articque

LIGHTING YOUR WAY TO BETTER DECISIONS

The geospatial dimension of your data
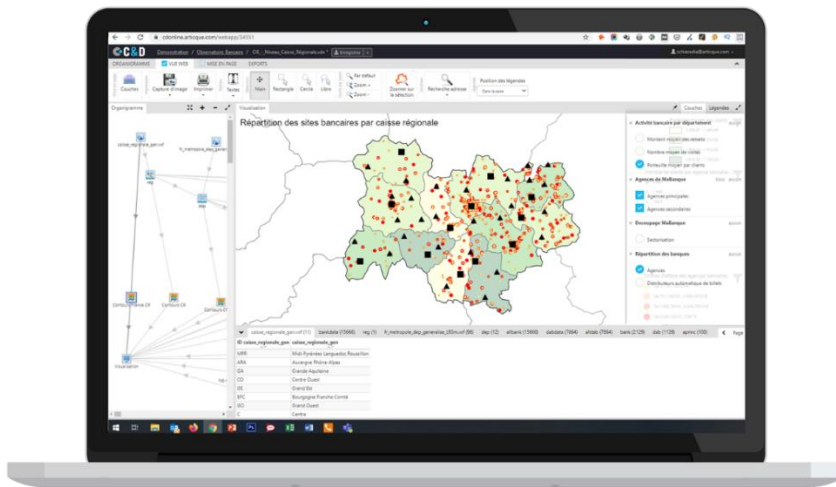
C&D
ONLINE
EXPERT

Table of contents

C&D Online – Expert package:
Create your maps and model your analyses

Do you have a large volume of data whose richness is not always visible?

Visualizing your data on a map allows you to highlight facts that cannot be detected through charts and tables, because maps are a mine of information with a strong power of synthesis. You can instantly spot sources of productivity and identify the territories where priority action is required.

With our cartographic design studio, you will be able to establish reports and suggest efficient action plans regardless of the area of analysis: sales performance, cost rationalization, statistical analysis, strategic location for a new establishment, environmental or social studies.

 Display and visualize all your data

Excel spreadsheets, CRM, ERP, data warehouses: every day you have a plethora of data:

- Clients and prospects addresses, points of sale, agencies, …
- Turnover and sales force performances
- Statistics (population, number of companies, age groups, etc.)

Exploiting your data fully without spending too much time on it is essential. The C&D Online design studio reveals the facts hidden within your data by representing it on a map, extracting strategic information instantly.

From basic Excel users to cartography and statistics specialists, everyone can immediately identify the strong and weak areas of their activity, the areas where taking action is a priority, and how to act.

Analyze information and understand trends

In addition to giving you a new insight into your data, the C&D Online design studio allows you to cross-reference indicators to go beyond simple observations. The features and the analysis tools of the software easily give you the answers to essential questions in order to understand the key factors of your activity.
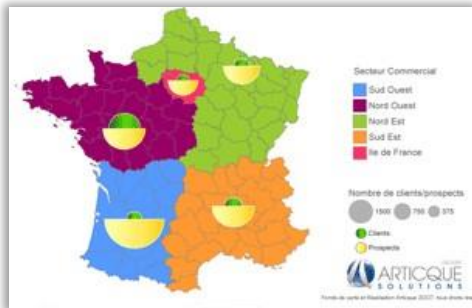

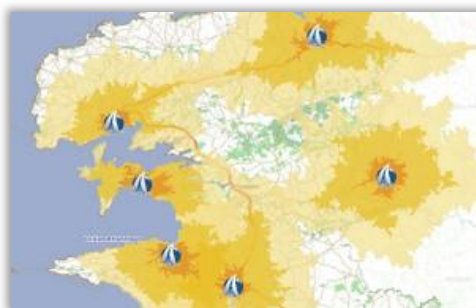How do I redefine my sales areas to enhance my performances?
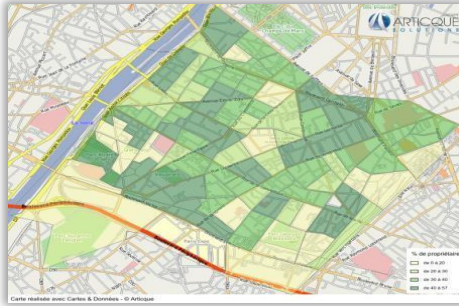
Do my local action plans correspond to my statistical analyses?
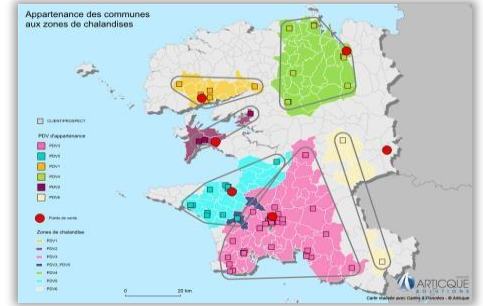
What do my catchment areas look like and how can I optimize my leaflet distribution?

Where are my best sales results?

