Technical FAQ

inoBrix Intelligent Yard Logistics & Shipping Solution

inoBrix Intelligent Yard Logistics & Shipping Solution is an integrated inoBrix solution built on SAP. It coordinates gate activity, truck weighing, loading, quality and shipping documentation from arrival through dispatch. This FAQ accompanies the logical architecture and interface register; documented workflows describe design intent, not proof of deployed or demo-ready functionality.

1 What process does the solution cover

The documented outbound flow spans delivery and carrier coordination, truck arrival, barcode check-in, empty weight, travel BOL, loading, inspection, certificate of analysis, final weight, goods issue, checkout and customer ASN. Plant reporting brings shipment milestones together. Initial business focus is chemicals, agriculture and process manufacturing.

2 Which SAP components are in scope

The logical architecture identifies SAP S/4HANA business applications for sales and delivery, inventory, warehouse execution and quality. It shows SD, LE, MM-IM, EWM and QM with SAP HANA persistence. SD / MM allocation and the division of work between IM and EWM require confirmation. Module labels do not establish a licensed bill of materials.

3 What is standard configured or custom

The complete inoBrix solution coordinates the plant journey using SAP business capabilities, SAP configuration and solution-specific workflows and integrations. The following classifications are a messaging baseline; verify them against actual configuration, application code and interfaces before making implementation claims.

Classification	Examples
SAP standard	Sales orders, deliveries and PGI. EWM execution and check-in/out, and QM certificate capabilities where applicable.
Configured SAP	Inspection plans, certificate profiles, output forms and partner mappings.
inoBrix solution-specific work	Tailored kiosk / Fiori workflows, scale connectivity, shipment correlation and plant milestone reporting. Confirm code and integration boundaries.

4 Is EWM mandatory and which SAP editions are supported

No universal EWM prerequisite or supported-edition matrix has been established. Confirm the customer edition, release, warehouse topology and required processes with the solution team. Do not assume equivalent support across Public Edition, Private Edition, on-premises deployments or ECC.

Architecture and integration

5 Where do the applications and custom services run

Fiori is the documented user experience. The architecture deliberately leaves application hosting, service endpoint placement and custom runtime open. Confirm the frontend, Gateway / service approach, ABAP or BTP execution, and plant connectivity before issuing a deployment design. The diagram does not establish that custom apps run on BTP.

Design status: Hosting and runtime to confirm.

6 What role does SAP BTP play

The source workflow names SAP Cloud Integration, also called CPI, for inbound scale weight APIs. Treat the platform service separately from the solution-specific integration flows. No other BTP services or entitlements are confirmed as mandatory.

Design status: Cloud Integration weight path documented; tenant setup and entitlements to confirm.

7 How do weighbridge readings reach SAP

The documented path is scale head / SQL database, an integration path through CPI, and an inbound API to S/4HANA for empty and loaded weights. The direct SQL access method, adapter, trigger, authentication, schema and target API are not yet specified. Do not interpret the diagram as a confirmed network path or direct database connection.

8 How are weights matched and validated

Shipment correlation, weight units, event time and empty-versus-gross identity need an agreed contract. Recommended controls include rejecting unmatched or stale readings, handling repeated events without duplicate updates, and retaining the original reading for reconciliation. Net-weight calculation and allowed tolerances need functional approval.

Design status: Recommended controls; implementation and acceptance rules to confirm.

9 What exchanges connect the 3PL and the customer

The source describes delivery information and a planning ASN to the 3PL, inbound carrier / truck / pickup details, and a separate customer ASN after PGI. Confirm each partner message, mapping, acknowledgment and transport. EDI location is open; do not assume all EDI traffic passes through CPI.

10 Are interfaces synchronous and how quickly do statuses update

The design does not establish synchronous versus asynchronous execution, polling intervals, notification latency or a real-time service level. Confirm these per interface and measure them during testing. The customer ASN trigger follows successful PGI; outbound transmission alone does not prove recipient receipt.

Interface register: I01 scale readings, I02 CPI weight API, I03 3PL exchange, I04 customer ASN, O01 forms / BOL, O02 CoA / signing, D01 persistence and R01 reporting. Use the companion architecture register for the full functional contracts.

Execution documents and quality

11 How does gate check in work

The documented kiosk flow scans the travel-document barcode, retrieves shipment information and validates it against the scale-house planning report. Successful validation marks the shipment checked in. Confirm whether standard EWM check-in/out provides the transaction and which arrival validations or screens are additional code.

12 How do loading and inspection connect

The source describes a tailored Fiori loading application replacing a legacy tracker. Loading completion notifies quality with delivery, material and composition information. Quality uses digital forms with section validations and checklists. The source lists 17 formats; it does not establish that all 17 are implemented or demo-ready.

