRechnung 3.0 compatible	XRechnung-compatible output

Choosing a Profile

- **COMFORT** is recommended for most B2B scenarios
- Use **EXTENDED** for maximum ERP compatibility
- Use **XRECHNUNG** profile if you want XRechnung-compatible output in a hybrid document

Configuration

Enable ZUGFeRD

Stores > Configuration > MageB2B > E-Invoice:

1. Set **Default B2B Format**: ZUGFeRD
2. Set **ZUGFeRD Profile**: COMFORT (or as needed)
3. Set **Document Type Code**: 380 (Commercial Invoice)

Required Company Data

Ensure these fields are configured:

- VAT ID (required)
- Company Name (from Magento store info)
- Address (from Magento store info)
- Bank IBAN (recommended)
- Bank BIC (recommended)

Generated Files

When a ZUGFeRD invoice is generated:

File	Path Example
XML	`pub/media/einvoice/invoice-100000001-zugferd.xml`
PDF/A-3	`pub/media/einvoice/invoice-100000001-zugferd.pdf`

The PDF contains the embedded XML (hybrid), and the XML is also stored as a separate file for download/API use (depending on your storage strategy).

Validation

ZUGFeRD documents are validated against:

- Cross-Industry Invoice (CII) schemas
- Profile-specific requirements
- PDF/A-3 compliance (when generating PDF)

Compatibility

ZUGFeRD 2.3.x is compatible with:

- **Factur-X 1.07.x** (French equivalent)
- **EN16931** (EU semantic standard)
- Most German ERP systems (SAP, DATEV, etc.)

Best Practices

1. **Use COMFORT profile** unless you need specific extended features
2. **Include IBAN/BIC** for faster payment processing

3. **Test with recipients** before going live
4. **Verify file storage** and email attachment settings match your process

Troubleshooting

PDF Not Generated

- Check that Magento's standard PDF generation works
- Verify the horstoeko/zugferd library is installed
- Check `var/log/system.log` and `var/log/exception.log` for errors

Validation Errors

- Verify all required company data is configured
- Check VAT ID format (must include country code)
- Ensure order has valid billing address

Related

- Factur-X Format
- Configuration Guide

CLI Commands

E-Invoice Documentation · /e-invoice/reference/cli

The module provides CLI commands to generate and verify e-invoices.

`einvoice:generate`

Generate e-invoices on demand for one or more invoices / credit memos.

```
php bin/magento einvoice:generate --invoice-id=123
php bin/magento einvoice:generate --creditmemo-id=456
```

Options:

- `--invoice-id` / `-i` (single invoice entity ID)
- `--creditmemo-id` / `-c` (single credit memo entity ID)
- `--invoice-ids` (comma-separated list, e.g. `1,2,3`)
- `--creditmemo-ids` (comma-separated list, e.g. `10,11,12`)

Verbose output (shows a per-entity table for bulk runs):

```
php bin/magento einvoice:generate --invoice-ids=1,2,3 -v
```

Note: IDs are **entity IDs** (numeric), not increment IDs. Already generated documents are skipped.

`einvoice:verify-amounts`

Cross-check XML summation totals against Magento invoice / credit memo values. Useful for catching rounding drift, mapping errors, and EN16931 arithmetic violations before a customer complains.

```
# Verify a standalone XML file
php bin/magento einvoice:verify-amounts --file=/path/to/invoice.xml

# Verify an invoice against its Magento counterpart
php bin/magento einvoice:verify-amounts --invoice-id=123

# Verify a credit memo
php bin/magento einvoice:verify-amounts --creditmemo-id=456

# Override tolerance (default: 0.01)
php bin/magento einvoice:verify-amounts --file=/path/to/invoice.xml --
tolerance=0.05
```

Options:

- `--file` / `-f` (path to XML file, absolute or relative to Magento root)
- `--invoice-id` / `-i` (loads XML from `pub/media/einvoice/invoice/<id>.xml`)
- `--creditmemo-id` / `-c` (loads XML from `pub/media/einvoice/creditmemo/<id>.xml`)
- `--tolerance` (absolute tolerance per field; defaults to `0.01`)

What it checks

Three EN16931 business rules (BR-CO):

Rule	Invariant
BR-CO-13	`TaxBasisTotal == LineTotal − AllowanceTotal + ChargeTotal`
BR-CO-15	`GrandTotal == TaxBasisTotal + TaxTotal + Rounding`
BR-CO-16	`DuePayableAmount == GrandTotal − PrepaidAmount`

When an invoice or credit memo ID is passed, the command also compares the XML fields against the Magento values for `grand_total`, `subtotal`, and `tax_amount`.