How accessible are my agencies for my clients?

Where should I pitch our next sales outlet?

Publish your maps and share them with your colleagues

With C&D Online, you can choose between several possibilities of publication and exports to share your maps and your analyses with your colleagues, partners or clients.

- Share your map in a collaborative work space accessible only to registered co-workers.

- Generate and share a URL link to broadcast your map on the Internet.

- Export your map to include it in your reports using one of the many available formats:
  png, jpeg, gif, bmp, tiff, emf, wmf, multilayer vector PDF

- Automate your exports thanks to the Multimap and Word Report features

Design interactive and dynamic atlases with the C&D Online publishing tool

Design interactive and dynamic atlases of your maps and analyses from the C&D Online design studio.

Do you want to incorporate a cartographic app into your website, intranet or extranet website to publish information and represent your data: a geographical dashboard, a monitoring centre…?

Without being a developer or an expert in cartography, you can create maps from the C&D Online design studio and publish them on your personalized Atlas Web app.

Advantages for final users / Explorers:

- An true communication medium, a data visualization tool
- Dynamic maps that evolve along with your data
- Interactive maps, (click interaction, drill down, filters…)

Advantages for analysts:

- A flexible tool that can be integrated into any web solution (website, intranet, extranet)
- A synergy with the design studio: create your maps and publish them in a few clicks
- The possibility to vary indicators and display them depending on the chosen geographical level

Features:

- Fine management of layers
- Users can filter data from the legend
- Customizable popup cards and tooltips
- Selection of displayed layers
- Pre-configured or configurable drill downs
- Click interactions on areas of the map
- Data sheet below the map (with filters available)
- Possibility of calculating isochrons on the map and of selecting the geographical entities covered
- Sharing visualisation links for your storytelling

Discover out examples of interactive atlases

(Click on the images to access the atlases)

International sales monitoring

Banks

Human resources

World Cup statistics

Create Wizards

Create custom applications for business users from your flowcharts. Your cartographic analyses become intuitive tools that allow users to carry out guided analyses without needing any prior training.

In this way, your teams can benefit from the power of cartography (create their own maps, carry out their analyses and generate their reports…) **in a completely self-sufficient way.**

The Wizard, or application for business users, is fully customizable, putting you in control of what your *Explorers* can do:

- Uploading their own data
- Selecting an area to analyze
- Modifying a districting or isochrones,
- Choosing the layout of the map (colors, legends, titles…)
- Exporting the map, the data or a report
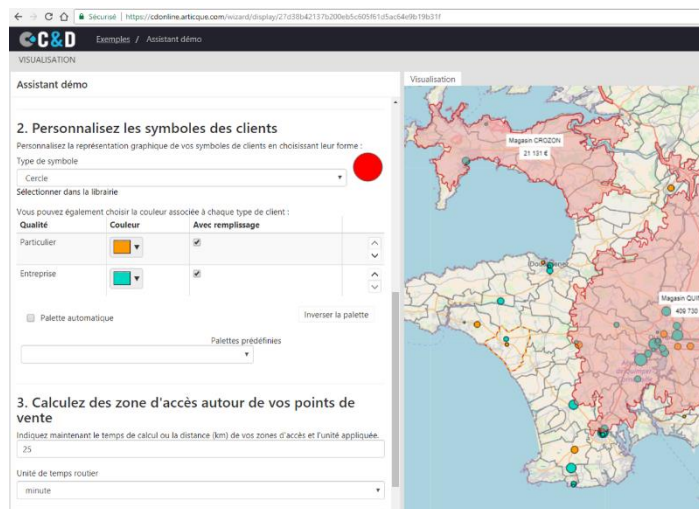
Discover Wizards with our videos: Creating a Wizard for simulating the creation of an agency, Using a Wizard to find the best location for an agency.

The operating principle of Wizards:

DESIGN
The Expert designs a wizard tool to allow Explorers to edit and export maps independently.

Expert

EDITION
Explorers edit their maps and reports using the wizard tool designed beforehand by the Expert.

Explorers

Content of the Expert package

In order to carry out your analyses, you will have at your disposal:
- A named **Expert C&D Online license**, allowing you to create an unlimited number of Atlases and Wizards
- 10 named **Explorer licenses**
- The **boundary maps for Europe** (Carticque) containing the outlines of countries, provinces and 2-digit zip codes
- The **Road Options for Europe** (light-duty vehicles) and detailed boundary maps.
- The possibility for the Expert user to download the Desktop version of the software, **C&D Desktop**, in order to benefit from advanced formatting options for printing.

C&D Online: Description of Expert and Explorer profiles

"Expert" users can:
- Create maps and documents (flow charts, base maps, data files)
- Create user groups on the platform (ex: business/zone-oriented groups)
- Import or download documents (flow charts, spatial data, data files, PDF files, personalized icons, report templates) on the platform, in their work space, in their user groups
- Share map models or cartographic analyses and treatments with other users (Analysts or Experts) to provide them with business-oriented working bases that they can re-use and customize.
- **Create interactive and dynamic atlases** using advanced parameters and share them with other C&D Online users. Atlases can also be incorporated in a website meant for the general public or in an Intranet website to be shared with unrestricted access (this is an option, contact us to learn more).
- **Create Wizards** (assistants to the creation of maps) to allow "Explorers" to carry out their analyses independently.


