

### Architecture

The architecture of Q4 is based on simplicity and efficiency. It is a client server system that integrates all the functions in four pieces: a server, a client, an InDesign plugin and an XML Editor. The server also connects to an SQL database. No more services or systems are required than those published by Q4 itself.

#### No installers

Except for the database, no other parts require installation. Each one of them, when it starts, looks for a configuration file (a text file) and if it doesn't find it, it creates it. That's it.

#### Universal client

All users –Mac or Windows– use the same Client, regardless of the features they are authorized to use in Q4.

#### Requirements

All four pieces are available for Mac and Windows. Adobe InDesign (CC19 to CC22) is required as a layout tool. Absolutely all the functions of Q4 are

contained in this architecture, both the newspaper's and the editorial ones. No additional components are required apart from the operating system itself, which can start from Windows 7 and Mac OS 10.12. In terms of processor and memory requirements, the Q4 Client and XML Editor have enough with 8 Gb of RAM and an i3 or equivalent (when InDesign is required, InDesign rules the roost). As far as the server is concerned, it is installed on the same machine as the MySQL database, and a 32 Gb + i7 configuration on an SSD would be recommended.

#### Input/Ooutput

The input of data and files to Q4 is generally carried out by the users through the Q4 applications. However, we have made integrations that collected data from other systems, through web services: Cumulus, Infodata, Agile Contents... Finally, the DAM assets are

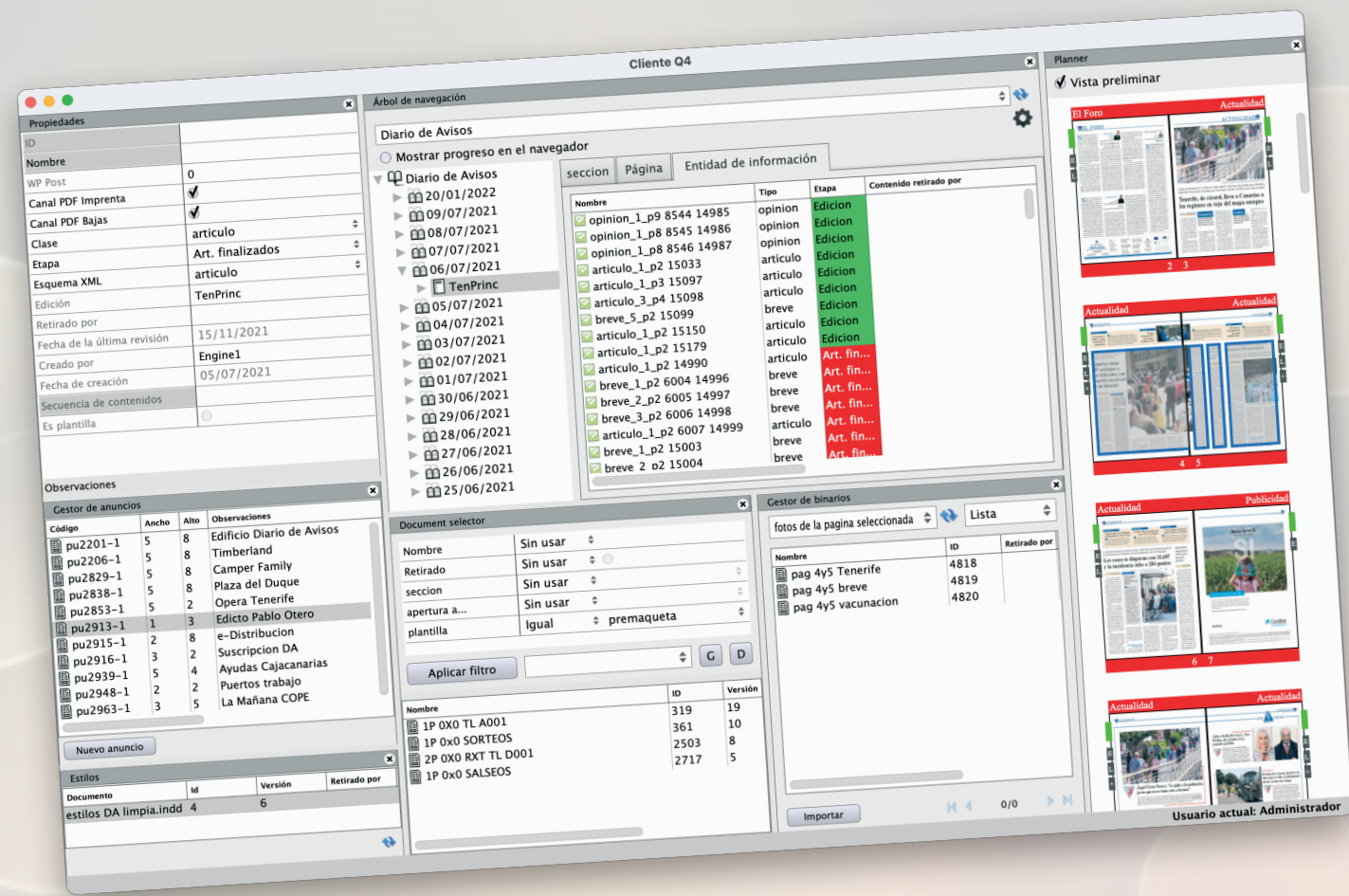
controlled through the operating system services, which makes it literally compatible with any application or system.