Output

```
XML summation (BT-106..112):
+-----------------+--------+
| field           | value  |
+-----------------+--------+
| grand_total     | 119.00 |
| tax_basis_total | 100.00 |
| tax_total       | 19.00  |
...

Magento vs XML:
+-------------+---------+--------+---------+--------+
| field       | magento | xml    | diff    | status |
+-------------+---------+--------+---------+--------+
| grand_total | 119.00  | 119.00 | +0.0000 | OK     |
| subtotal    | 100.00  | 100.00 | +0.0000 | OK     |
| tax_amount  | 19.00   | 19.00  | +0.0000 | OK     |
+-------------+---------+--------+---------+--------+

All checks passed.
```

Exit code `0` on match, `1` on any mismatch.

REST API

E-Invoice Documentation · /e-invoice/reference/rest-api

The extension provides two kinds of API functionality:

1. **Add E-Invoice content to Magento Sales APIs** (invoice/credit memo GET)
2. **Custom endpoints to trigger generation** (invoice/credit memo + bulk)

Include E-Invoice in Invoice / Credit Memo API

Enable it in **Stores > Configuration > MageB2B > E-Invoice > REST API Settings**:

- **Include E-Invoice in Invoice API**
- **Include E-Invoice in Credit Memo API**

When enabled, `GET` responses include extension attributes:

- `extension_attributes.einvoice_xml` (XML string)
- `extension_attributes.einvoice_pdf` (base64-encoded PDF content, only for hybrid formats)

Examples:

```
GET /rest/V1/invoices/{invoiceId}
GET /rest/V1/creditmemos/{creditmemoId}
```

Trigger Generation via REST

The module registers custom endpoints:

```
POST /rest/V1/einvoice/invoice/{invoiceId}/generate
POST /rest/V1/einvoice/creditmemo/{creditmemoId}/generate
POST /rest/V1/einvoice/invoices/generate
POST /rest/V1/einvoice/creditmemos/generate
```

Notes:

- These endpoints operate on **entity IDs** (numeric), not increment IDs.
- Bulk endpoints use `invoiceIds` or `creditmemoIds`.
- The optional `force` parameter is accepted for backward compatibility.

```
{
  "invoiceIds": [1, 2, 3],
  "force": true
}
```

Troubleshooting

E-Invoice Documentation · /e-invoice/troubleshooting

Common issues and solutions for the E-Invoice extension.

E-Invoice Not Generated

Symptoms

- Invoice created but no e-invoice
- Status remains "pending" or empty

Solutions

1. **Check if enabled**
    - Verify E-Invoicing is enabled for the store view
    - **Stores > Configuration > MageB2B > E-Invoice > General Settings > Enable E-Invoicing**: Yes
2. **Check generation mode**
    - Immediate: Should generate on invoice save
    - Queued: Check queue consumer is running
    - Cron: Wait for cron (hourly/daily) or check cron status
3. **Check logs**

    ```
    tail -100 var/log/system.log
    tail -100 var/log/exception.log
    ```

4. **Verify company data**
    - VAT ID must be configured
    - All required fields must be filled

Validation Errors

"Invalid VAT ID format"

- VAT ID must include country prefix (e.g., DE123456789)
- Check for extra spaces or special characters

"IBAN validation failed"

- IBAN must be valid and include country code
- Verify with your bank

"Leitweg-ID required"

This extension does not require a Leitweg-ID for XRechnung generation (B2B usage). If you need B2G submission requirements, validate and enrich the XML in your integration layer.