"Explorers" can:
- View simple publications or atlases within user groups on the platform, or through URLs/iframes.
- Interact with simple Publications or dynamic Atlases shared through the web, according to the options selected and granted to them (zoom, display/hide information layers, selection, exports, etc.) by Analysts and Experts.
- Use Wizards (guided analyses) in order to create maps, carry out analyses and generate reports independently, using scenarii created by "Expert" users.

C&D Online operating principle and interface
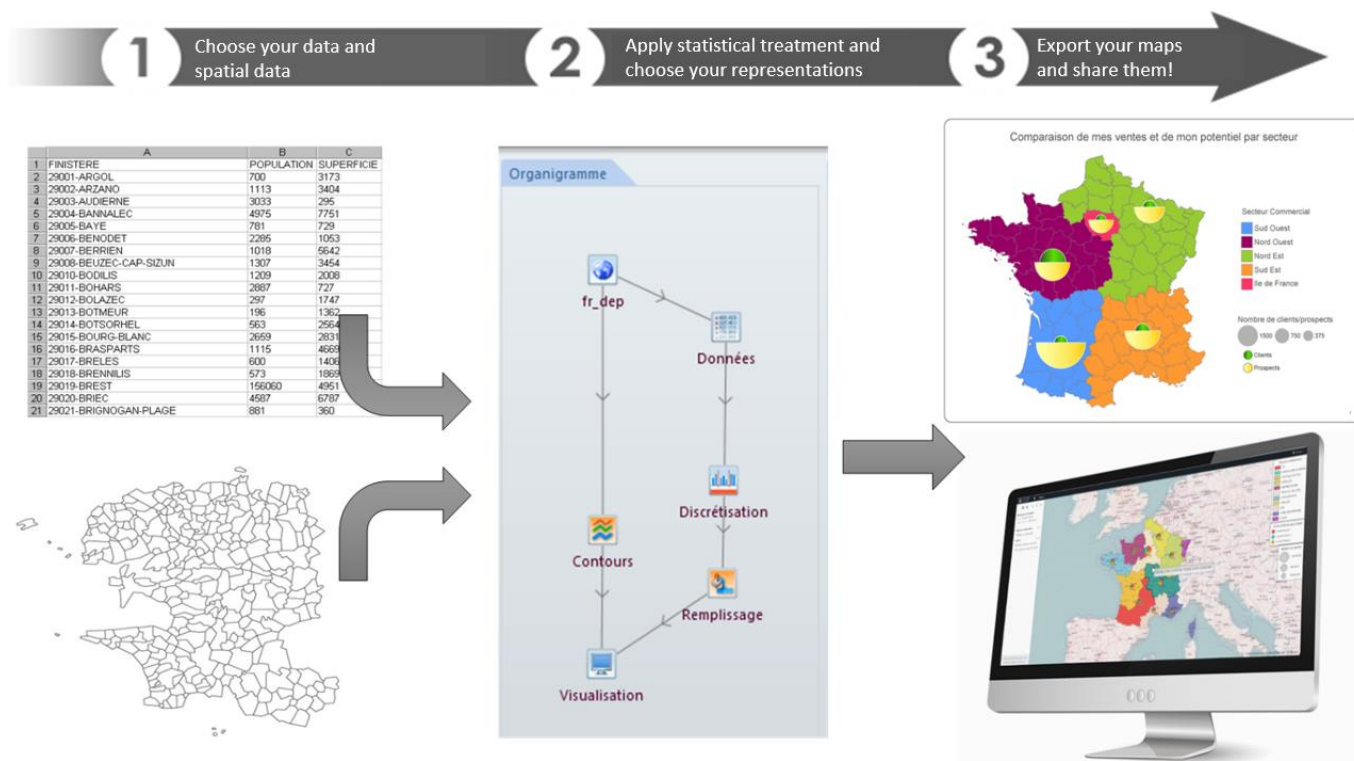
C&D Online relies on the use of a **flow chart** where you associate your study area with your data and apply graphic, statistical and geographic treatment.
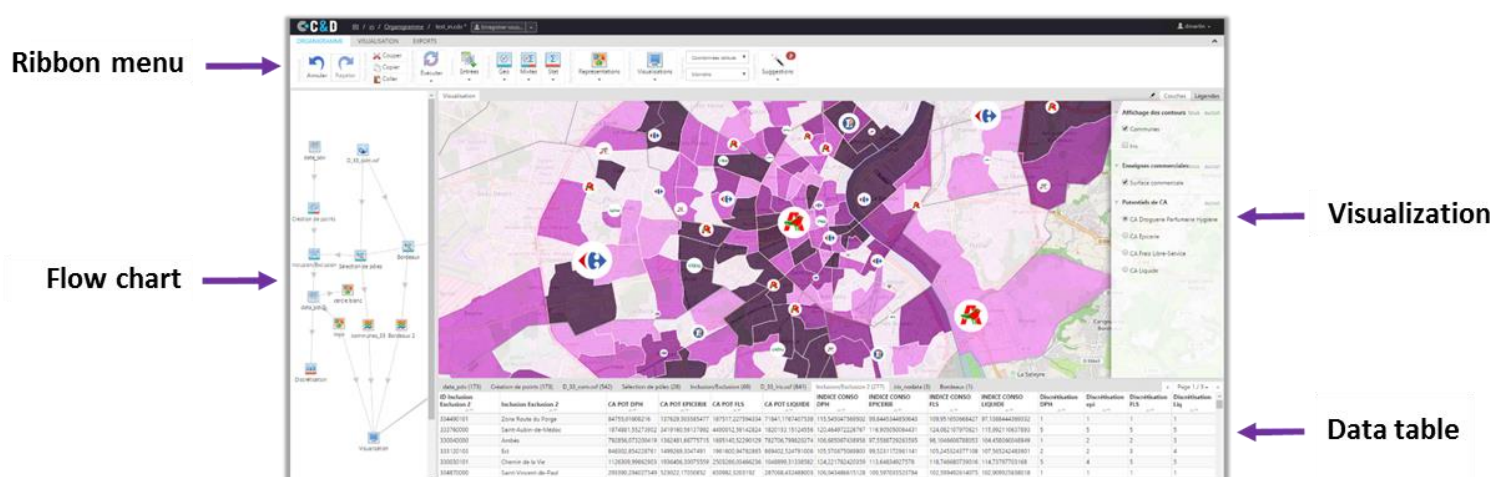
- **Ribbon menu:** Access the modules and the features of the design studio.
- **Flow chart:** Link modules to build your map
- **Visualization:** Constantly visualize the cartographic result created by the flow chart
- **Data table:** Keep an eye on your data.

