Building a Better Business Seminar

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Introducing BIC Realtime
Standard API's for the book industry

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What is BIC Realtime?

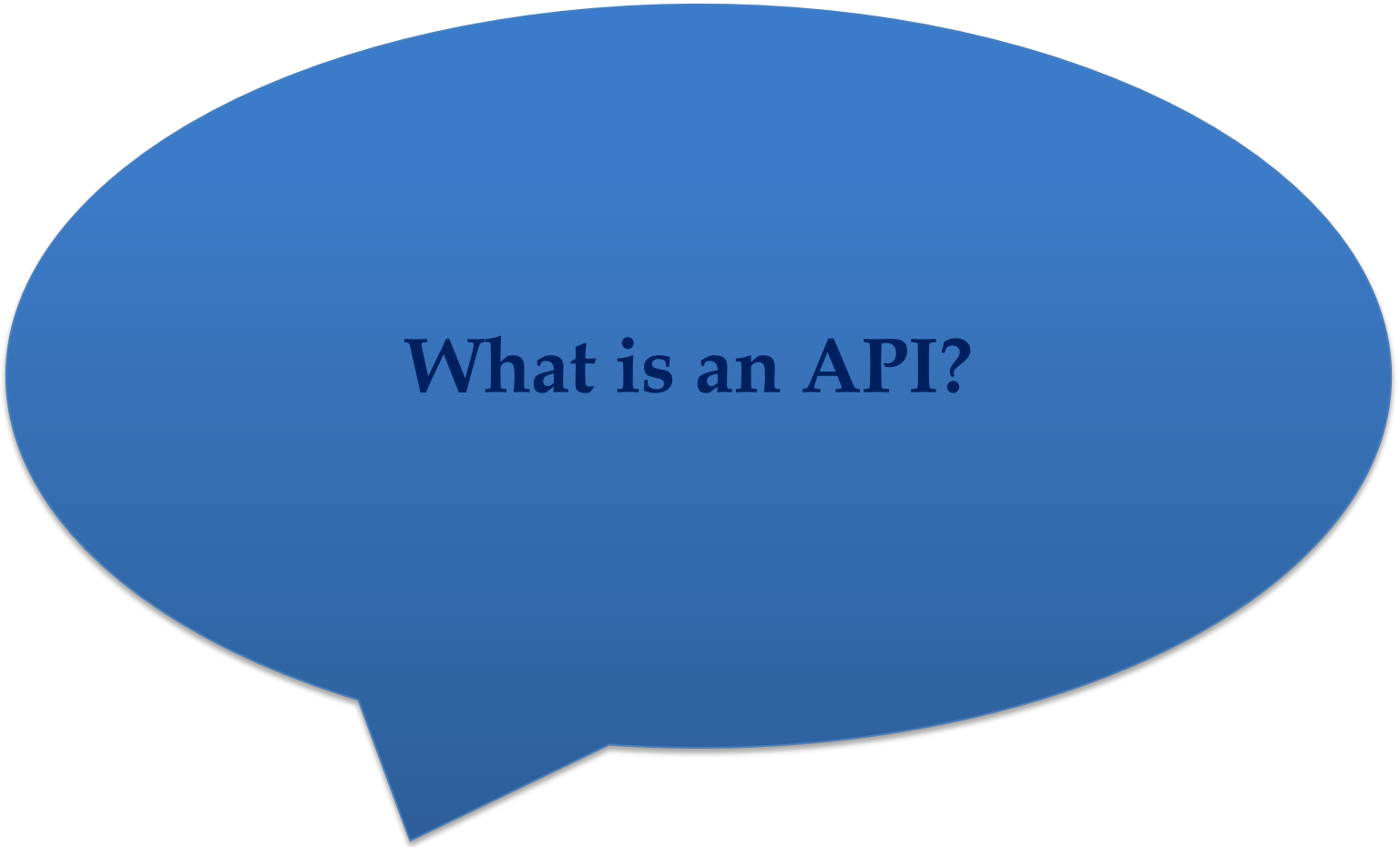
1. *BIC Realtime is a suite of 19 API's designed by and for the book industry covering a range of business requirements.*

2. *It refreshes and extends the previous set of Web Service standards that BIC has developed, adding features, new messages and provides a platform for growth.*

3. *Companies can use BIC Realtime to give trading partners secure, controlled access to their databases in real-time via standard API calls.*

4. *The new API's fill gaps in the EDI message set and will help reduce costs by reducing the number of calls, emails and other manual interventions.*

5. *Giving customers access to this data in real time eliminates issues and costs caused by daily or weekly batch updates which are out of date as soon as they are produced.*


What is an API?

