



# UDX DATA EXCHANGE PLATFORM

## Data Exchange for Government & Regulated Sectors

- Schema-driven
- Policy-controlled
- Built for Compliance

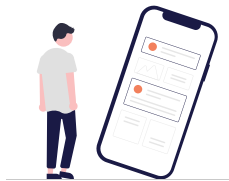


# The Problem: Why Traditional Data Sharing Fails



## Rigid APIs

Schema changes require costly redevelopment. Each consumer demands bespoke integration.



## No Field-Level Control

Binary access: all data or none. Cannot suppress sensitive fields per partner.



## Manual Mapping

Separate processes for each consumer. Version control problems.



## Compliance Risk

Cannot audit field sharing. Cannot enforce consent. GDPR exposure.

## Real-World Impact

Hospital shares patient data with 12 partners. Traditional: 12 integrations  $\times$  £50K = £600K + £180K/yr maintenance. 18 months delivery. Manual redaction creates errors.

## What Government Needs

### Submit Once, Serve Many:

Single integration serves all consumers

### Field-Level Governance:

Control visibility per field, per partner.

### Audit Trail:

Every field exchange logged for compliance.

## Core Innovation: Field-Governed Data exchange

Every field carries metadata: purpose, classification, sensitivity, regulatory basis, consent requirements. Platform constructs custom payloads per consumer.

### Field-Level Tagged Datasets

Test Type, Result Value, Lab ID-each tagged with purpose, classification, access rules.

### Consumers Define Requirements

NHS publishes schema. Result Value mandatory. Lab ID restricted to quality partners.

### Providers Submit Once

Map data once. Forms, Excel, APIs auto-generated. Serves all consumers.



### No-Code Schema-Driven UI:

Configure schemas without code. Platform generates forms, validates submissions, enforces policies automatically.

## Same Submission, Different Payloads

#### GP:

Full clinical history

#### Pharmacy:

Prescriptions only

#### Insurer:

Billing codes, no patient IDs

#### Public Health:

Anonymised aggregates

# Multi-Layer Governance: Global → Sector → Partner

## Hierarchical Rule System

### Global Rules

Baseline policies. PII suppressed outside jurisdiction unless consent recorded.

### Sector Overrides

Mental health restricts psychiatric diagnoses. Child safeguarding auto-restricts.

### Partner Overrides

Research gets anonymised data. Cross-border agreements permit specific fields.

## Field-Level Logic

Mandatory fields always included. Voluntary if policy permits. Conditional based on other values.

## Consent Aware

Withdrawal → Research fields suppressed.  
Official-Sensitive → Cleared partners only.

## Superior to Dataset-Level Governance

### Traditional:

All or nothing. Grant/deny entire endpoint.

### UDX:

Field-level access based on layered policies.

### Result:

Participate without exposing sensitive data.

# How It Works: Six-Step Operational Flow

## Hierarchical Rule System

### 1. Consumer Publishes Schema

NHS defines discharge fields. Tagged with purpose, classification

### 2. Fields Tagged

Each field: regulatory basis, intended use, sensitivity, retention.

### 3. Provider Connects

Trust maps internal systems once. Serves all consumers.

### 4. UI Auto-Generated

Web forms, Excel templates, APIs created. Validation embedded.

### 5. Platform Filters

Policies, consent, classification evaluated. Custom payload built.

### 6. Consumer Receives

Schema-validated, policy-filtered data. Complete audit trail.



#### Impact:

80% reduction in integration burden.  
Consumers get compliant data instantly.  
Compliance officers audit every decision.  
Days, not months.

## Excel Template Ingestion: Key to Provider Adoption

Platform generates Excel with embedded validation. Small NHS trusts download, complete offline, upload. 95% adoption vs 40% for API-only platforms.

# Key Features & Capabilities



## Dynamic Schema Engine

Define, version, publish schemas without code. Auto-regenerate forms when updated.



## Field Tagging Framework

Tag fields with metadata. Custom vocabularies for organisational governance.



## Policy-Based Visibility

Declarative rules. Real-time evaluation. Changes take effect immediately.



## Multi-Partner Routing

Submit once, route to many. Conditional notifications. Automated escalation.



## Secure APIs

OAuth 2.0, TLS encryption. Auto-generated from schemas. Rate limiting, monitoring



## Excel Template Ingestion

Auto-mapped to schema. Validation embedded. Bulk upload with error reporting.

## Compliance Logging

Tamper-evident audit trails. FOI-ready. Dashboard views of violations.

## No-Code Portal

Non-technical users manage schemas, policies, submissions. Guided workflows.

## Version Control

Schema evolution tracked. Gradual rollout. No forced simultaneous upgrades.



# Why Government Needs This

## Safe Inter-Agency Exchange

Field-level control enforces legal obligations. Child protection shares case data without exposing family medical history to all parties.

## Reduces Integration Cost

Connect once, serve many. Hospital serves all 12 consumers from single integration. New partnerships onboard in days.

## Enforces Compliance at Attribute Level

GDPR, Data Protection Act obligations implemented at field level. Auto-suppress fields when policy denies. Generate audit trails.

## Supports Critical Sectors

Purpose-built for healthcare, justice, research, emergency services. Single architecture serves all use cases.



## Perfect for Data Custodians and Regulators

Regulators collect compliance reports from industry, distribute insights to policy teams. Healthcare commissioners collect service data, share metrics with inspectors. Platform provides turnkey solution for managing complex, multi-party ecosystems.

# Differentiators & Transparent Pricing

## vs Traditional Platforms

### Not API Hub:

Governs content, not just routing. Filters fields per consumer automatically.

### Not Integration Tool:

Declarative policies, not coded logic. Business users configure.

### Not Data Warehouse:

Real-time exchange with field governance. No central storage..

### Foundation

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per month

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