More than 55 features to create your maps and carry out your analyses

You have all the tools you need to locate, analyze, and communicate efficiently.

Whether you simply want to create a business report from your data, or need to carry out advanced geomarketing and statistical studies, you have at your disposal all the features necessary for your analyses and your representations, from the most basic to the most detailed.
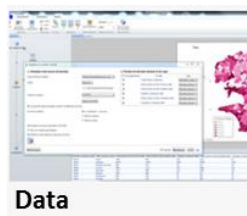
You even have access to distinctive, or even exclusive features: flows, cartograms, opposing semicircles…

Import your data and spatial data

Choose your territory and the data you want to analyze: districting, GIS maps, Excel files, dynamic links with your DBMS (ODBC), etc. The software can use all the main formats of spatial or statistical data on the market.
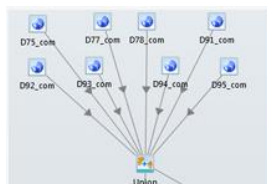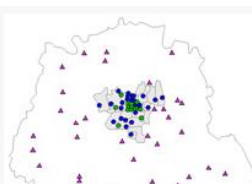

Map

Data

Personalize your geographic space

Whether you need to create a map of the world, of a department, a city or a neighbourhood, quickly target the geographic area that fits your analysis. In a few clicks, go from a global view of your territory to a specific area. You can also overlap your map with an analysis grid or deform it depending on a variable.
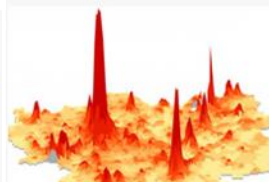

Union

Inclusion/Exclusion
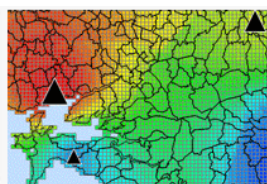
Grid

Intersection

Cartogram

3D elevation

Entity selection

Locate your addresses

Visualize your clients, prospects, retail stores, shops, agencies, activity sites, POI, etc. as points on the map to associate them with quantitative and qualitative information. You can import your addresses from an Excel file, a database or directly as GPS coordinates. Placement can be accurate down to the street number, in France or in the whole world, depending on the information you have.

Geocoding | Geolocalization | Point creation
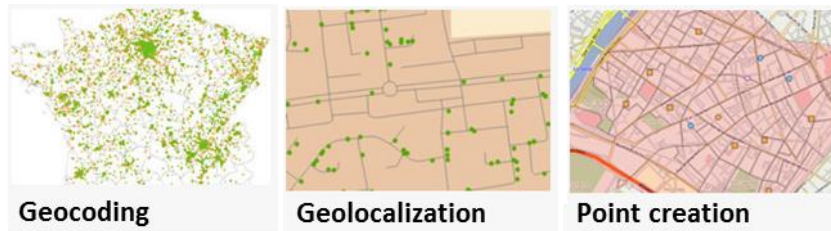
## Create your own districts and territories

Do "classic" administrative breakdowns not suit you because you work with specific areas? You can automatically or manually recreate your commercial breakdowns, specific zones, balanced sectors or other types of territorial breakdowns, basing yourself on neighbourhoods, postal codes, administrative districts, departments, etc.