PDF Generation Issues

PDF Not Created (ZUGFeRD/Factur-X)

1. **Check Magento PDF works**
   - Try generating a standard invoice PDF
   - If that fails, fix Magento PDF first

2. **Check library installation**

   ```
   composer show horstoeko/zugferd
   ```

3. **Check PHP extensions**
   - Ensure `zlib` extension is enabled
   - Ensure `dom` extension is enabled

4. **Check memory**
   - PDF generation requires memory
   - Increase `memory_limit` if needed

PDF Corrupted

- Check file permissions in media/einvoice/
- Verify disk space is available
- Check for PHP warnings during generation

Queue/Cron Issues

Queue Not Processing

1. **Check consumer is running**

   ```
   php bin/magento queue:consumers:list
   php bin/magento queue:consumers:start mageb2b.einvoice.generate
   ```

2. **Check message queue configuration**
   - Verify `env.php` queue settings
   - Verify your queue backend/consumer setup for the `mageb2b.einvoice.generate` consumer

Cron Not Running

1. **Check cron status**

   ```
   php bin/magento cron:run --group=default
   ```

2. **Verify crontab**
   - Ensure Magento cron is configured
   - Check system crontab entries

File Storage Issues

Files Not Saved

1. **Check directory permissions**

   ```
   ls -la pub/media/einvoice/
   chmod -R 775 pub/media/einvoice/
   chown -R www-data:www-data pub/media/einvoice/
   ```

2. **Check disk space**

   ```
   df -h
   ```

3. **Verify storage path**
   - Check configured path in settings
   - Ensure it's relative to media directory

Files Not Found

- Check **Storage Strategy** (Permanent vs On-Demand)
- Check filename pattern settings (Invoice/Credit Memo Filename Pattern)
- Verify files exist under the configured storage path
- Check for file system errors

Performance Issues

Slow Invoice Creation (Immediate Mode)

- Switch to Queued or Cron mode
- Reduce validation level
- Review other heavy customizations or integrations running during invoice creation

High Memory Usage

- Process invoices in smaller batches

- Increase PHP memory limit
- Use cron mode for high volume

PEPPOL BIS Issues

"Missing Seller Endpoint"

Receiver rejects the UBL document with a missing-endpoint error.

Solution:

- Configure **Seller Endpoint Scheme** and **Seller Endpoint ID** under **Stores > Configuration > MageB2B > E-Invoice > PEPPOL BIS Billing 3.0**
- Make sure the identifier format matches the selected scheme (e.g. scheme `9930` expects `DE123456789`)

"Missing BuyerReference"

PEPPOL BIS requires BT-10 on every document.

Solution:

- Set `buyer_reference` on the order, or
- Populate the customer note field, or
- Accept the fallback to the invoice increment ID (default behaviour)

Wrong Buyer Endpoint Scheme

XML contains the buyer's VAT ID but the receiving access point expects a different scheme (e.g. GLN, Leitweg-ID).

Solution:

- Set customer attribute `peppol_endpoint_id` and `peppol_endpoint_scheme` explicitly on the customer record

VAT Category Issues

All Lines Show `S` but Should Be `K` or `G`

Solution:

- Verify the buyer has a VAT ID on their billing address (required for intra-community `K`)
- Confirm the buyer country is in the Magento EU country list under **Stores > Configuration > General > Countries Options**
- For export (`G`): confirm the buyer country is not in the EU list

Gift Cards Get Taxed

Solution:

- Enable **Treat Magento Giftcards as Multi-Purpose Voucher** under **VAT Classification**
- For non-Adobe-Commerce giftcards: create a product attribute and enter its code in **Voucher**

Override Product Attribute, then set products to `multi_purpose`

Amounts Don't Match Magento Totals

Solution:

- Run `bin/magento einvoice:verify-amounts --invoice-id=<id>` to pinpoint which field drifts
- Check rounding / discount handling on the order

Debug Checklist

When troubleshooting:

1. ☐ E-Invoicing is enabled for the store
2. ☐ Generation mode is correctly configured
3. ☐ Company data is complete (VAT ID, etc.)
4. ☐ For queued: consumer is running
5. ☐ For cron: cron is configured
6. ☐ File permissions are correct
7. ☐ Disk space is available
8. ☐ Checked all log files (`system.log`, `exception.log`)

Getting Help

If issues persist:

1. Collect relevant log excerpts
2. Note the exact error message
3. Document steps to reproduce
4. Contact support at info@softwaresilo.io

Related

- Error Handling
- Configuration Guide