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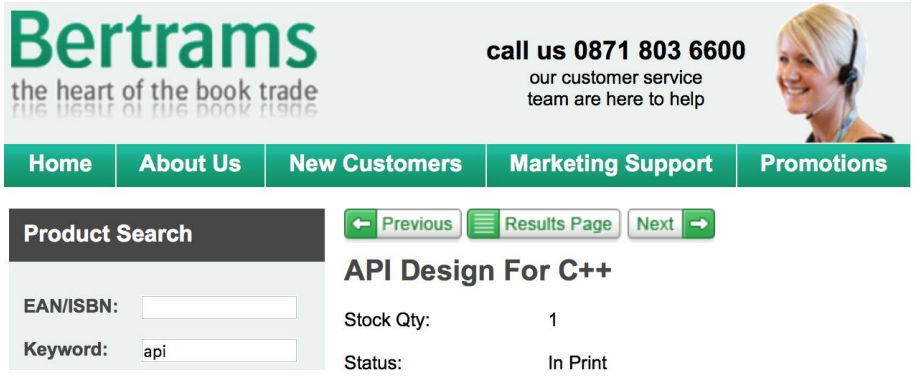
Scenario:

"We want to create an iPhone App that lets a bookseller scan an ISBN barcode and display its price and availability at their supplier."

BIC Price & Availability API standard



nielsen

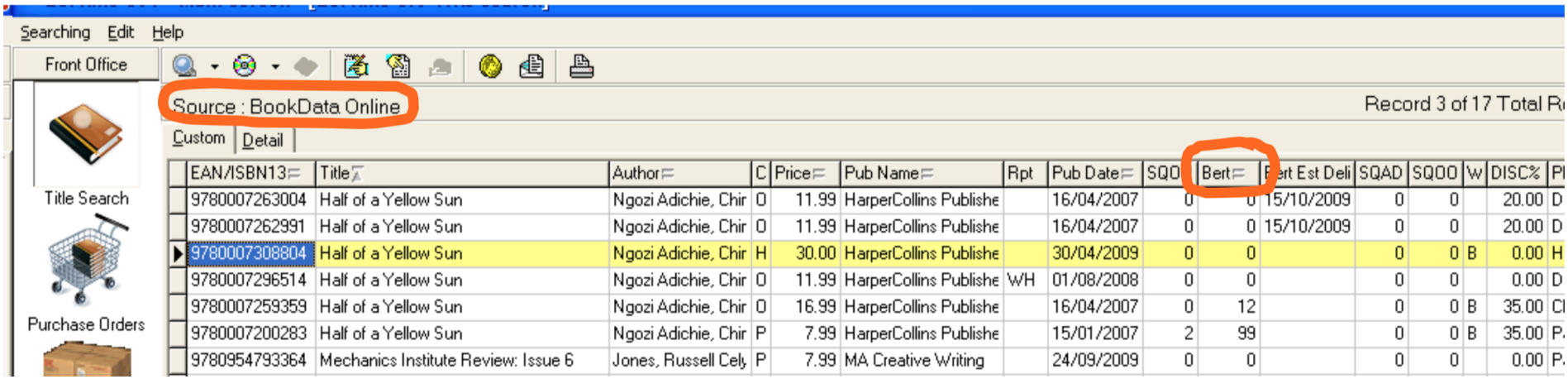
PubEasy

The API provides **secure, controlled access** via a **standard interface** to the suppliers systems.

The App can be used to access **any** supplier who implements the **standard API**, by adding the URL and credentials issues by the supplier.

What is an API?