C&D offers two automatic districting methods: the heuristic method, and the genetic method, which is connected to Machine Learning. Successive executions allow "learning" genetic algorithms to optimize their results in order to find solutions to complex optimization problems.

Districting | Manual districting | Merge | Aggregation
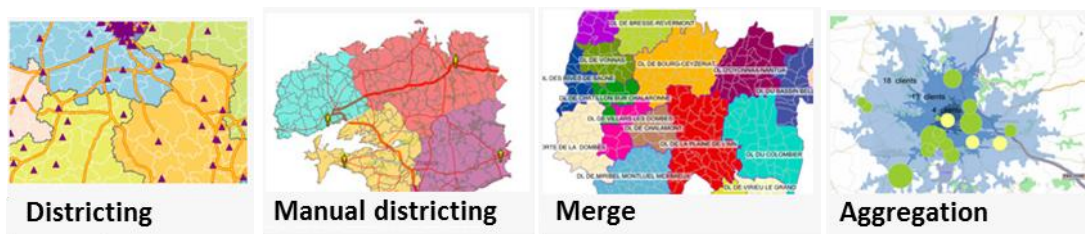
Analyze your coverage, your catchment areas, your areas of prospection

Automatically represent your theoretical catchment areas depending on distance or driving time, or your real catchment areas using the geolocalized addresses of your clients and prospects. You can determine the number of clients within a given radius around your agencies, identify the territories that you do not cover yet and untapped prospection potentials…


Catchment areas | Access areas | Hull
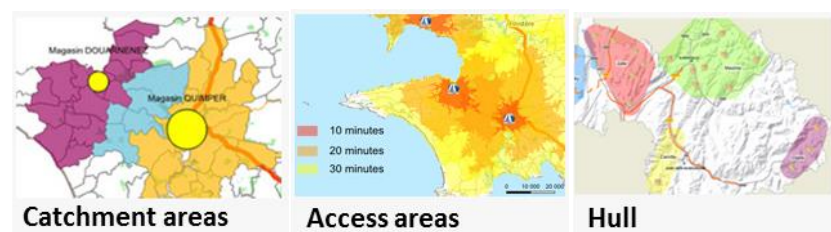
Compare the attractiveness of your points of sale and optimize your locations

Shops, agencies, regional offices, etc.: assess the attractiveness of your sales locations and observe overlap between your sales outlets and your competition. Evaluate the coverage of your network, make simulations to optimize your current and future locations.
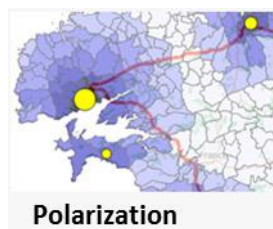
Polarization
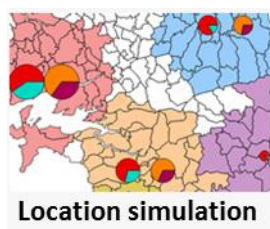
Location simulation

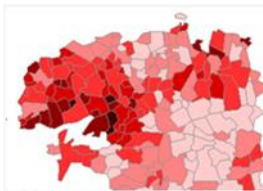## Make the most of the power of statistics: computations, classifications, correlations…

Filter your data, compute indexes, compare variables, define standard client or territory profiles… You create new statistical indicators to highlight truly strategic information.

Filter

Discretization

Computation
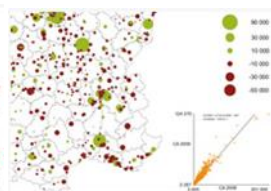
Regression

Matrix operator
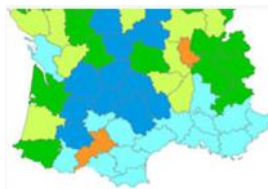
PCA
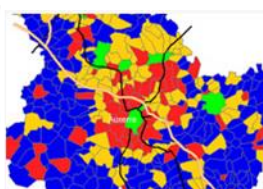
CA
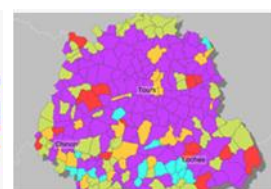
AHC

Bertin
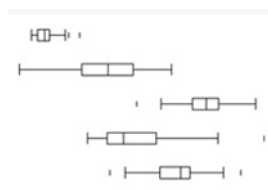
Box and whisker plots

Winner
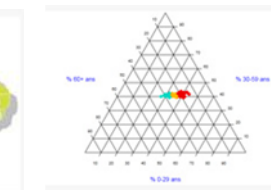
Ternary plot

Take the spatial dimension into account

Link your business data with the characteristics of your territories: surfaces, road distances, travel times (by car, by truck, on foot, by bike, etc.). You have everything you need to calculate population density, to measure how far your clients are, to find out where they are located, etc.