13 How are CoA generation and digital signatures handled

SAP QM certificate capability is the stated foundation. Certificate profiles and templates may be configuration, while plant-specific approval or signature integration may involve custom work. The source places CoA preparation and signing after successful inspection. Confirm the authorized role, signing provider, audit evidence and any applicable customer requirements.

Design status: Provider, signing mechanism and role allocation to confirm. No compliance assurance is implied.

14 Which shipping documents are generated

The source identifies a barcode travel document, traveling BOL after check-in, CoA, and final BOL after PGI. Adobe forms are documented, but ADS deployment, output framework, printer integration, reprint rules and retention require design. A configured layout may still need custom data retrieval or barcode logic.

15 Does final weight automatically post goods issue

The source links final weight with subsequent PGI, but the actual trigger and posting mechanism require confirmation. Establish whether an operator posts, a service initiates posting or another event drives it. Inspect the actual SAP posting result rather than treating a received weight message as proof of PGI.

16 Does the solution block dispatch when a requirement is incomplete

The consolidated dispatch-readiness gate and exception / revalidation loop are proposed. Define the criteria and the exact action blocked, such as PGI or checkout, before claiming availability. Check existing SAP quality and release controls first. A status warning does not prove the system enforces a dispatch hold.

Design status: Proposed capability requiring functional design and demonstrated evidence.

Security operations and support

17 How do users and integrations authenticate

No identity provider, sign-on pattern or service authentication mechanism is confirmed. Define user and service identities, role-based access, certificate / secret management and session behavior. For kiosks, confirm how driver identity and shared-device access relate to authorized SAP actions.

Design status: Security design to confirm; these are requirements, not verified controls.

18 How are the plant network and data protected

Network zones, outbound / inbound access, TLS termination and any connector or gateway must follow the approved customer architecture. Define what driver, truck, shipment and quality data the solution stores, which systems own it, who can access it, and its retention. No cloud region, encryption implementation or certification has been verified.

19 How should failures and duplicate messages be handled

Agree a correlation key and unique event identifier, retry and replay rules, an exception owner, and reconciliation against SAP business state. Define what happens when a scale reading arrives twice, a posting times out or an ASN fails. Replaying a transport message must not inadvertently repeat a business posting.

Design status: Recommended operating design. Verify implemented behavior through failure tests.

20 Can operations continue offline

Offline capture, local queuing, failover and recovery are not validated capabilities. The plant must agree a safe fallback for connectivity or device outages and a controlled reconciliation process before production use. Confirm whether each action can pause or needs an alternative operating procedure.

21 What reporting and audit history are available

The source lists a scale-house report with shipment references, weights, loading, CoA / signature status, PGI time and check-in/out details, plus monthly analytics distribution. Confirm stored timestamps, change history, refresh timing, export method and retention. No specific analytics deployment or immutable audit trail is established.

22 Who supports the solution and how does it scale

Support ownership, monitoring, incident escalation, service levels and upgrade responsibilities need agreement across the customer, SAP providers and inoBrix. Throughput, response time, multiple scales and multiple plants need sizing and testing. No performance benchmark, rollout duration or service commitment has been validated.

Prerequisites and decisions to close

23 Is the solution clean core compliant

No clean-core assessment has been validated for the solution. Review the implementation against the customer edition and approved extensibility approach, including APIs, modifications and upgrade impacts. Do not claim certification or clean-core compliance without evidence specific to this solution.

24 What is needed before an evaluation

Provide the SAP edition and module scope, one plant workflow, sample shipments and documents, scale interface details, relevant master data and authorized test access. Agree business and technical owners, a sandbox scenario, live versus simulated interfaces, and baseline measures. Confirm commercial and licensing prerequisites separately.

Design decision register

Suggested owner roles below are proposed assignments. Close each item with approved evidence, then update the architecture and this FAQ.

Decision	Suggested owner	Evidence needed
AD01 Application deployment	SAP / application architect	Runtime, frontend, service ownership and deployed endpoints
AD02 Warehouse topology	SAP functional lead	Edition, IM / EWM allocation and supported process scope
AD03 Integration contracts	Integration lead	Scale / partner schemas, APIs, triggers and correlation rules
AD04 Security and connectivity	Security / plant IT	Identity, roles, network flows, certificates and data access

Decision	Suggested owner	Evidence needed
AD05 Resilience and support	Operations / integration	Replay behavior, exception ownership, monitoring and recovery tests
AD06 Documents and analytics	Quality / output / reporting	Form framework, signing, approvals, reporting refresh and retention

Evidence required for technical signoff

Approve the system landscape and interface specifications, demonstrate the complete shipment flow, and test role restrictions and failure recovery. Verify final weight / PGI correlation, final BOL timing, ASN after PGI and document approval evidence. Confirm production support and release responsibilities before deployment.

Reference basis: the supplied end-to-end yard logistics workflow, inoBrix messaging brief and logical architecture / interface register. Detailed deployment selection, supported-version statements and control implementation require confirmation with the build and customer teams.