API's can be integrated into anything connected to the Internet and used as building blocks to create complex applications:



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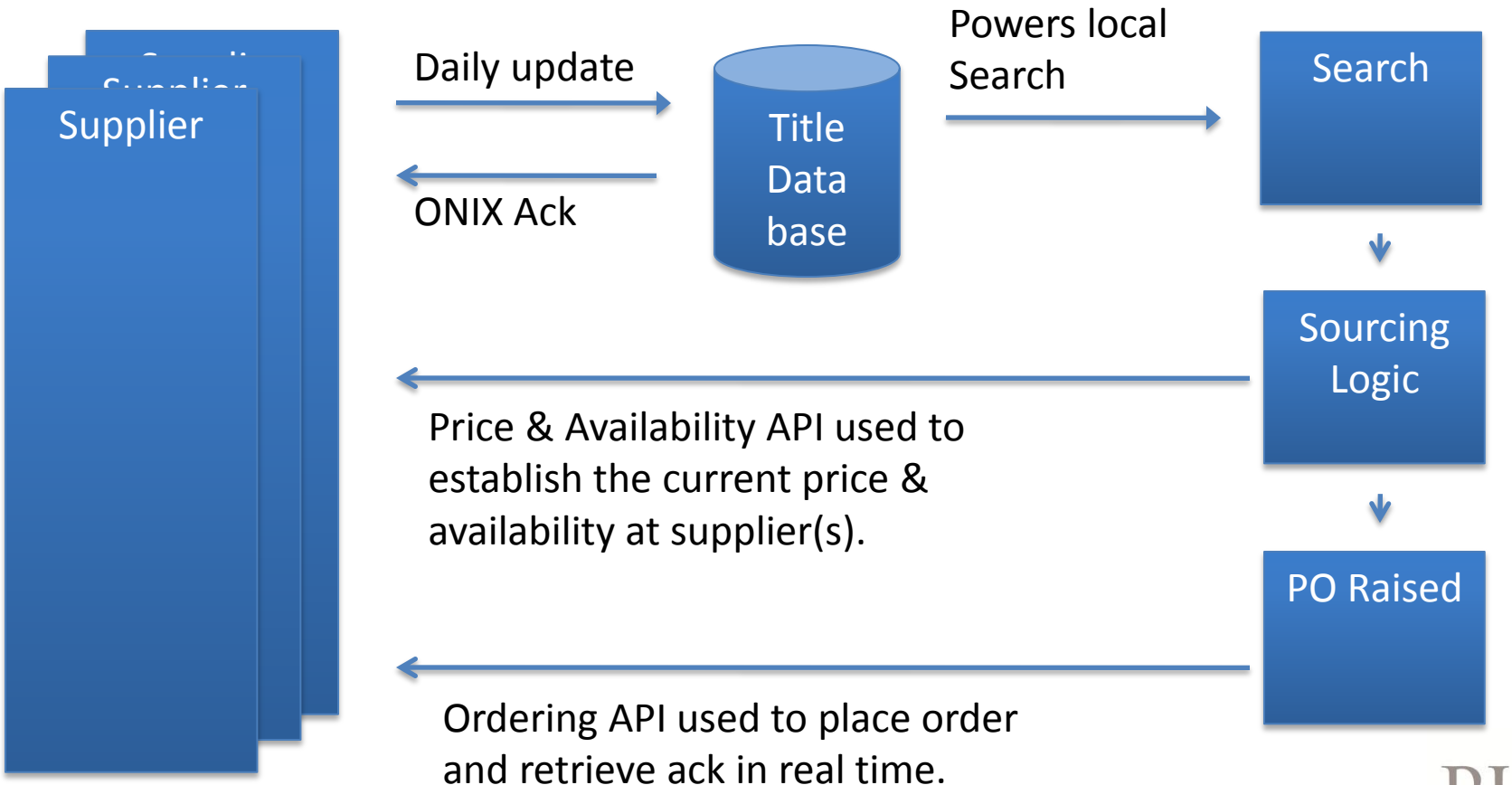
This example shows Bertrams Bertline system displaying search results from Nielsen Bookdata Online API's, merging together real time stock holding information at Bertrams using the BIC Price & Availability API.

BIC

How does BIC Realtime Improve data quality and processes?

How BIC Realtime improves data quality:

Example: A retailer uses the ONIX Ack API and BIC P&A API to improve data accuracy and finally uses the Ordering API to commit the order.



How BIC Realtime improves data quality:

The new ONIX Acknowledgement API

The new API encourages recipient to confirm that they have successfully ingested an ONIX record OR report any failures in real time.