Length

Surface

Minimum distance

Flying distance

Affiliation

Road distance
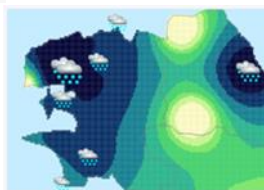
Grid
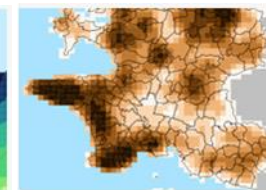
Smoothing

Choose the right representations to create truly revealing maps

You have access to representations adapted to your data, from the simplest ones to the most detailed. Your maps highlight remarkable occurrences. They become clear and are immediately intelligible to the recipients, helping them make the right decisions.
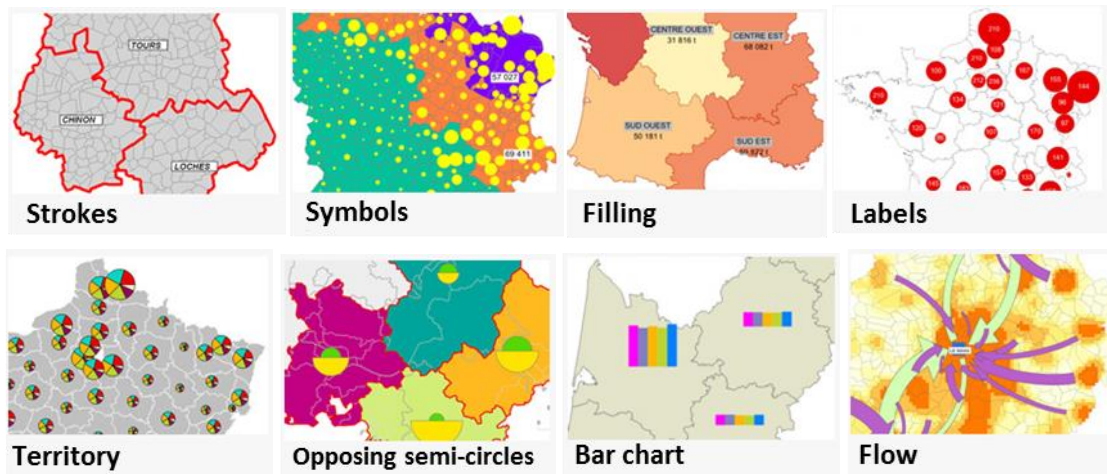
Enrich your cartographic analyses with charts

Add charts next to your maps to immediately obtain a synthesis of your KPI on a given geographic level. Choose between several types of charts to represent your data in the most relevant manner (pie charts, bar charts, plot charts).
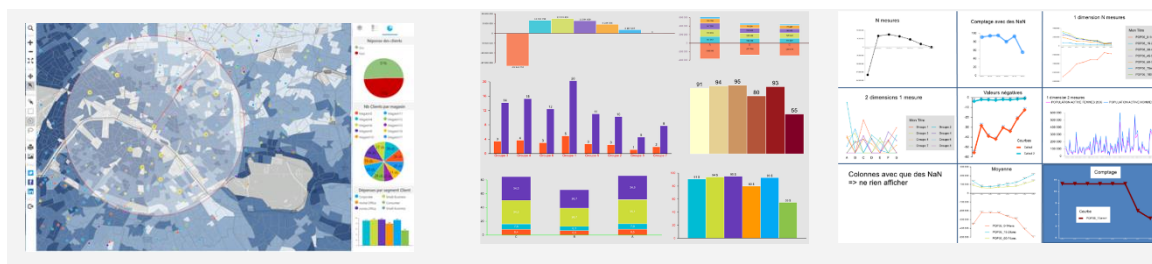
Communicate your results with personalized reports, automatically formatted

Share your analyses and decisions according to your needs: generate HD maps, tables and Word/PDF reports on demand or automatically for all your territories, sites and points of sale.

Discover our solutions on our [Youtube channel](): you can watch demos and video tutorials:

Discover C&D / Articque Platform

Articque video tutorials -
C&D / Articque Platform
(subtitled)

Road options – light-duty vehicles (Europe)
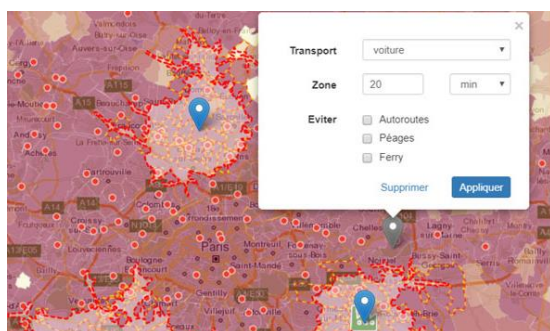
C&D offers several features to help you solve your travel-related business issues: road options. These features allow you to include road distances and travel times directly in your mapping analyses, with a detailed display of road plans and streets.