Regarding the output, Q4 generates PDF, XML, electronic book files (ePub, mobi, ePub3, webapp...), and HTML5, among many others, thanks to its XQuery engine. These files can be physically in the file system or sent via FTP and other protocols to servers or systems on the WAN. It can also "talk" to other systems, for example create posts in WordPress and control them. It also has an API for external CMS integrations.

#### Security

Thanks to its simple architecture, Q4 can be mounted in cluster mode on a RAID, with cheap hardware, ensuring a very high availability and tolerance to errors.

All editorial work is saved in native InDesign files, in a repository, from where they can be opened without the need for the editorial system.



#### Direction and control of publications

- Workflow based on tasks or stages
- Transversal queries
- Visual and analytical production control
- Prioritization and load balancing
- Advertising distribution
- Closing and preflight

#### Optimization

- Collaborative editing
- Visual indications layer
- Placement of variables
- Application of templates and repaginations
- Automated PDF creation
- Automated import of images and texts
- Integrated Digital Asset Management

#### Digital publishing

- Industrial production of eBooks
- Production of other electronic formats
- Integration with CMS
- Semantic cross publishing

#### Organization

- Central styles
- Central manager of InDesign templates and libraries
- Document manager

#### Security

- Single document
- Automatic management of decentralized copies
- Native documents
- User activity log



“ the essential tool in your production flow ”

# Q4

the things you can no longer do without







Optimization



Direction and control of publications



Digital publishing



Organization



Security

### Collaborative editing

Q4 uses InDesign and the XML Editor as editing tools. And in both cases, with both tools, it is possible (even combining them with each other):

- work at the same time, from different workstations, on different parts of a page, or on different pages of a document
- edit content from one workstation, while the same content is being designed and formatted from another

This versatility allows you to distribute the work when there are jams, or avoid unwanted overwrites and other issues.

In addition, any change in content or layout is transferred to the other users as soon as it is saved.

### Visual indications layer

In a book environment, each part of a publication has a long execution time, and each operator works on several publications, so the communication between the operators that work in the pages often suffers latencies. Q4's visual indications layer allows you to leave graphical and text notes on the pages. This eliminates both the

delays that occur when looking for a meeting date, as well as the manually annotated hard copy that must be sent to all parties.

### Variable placement

Any data that has to be put on all the pages of a publication (numbering, prices, dates, headers...) can be placed automatically by Q4.

### Application of templates and repaginations

No matter what InDesign layout was used to create a piece of content, it can always be replaced from Q4 without the user even having to close the document or save its contents. In the same way, you can reflow the entire plan of a publication without interrupting anyone's work.

### Automated PDF creation

Each time a document is edited, one or more PDFs are generated with specifications that depend on the stage. Q4 provides several ways to access them: FTP channels, folders, previews in Q4, local downloads... PDFs of individual pages, editorial objects or entire publications.

### Automated import of images and texts

If a company has graphic or textual information provided by other systems (sports rankings, financial data, infographics, photo retouching...) Q4 allows you to define templates for the automatic import and formatting of said data, creating complete pages of data in seconds.

### Digital Asset Management

If a publishing company works in distributed environments, it will be essential that all the digital assets of its paper and digital publications are centralized in the system, either for the preparation of high-quality PDFs or for the correct export of content to a CMS, or the direct creation of a digital publication. It will be also necessary that all those assets are in a correct stage of production when the pages and contents are going to be published. That's why Q4 offers a production DAM designed specifically for that purpose. Furthermore, our DAM is seamlessly integrated with Adobe InDesign.

