

JCricket as an Operational Entity Editor for Shared Cataloguing

The New Paradigms of the Bibliographic Workflow

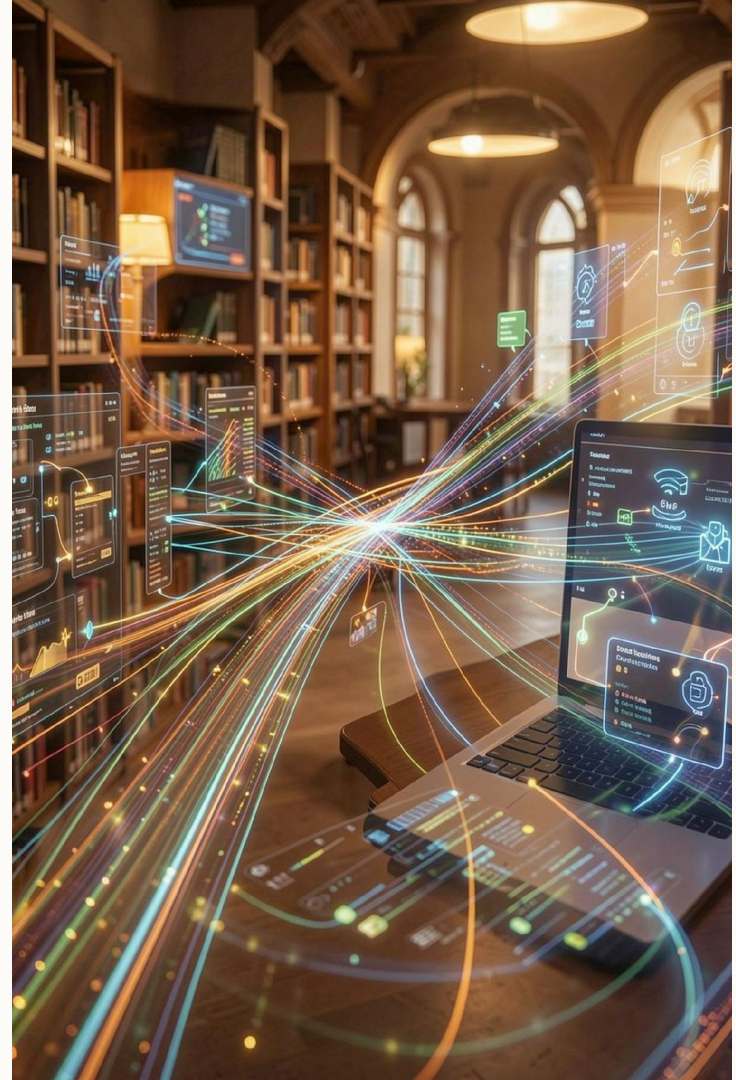
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The Traditional Model: MARC as an Interoperability Technology

Export / Import of MARC Records

ILSs provide tools to extract bibliographic records from the local database, translating them into structured files according to the MARC standard, ready for transfer to other systems.

Querying via Z39.50

Catalogers query external institution catalogs directly, identify the matching bibliographic description, and download it in MARC format to integrate into their local system.

The Traditional Workflow: Transferring records

In both operational modes, catalogers retrieve a record to transfer it into their own cataloging environment. Interoperability is thus based on transferring record duplicated rather than direct entity sharing.



Export/Import

From ILS1 to a MARC file, then into ILS2.

Z39.50

Remote OPAC via Z39.50, imported MARC record.

Local Import

Files, in different formats (MARC, Onix and other) provided by external providers are loaded into local ILSs.

Both operational paths share the same logic: data is always duplicated and isolated in separate environments without direct integration between systems.

Drivers of Change: Towards an Ecosystem of Interconnected Data



APIs

Enable direct, real-time interaction between different applications, eliminating file transfers.



JSON / XML / RDF

Standardize machine-readable structured data exchange and representation.



Ontologies & Vocabularies

Define shared, unambiguous semantics for consistent interpretation across systems.



Linked Open Data

Transform data into globally identifiable, linkable, and reusable resources via persistent URIs.