Here are a few examples of the analyses made possible by road options:

- Displaying the coverage of your distribution network, the catchment areas of points of sale, the access areas of points of sales, warehouses… within a drive-time zone or a specific radius (travel time or road distance).
- Defining charging zones depending on travel time or distance in kilometers by road.
- Obtaining the number of clients or prospects located within x minutes of your agencies.
- Assessing your performance (potential turnover vs cost of visits) and adjusting your strategy.
- Displaying cannibalization areas, and the areas of your network which are thinly or under served.
- Streamlining your logistical flows and transport costs, by associating each recipient with its closest supplier.

The "Truck" mode of transport (option) uses a specific "TomTom Logistics" database which integrates additional characteristics concerning heavy goods vehicles (length, width, weight, speed limitation, traffic ban, etc.) For information about "Truck" map databases, please get in touch with your customer adviser.

Articque is a TomTom partner. TomTom is a world-recognized expert of navigation and road map databases. Our solutions use TomTom light-duty vehicles and heavy goods vehicles map databases for France, Europe and the world.

C&D Desktop

Expert users of C&D Online accounts can use the Desktop version of the software by installing it on their computer. C&D Desktop is an extension of the online license, and access **can by no means be shared with other people.**

The possibility of downloading C&D Desktop is designed to give additional advantages to users. C&D Desktop allows them to:

- **work offline** if they wish to,
- benefit from **advanced formatting options** for printing.

See the technical prerequisites for C&D Desktop

C&D Online : technical prerequisites

- Users can access C&D Online from their computer station, via a web browser
- An Internet connection is required
- C&D Online is optimized for Mozilla Firefox, Google Chrome, Safari, and recent versions of Microsoft Edge (latest up-to-date version recommended). Articque no longer maintains the solution for Internet Explorer 11 (starting September 30, 2021).

Articque gives registered users of C&D Online the possibility to obtain the Desktop version of the map-designing studio in order to **work offline or to benefit from advanced formatting features for printing**. The technical prerequisites below are necessary to the optimal operation of the desktop version of the software:

Technical prerequisites for C&D Desktop

<u>Hard drive:</u>

- 250 MB of disk space are required for the installation of the software itself.

- An additional 1 GB is necessary to add a set of base maps such as the Administrative France Carticque.

- Between 500 MB and 3 GB more will be needed if you purchase Road functions (depending on the option selected).

<u>RAM:</u>

- A minimum of 4 GB for the simplest maps (representing departments or districts) –

- A minimum of 8 GB for maps representing a communal breakdown on a national scale.

- 16 GB are recommended for maps representing a communal breakdown on a national scale with a computation (districting, aggregation of data stemming from a geolocation, intersections, distance and/or travel time computations, etc.)

<u>Processor:</u>

- An Intel Core i5 Processor is required at a minimum for the simplest maps (representing departments or districts) – i7 (quad core) 2.00 Ghz at a minimum for maps representing a communal breakdown on a national scale.

- I7 > 3 Ghz are recommended for maps representing a communal breakdown on a national scale with a computation (districting, aggregation of data stemming from a geolocation, intersections, distance and/or travel time computations, etc.)

<u>OS:</u>

- Operating systems compatible with Microsoft .NET Framework 4.0: Windows 8, 8.1, 10.
- 32 bits systems for the simplest maps and 64 bits systems recommended for more complex maps.

C&D Online : Hosting conditions – ARTICQUE shared cloud

Shared cloud with standard service:

- Storage space allocated per account: 2 GB (excluding shared resources)
- Limitations of Shared cloud :
    - Maximum size for file upload: 64 MB
    - Maximum data in a flowchart: 2,000,000 cells
    - Maximum number of lines that can be displayed in the data table (dataspace): 100,000 lines
    - Theoretical bandwidth : input 5 Mbps / output 10 Mbps
- Hosting country : France
- IT management: Articque. Includes: OS installation, installation of the application, installation of all the updates of the application, installation and regular update of the antivirus.
- HTTPS: secure connection via SSL certificate.
- Data encryption: no. However, the data files are not directly accessible; they are renamed and their access is technically limited to application rights.
- Not adapted to the processing of data characterized as "sensitive" by the Client or by law.

If needed, ARTICQUE can provide the software as a private platform with on-premises hosting (installed on your infrastructure) or on an ARTICQUE server that is strictly dedicated to you.

Support and maintenance

Choosing Articque does not just mean choosing a mapping solution. It means being guaranteed to benefit from a human, professional and personalized support throughout our adventure together:

Technical support and unlimited assistance*
Our technical support team is based in France, in Fondettes (37230). Our trainers, who are also cartographers, are available by phone or by email to assess and solve your technical difficulties. They are here to help you and offer methodological, cartographic and statistical advice.

Learn more

Familiarization session
Start off on the right foot with the help of a cartographer and trainer. Our expert will check the solution functions properly and will create your first map with you, step by step.