List 226 –Record status code (ONIX Acknowledgement only)

Code	Label	Note
00	No record errors	Entire record parsed and ingested without errors, and any associated media files also processed without errors. Record *may* have a Product record in the Acknowledgement which itself *may* have a <RecordStatusNote> or <RecordStatusDetail> to convey information, editorial queries or warnings.
01	No record errors – errors in collateral	Entire record parsed and ingested without errors, record *must* have a Product record in the Acknowledgement with a <RecordStatusNote> or at least one <RecordStatusDetail> to convey errors in associated media files (and possibly supplementary information, editorial queries or warnings).
02	Record with errors	Record parsed and ingested with errors, record *must* have a Product record in the Acknowledgement with a <RecordStatusNote> or at least one <RecordStatusDetail> to convey errors in the record (and possibly supplementary information, editorial queries or warnings, plus any evident errors in the associated media files). At least *some* of the data in the original Product record has been ingested.

Real time data can create efficiency savings for suppliers and customers

Less order chasing, as status and availability confirmed prior to ordering AND acknowledged immediately

New Short pick notification API to keep customers informed in real time if things go wrong.

Higher invoice auto match rate

A better experience for consumers when they are not let down by promises made based on yesterdays data

BIC Realtime Order Cancellation API:

Consumer Contracts Regulations - came into force on 13 June 2014 and implemented the Consumer Rights Directive….giving consumers the right to cancel.

BUT There is no standard EDI / Automatic means in the book industry for sending a cancellation to a supplier.

This causes phone calls, emails, manual use of web sites, unwanted deliveries that then cause returns = unnecessary COST in supply chain.

The BIC Order Cancellation API is easy to implement and solves this problem.

Gives confidence to backorder

Does BIC Realtime mean EDI is dead?


No but…

API's vs. EDI: Technology & Skills Perspective

ANSI X12 released: 1979
TRADACOMS released: 1982
EDIFACT released: 1987

EDI Standards have been well maintained over the years but are limited by what was possible over 30 years ago.

BIC Realtime makes the experience and learning of the last 30+ years available to the next generation.

1. Any computer science graduate from the last 6 years will have studied and be experienced in using various styles of API's.

2. On the other hand EDI tends to be learnt on the job or by attending a BIC training course.

3. The last new EDI Message in the Book Trade was for the Industry Returns Initiative ten years ago whereas there are new API's every month.

Web API's vs. EDI: Cost Perspective

1. It costs less to develop a new web API than to develop a new EDI message.

2. The rollout costs can be substantially less and timescales shorter using web API's. This is because the users can **self serve** and don't need to call on much support from staff at the supplier to progress their development / deployment.

3. Web API's use the Internet to communicate so beyond your Internet connection there are no additional costs for Value Added Networks (VANS), Mailboxes, Gateways or translation services.

   As Web API's use the Internet they are automatically available globally, no need to join or interconnect with services in other parts of the world.

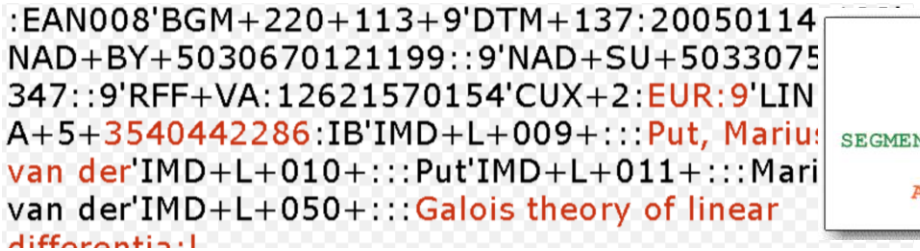
API's vs. EDI: Ease of development & Rollout

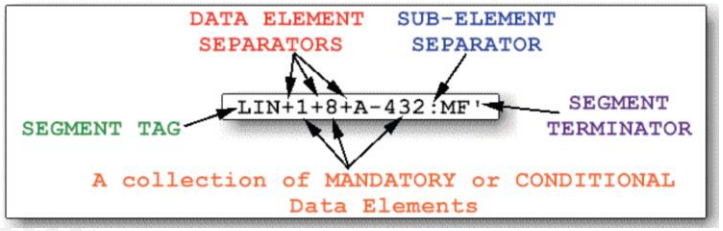
BIC Price & Availability API standard

The API standards are expressed in XML schema definitions. Think of this as a contract. The technology will validate API requests and responses against the schema and reject any requests that are not inline with the schema…and usually give a sensible reason straight away.

An API call can be developed and tested by the developer the same day with no interaction with support staff at the supplier.