Interoperability in JCricket: Two Operational Models

Inside the [JCricket editor](#), interoperability takes shape through two distinct functions modeled on the cataloger's workflow. In both cases, cataloging becomes **synchronous**, **interactive**, and **bidirectional**.

1

Copy Cataloguing

Traditional mode querying the configured external ILS via API. Search and retrieval occur seamlessly within the same environment: catalogers analyze individual fields of a selected record and selectively copy useful data into the JCricket entity.

2

Search and Import with On-the-Fly Clustering

Queries the ILS via API and automates acquisition. The selected record transfers directly into JCricket's Cluster Knowledge Base (CKB), where an algorithm translates bibliographic data into relational entities based on BIBFRAME.

The Four Entities created

Bibliographic records are **clustered on the fly**, saved in the CKB, and indexed in SOLR for Share portal searches. The process matches existing database entities automatically to reconcile or create new entities, eliminating duplicates and ensuring consistency.

The screenshot shows the 'Grisham, John' entity page. It includes a portrait of John Grisham, his name, and a brief biography. Below the biography, there are tabs for 'Original works by' and 'Publications by'. The 'Original works by' tab is selected, showing a table with one result: 'The Rooster Bar' by Grisham, John (author).

AGENT

Gathers actors responsible for creation/contribution: authors, publishers, translators, and other contributors.

The screenshot shows the 'Rooster Bar' entity page. It includes the title 'Rooster Bar', the author 'Grisham, John', and the main title 'The Rooster Bar'. Below the title, there are tabs for 'Publications of this', 'BF works', and 'Related agents'. The 'Publications of this' tab is selected, showing a table with one result: 'The Rooster Bar (Volume In English)' by Grisham, John (author).

OPUS

Represents the intellectual work, the highest level of conceptual abstraction, acting as the core node linking other entities.

The screenshot shows the 'Rooster Bar' entity page, specifically the 'Related works' tab. It displays a list of related works, including 'The Rooster Bar (Volume In English)' and 'The Rooster Bar, English, (Text)'. The page also includes a summary of the work and a list of related agents.

WORK

An entity representing the Work as materialized in a specific text, language, version, or revision.

The screenshot shows the 'Rooster Bar' entity page, specifically the 'Instances of' tab. It displays a list of instances of the work, including 'The Rooster Bar (Volume In English)' and 'The Rooster Bar, English, (Text)'. The page also includes a summary of the work and a list of related agents.

INSTANCE

Describes the physical or digital manifestation of the Work: edition, format, publisher, and publication details.

JCricket: to Integrate, Not to replace

From "Record Sharing" to "Data & Entity Sharing"

1

RECORD SHARING

Unidirectional, asynchronous records import/export, prone to duplication.

2

SYSTEM INTEROPERABILITY

Real-time API connectivity breaks down silos.

3

ENTITY & DATA SHARING

Linked data sharing enables bibliographic entities to be reused across systems.

ILS/LSP

JCricket integrates with ILSs like FOLIO and Alma, allowing them to manage cataloging and administration while maintaining operational control over local collections and internal workflows.

Multi-Editors Support

JCricket workflows can be combined with other editors and applications, such as Sinopia, Marva, Wikidata.

A unique library ecosystem

Millions of bibliographic and authority data entries from various institutions are shared and interconnected instantly, creating an unprecedented *knowledge network*.

The challenge: A New Dimension in Metadata Quality

When entities become shared resources edited by many institutions simultaneously, metadata quality also depends on how the community governs collaborative editing.

JCricket evolved into a collaborative workspace where governance questions became visible, were discussed, and translated into operational Best Practices.



A Broader Governance Framework

In this context, various governance scenarios can emerge, which require the application of targeted Best Practices concerning:

- Adding information
- Replacing a value
- Managing multiple values
- Evolving controlled vocabularies
- Protecting contributions made by other institutions
- Merge and split policies
- Removing relationships
- Selecting authoritative external sources

The real challenge concerns responsibility, transparency, provenance, and the coordination of decisions within a community.

Governance should be recognised as a fundamental dimension of bibliographic infrastructure.





JCRICKET

Entity Editor



Thank you!

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