### Workflow based on tasks or stages

The Q4 stages grant or restrict access and functions to the staff, enable different PDF qualities, send the contents to the CMS, put variables on the page, ensure preflight... In addition, the system enables the creation and assignment of tasks to users or departments, which allows directing human resources to the most urgent materials and publications. In a newspaper the materials are obtained directly from a navigation tree. In a publishing house, moreover, the task can be left as the only access to the material, the latter being closed when the first one is finished.

### Transversal queries

Many systems allow you to search – for example– images by size, format, horizontal or vertical pixels... and even mix parameters with multiple conditions. But no editorial system allows you to search for an object based on the properties of others. And what's that for? Well, to make queries such as “give me back the publications that contain pages checked out by [somebody]”, “tell me which chapters of that collection have pages in design

stage at this time”, “I want to know how many correction tasks this book has accumulated”... You will need this ability to know almost anything in large environments with thousands of objects in production in the medium and long term.

### Visual and analytical production control

In a newspaper, the colors of the stages serve to know the status of each page and article. In a book case, this control is too simple to indicate anything useful, so what determine the progress and status is it is the type and number of tasks, as well as the relative workload of users and departments.

### Prioritization and workload balancing

Based on information about tasks, departmental managers can reassign them in real time to other users or departments, as well as increase or decrease their priority with respect to other tasks. Q4's versatile query system allows you to establish different prioritization environments: any other tasks, others of the

same type, others from the same department... Even entire publications and all their tasks can be prioritized, absolutely, dragging it in a window.

### Advertising distribution

Q4 allows you to import advertising listings to diagram the advertising distribution on the plan of the newspaper. The boxes will appear in InDesign and the ads will be imported automatically. This feature is active and available throughout the workflow.

### Closing and preflight

Q4 offers to newspapers, magazine and book publishers a control system by which a page or content cannot be printed or published if it has not reached a certain state, nor can it be moved from that state by anyone who is not authorized. Consequently, only certain people are authorized to publish pages and content, and from then on no one can alter them. In addition, Q4 provides critical preflight to control fonts, overflows, and images when printing or publishing, to prevent an oversight from ruining a publication.

### Industrial producción of eBooks

Since 2007, Q4 has produced thousands of publications in the most demanded formats at all times: ePub, mobipocket, azw... and all using simple and fast InDesign tagging techniques.

### Other formats

Q4 has a core of XML features and tools integrated with InDesign to translate any document into any data format: RSS, HTML, XML...

### CMS connection

Q4 can register posts in WordPress and other CMS, and control their status. It has an API through which the CMS can query and extract content from the editorial system.

### Semantic Cross Publishing

There is an even better solution than digitizing publications: semantic cross publishing (SCP).

This technique relies on XML tagging of templates and libraries used in production. An SCP project sets up a flow where InDesign becomes a permanent data entry interface. Q4 converts them into CMS records, eBooks, XML, HTML5 or webapps. It is, in every rule, a two for one. And in addition, the digital and paper contents are permanently connected for any reissue or correction.

### Central styles

How to keep the style of a set of publications and their documents cohesive? With Q4 central styles, which can be applied to publications and editorial objects. The user can link them to those styles at any time. Q4 can prevent a document from being saved if its style list is faulty, at certain stages of production, ensuring publication consistency with its collection.

### Central manager of InDesign templates and libraries

To facilitate consistency, we will need – in addition to a unified set of styles – that InDesign templates and libraries are managed by a small group of people, and that any changes made to them are easily and automatically distributed to all users of the system. And this is what Q4 does every day.

### Document manager

Over time, publishing companies end up generating thousands of documents that serve as the basis for publications. It is necessary to have a tool to classify them with the criteria of each company and to be able to locate and view them quickly. The Q4 document manager allows you to define any number of classificatory fields, of seven different types, and combine them with each other to characterize and search for them.

### Unique document

In editorial environments, hundreds of thousands of files are generated, which –like photos from a camera– are stored in folders on different devices: one ends up not knowing how many duplicates there are and which one is the “good one”. Having a single valid document and a backup of versions just in case is a balm for everyone and a guarantee that no one will overwrite the copy by mistake.

### Automatic copy management

Every time a document is checked in, Q4 generates a numbered copy. The number of copies can be specified by preferences. These copies are stored both on the server and locally, so it is virtually impossible to lose a page or content.

### Native documents

Q4 works with InDesign documents by saving them to a folder on the server. If necessary, these can be located and edited only with InDesign, without the need for Q4.

### User activity log

Operations such as deleting and editing documents are monitored and recorded by Q4, so that in the face of a mystery you can always find out what has happened to a page.