EDI Implementations are comparatively difficult:
It's hard for a developer to know if the message they have built is valid until they send it to the recipient. The specifications are held externally in manuals.
Suppliers have to try and translate it and communicate any problems via email or phone, this can take days.





Web API's vs. EDI: The future

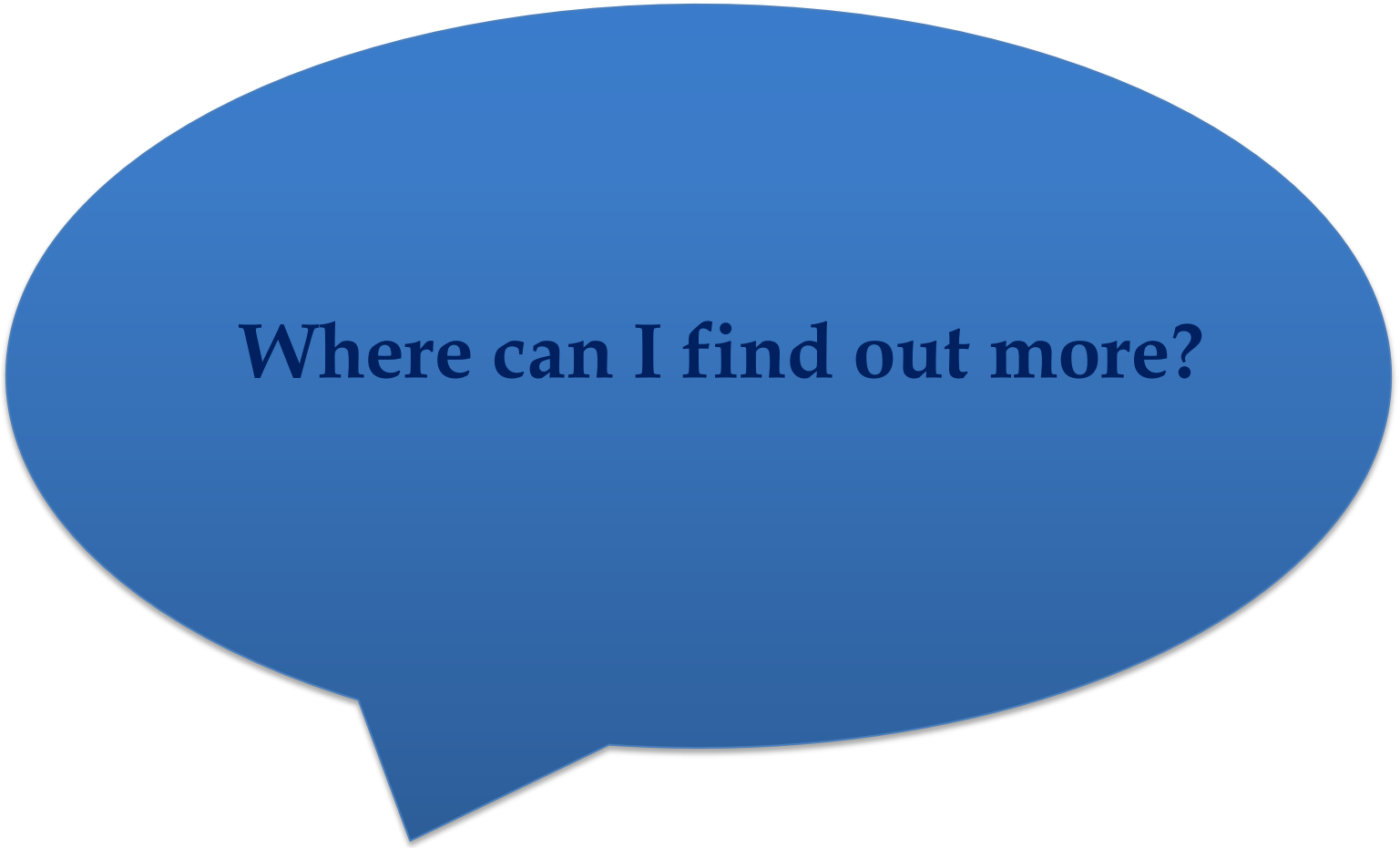
1. We are **not** suggesting that you replace existing EDI solutions while they are fit for purpose.

