

7. Integration Capabilities and Methods

7.1 The Principle of Flexible Integration

Every enterprise is unique. Some operate modern APIs, others rely on batch files or legacy systems, and many have subsidiaries with little to no IT capability. Softrust and Bluelight provide a **multi-channel integration approach** that ensures all client environments can comply without costly ERP changes.

<diagram: Integration wheel with four entry points — API, File/SFTP, Email, BlueBox capture — all converging into SmartAPI → FIRS MBS>

7.2 SmartAPI Integration

The flagship method for modern ERPs and billing systems.

Features

- REST endpoints exposed for invoice submission, status checks, and archive retrieval.
- Secure authentication via OAuth2 with JWT or mTLS.
- Webhooks push clearance and rejection responses back to ERP.
- Polling fallback for environments that cannot expose inbound endpoints.
- Idempotency and replay queues ensure zero duplicates and no data loss.

ERP Examples

- **SAP ECC:** IDoc INVOIC02 routed through PI/PO to SmartAPI.
 - **SAP S4:** CPI iFlows using Billing Document API.
 - **Oracle:** EBS XML exports or Fusion REST APIs.
 - **Dynamics:** OData integration or CSV exports ingested into SmartAPI.
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7.3 File and Batch Integration

For clients accustomed to batch jobs or constrained environments.

Features

- SFTP or secure object storage endpoints for file drop.
- Supported formats: JSON, XML, CSV, TXT.
- Checksum validation ensures integrity of files before processing.

- Batch results returned with success/failure per invoice.
- Configurable schedules (hourly, daily, or ad hoc).

Use Cases

- Nightly batch runs from mid-market ERPs.
- High-volume clearing where ERP cannot push real time.
- Transitional approach for clients modernizing their ERP stack.

<diagram: File batch flow — ERP export → SFTP drop → SmartAPI → FIRS → return batch result>

7.4 Email Connector

The simplest integration option, designed for subsidiaries or contractors.

Features

- Client sends invoices as email attachments to a dedicated address.
- Supported attachments: PDF, XML, CSV.
- Invoices parsed, validated, signed, and submitted via SmartAPI.
- Response returned to sender by email with clearance or rejection details.
- Inbound invoices also supported — clients can receive validated invoices through the same channel.

Benefits

- Zero technical integration effort.
- Works with any system capable of sending email.
- Ideal for small subsidiaries, external vendors, or distributed teams.

<diagram: Email Connector flow — Client email → SmartAPI → FIRS → return email with receipt>

7.5 BlueBox Capture Technology

For legacy environments where system changes are not feasible.

Features

- Captures invoices directly from print spool, file folder, or network port.

- Converts captured documents into SmartAPI canonical schema.
- Automatically submits to FIRS and archives results.
- Works without touching ERP source code.
- Returns receipts into ERP or email for Finance validation.

Benefits

- Zero ERP modification required.
- Fastest path to compliance in locked-down systems.
- Ensures even outdated or unsupported systems can comply with FIRS mandates.

<diagram: BlueBox flow — ERP print spool → BlueBox → SmartAPI → FIRS → archive + dashboards>

7.6 Hybrid Integration

Large enterprises often require more than one method:

- Headquarters using **SmartAPI** for SAP,
- Regional subsidiaries on **BlueInvoice**,
- Contractors submitting via **Email Connector**,
- Legacy systems managed through **BlueBox**.

All methods converge into the same compliance core — SmartAPI — ensuring unified monitoring, reconciliation, and audit evidence across the enterprise.

7.7 Benefits of Multi-Channel Integration

- **Flexibility** – No system is left behind, from SAP to spreadsheets.
- **Risk Reduction** – Multiple fallback paths (API, file, email, capture).
- **Scalability** – Handle both high-volume automated submissions and ad-hoc manual entries.
- **Unified Compliance** – Regardless of channel, every invoice flows through SmartAPI for signing, QR, submission, and archiving.
- **Future Proofing** – As clients modernize their systems, they can migrate from Email or BlueBox to SmartAPI without disruption.