Learn more

Advisory meetings
Since your needs and projects are in constant evolution, you can benefit from 4 online advisory meetings per year, on the subject of your choice, with one of our cartographer and trainer.

Learn more

Updates
The software, maps, data and road baselines are updated automatically so you can benefit from the latest innovations.

Learn more
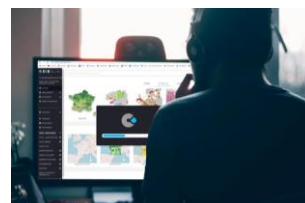
* This assistance is reserved for users with an "Analyst" or "Expert" license.

You will find the **details of the different levels of support** below :

1. The subscription includes access to maintenance and level 1 support.

Updates

The software update is included in the yearly subscription (Serenity or Saas). The details of improvements made with each version are available at the following pages: https://www.articque.eu/new-features-cd/

Annual updates of boundary maps subscribed by the user and of the TomTom road maps used in road functions are made automatically by Articque, or are made available in the event of a local installation.

Support, assistance and training must imperatively be carried out using the latest version of Articque solutions.

Description of level 1 support

Analyst and Expert users have access to technical support and level 1 assistance services.
- It consists in **methodological, cartographic or statistical advice** to assist them in the use of C&D features in their context, which do not require a long investigation period (less than 15 minutes).
- **Privileged, unlimited access to the helpline in Metropolitan France (non-surcharged call from 9am to 12pm and from 2pm to 6pm)** guarantees an intervention with high added value on cartographic, statistical and IT matters. You benefit from our technical and methodological support everyday **by phone and email.** We guarantee a true "human" response given by instructors who are both experts and experienced at teaching and are based at our site in TOURS (Indre-et-Loire, France).
- Languages used for technical support are French and English.
- **We guarantee a swift answer – within 24 hours (in work days) for any request made by email.** The average response time observed (moment the support team takes charge of the incident) varies between two working hours and two working days depending on the categorization of the cause of intervention, and consequently of its urgency. Since the assistance service is mutualized with ARTICQUE's other customers, the response time, and then the resolution time depend on the complexity and global volume of requests made at a given time.
- When the level 1 support expert detects a **need which comes under level 2 support**, the request is transferred to the level 2 team. If lengthy tests are required to find the solution to the problem, the Client will be notified and a date will be proposed for further contact. Amelioration requests within the initial functional scope will necessitate a feasibility study phase triggering the use of the stock of tickets.

2. Level 2 support – tickets

Description of level 2 support

Level 2 support corresponds to:

- The assistance of **Expert** users about: the creation and configuration of Atlases and Wizards, the connection to an external database (ODBC, MySQL, MS SQL Server, PostGreSQL, SalesForce, IBM Cognos), the resolution of a technical issue encountered with these features.
- Methodological, cartographic and statistical advice that require a long investigation period **(more than 15 minutes)** not included in level 1 support.

These services necessitate the **use of « level 2 technical support » tickets,** which are billed as a supplement. Their stock must be renewed as required.

Users ("Expert" profile) express their questions ("incidents") to the Articque support or to their project contact. The support contact will forward the question to the level 2 team, who handles questions depending on their urgencies.

In general terms, in order for the support to be able to answer a question as quickly as possible, it must be worded clearly and as precisely as possible, both about the incident itself and about the environment (exploitation system, software package version, etc.). In some cases, it will be necessary for the user to provide the files used when the incident occurred in order for the technical support to reproduce the issue in an equivalent situation.

Tickets count

Level 2 support necessitates the use of Tickets that are billed in advance to constitute a stock, renewable as required. 1 ticket corresponds to 30 minutes of intervention. If the stock reaches zero, an intervention is not possible.

Incident management is kept count of in the form of Tickets as follows:
- **1 ticket when an incident is triggered**
- **Then 2 ticket for each half-hour of resolution**

The Articque level 2 support team keeps count of completed incidents. The state of the remaining "stock" is available through a simple email request. The tickets are valid for one year; unused tickets are not transferred to the following year.

3. Limitations and exclusions from the Articque support service

ARTICQUE recommends that users follow an initial training session, and a session at each major update in order to make their use of the software easier, considering that this service **does not constitute a training session.**

During the **familiarization session,** consultants can guide users "step by step" in the creation of their first map and present the operating mode of the solution.

Each quarter, ARTICQUE proposes users take part in a one-hour phone interview on the subject of their choice (according to our consultants' planning) in order to assist them in a process of optimization of the software. An interview that was not used during a quarter cannot be transferred to the following quarter and will be considered as used.

The support, assistance, as well as the training sessions must imperatively take place using the latest version of our solutions.

Terms and Conditions

Here are the links to the Terms and Conditions of the Expert package:
- C&D Online SaaS Subscription – 36 months engagement
- Articque measures under GDPR regulation C&D Online Cloud

These documents are available on the legal portal of our website, articque.eu.