2. Develop your companies API strategy and use BIC Realtime where appropriate:

    1. For filling in functional gaps (e.g. cancellations, P&A)

    2. As requirements change and EDI is no longer adequate

    3. Where cycle times between customer and supplier will benefit from real-time rather than batch interaction.


Where can I find out more?

To find out more visit the BIC Website

Product Metadata API's

Product Metadata APIs

1.  Retrieve ONIX Product Information

2.  ONIX Product Information Acknowledgement *(acknowledges an ONIX feed and reports the result)*

3.  Retrieve MARC Product Information *(requests a MARC metadata record)*

4.  Retrieve Price & Availability *(requests price and availability information)*

Order Related API's

Ordering APIs

5. Trade Order Request and Response *(places a trade purchase order)*
6. Retrieve Order List *(obtains a list of orders, e.g. dues)*
7. Order Status Request and Report *(requests status of an order)*
8. Request Order Cancellation *(cancels an order, e.g. from backorders/dues)*
9. Request Backorder Release *(asks for backorders to be released for supply)*
10. Short Pick Notification *(notifies recipient of a shortage/zero pick)*

Financial document related API's

Financial documents APIs

11. Retrieve Financial Document List *(requests a list of financial documents, e.g. invoices)*
12. Retrieve Financial Document *(requests a copy of a specific financial document)*
13. Post Financial Document *(sends a financial document, e.g. invoice)*

Returns APIs

14. Returns Authorisation and Despatch *(requests permission to return books)*
15. Returns Despatch Advice *(states what is actually being returned)*

Consumer direct fulfilment (CDF) API's

Consumer Direct Fulfilment APIs

16. 

CDF Order Request and Response *(an order for a direct delivery to a customer)*

17. 

Order Shipment Details Change *(enables changes to a CDF order, e.g. customer delivery address)*

18. 

CDF Request Authorisation to Despatch Order *(asks if order can be despatched)*

19. 

CDF Grant Authorisation to despatch order *(asks for order to be despatched)*

What's missing?

We expect the list of API's to grow as people start to think in terms of API's and real time processing.

WHEN you identify a missing API get in touch with BIC and discuss getting it added rather than inventing your own proprietary API.

We want to avoid over complicating individual API's… instead we want separate API's focused on one or two Use Cases.

The quarterly BIC EDI Clinics can be used to raise potential new requirements and ask questions.

The first release of BIC Realtime is focused on Trade supply. A project to extend this to the Library sector is now being scoped.

Quotes:

We welcome BIC's latest industry standards initiative for data exchange and live messaging and we are pleased to confirm that in the future our applications will include functionality that enables integration with many book standards, like Web Services and BIC Realtime. Ingenta is committed to providing world-class products that make for a smarter and more efficient supply chain and we will be looking to work closely with our customers and BIC to guarantee we achieve this effectively

Emily Taylor Gregory
Head of Marketing and Communications Ingenta

Nielsen Book are strong proponents of Web Services and strong promoters of Standards….. BIC Realtime provides an important framework for supporting and simplifying communication and efficiency in particular applications for the book trade and for promoting the development of innovative solutions to specific problems or opportunities.

Jon Windus
Head of Product Leadership Nielsen Book

Quotes:

Three years ago we integrated with Bertrams using the BIC Realtime compatible APIs they provide. Over those three years we have grown Wordery turnover to over £40m and built an outstanding brand and reputation with our customers. Real time APIs are important to us. As other suppliers adopt BIC Realtime APIs we will leverage them to further innovate and grow our business.

Will Jones
Wordery Founder

How do you get started?

1. Talk to your system vendor and check their development plans.

2. Review the list of API's on the BIC Website and discuss priorities with customers / suppliers.

3. Pick an easy API to start with e.g. Order Cancellation and P&A.

4. Let BIC know when you go live with an API so you can be added to the implementation directory.

5. Attend the BIC EDI Clinic if you want to discuss technical issues and new requirements.

6. Send appropriate staff to future BIC Realtime deep dive technical sessions.

Thanks to:

All the people and companies that gave their time and served on the working party for BIC Realtime:

Alaina-Marie Bassett, BIC
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Matthew Hogg, Macmillan
Sam Langdon, Hachette
Barry Richardson, Nielsen
Terry Willan, Capita
Tim Wilson, Hachette
Jon Windus, Nielsen
Chris Wood, HarperCollins
Jonathan Wraight, Hachette

See http://www.bic.org.uk/152/BIC-Realtime/ for more information….