
CARPATHE

v5



Design & Operate
Gas Distribution Networks



CARPATHE v5

Design and Operate gas distribution network

Engineering departments and gas delivery companies...

Resulting from a partnership between CS Systèmes d'Information and Gaz De France, CARPATHE v5 assists you in your decisions.

Its calculation core, resulting from more than 15 years of practice allows you :

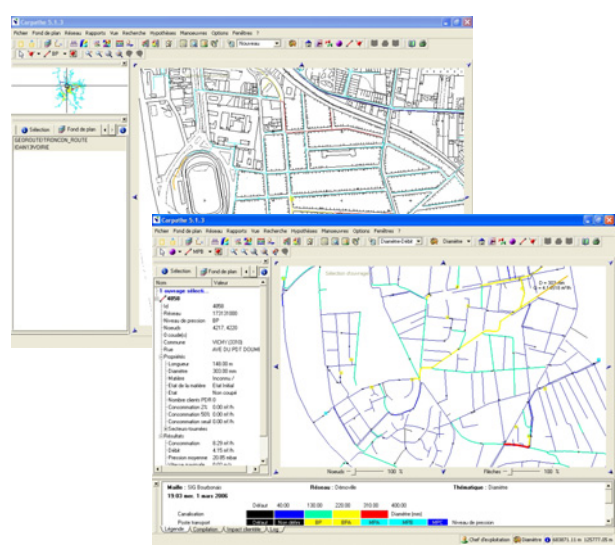
- calculations of **multi-pressure** level networks in stationary system;
- the considering of the **real conditions** of operation : state and prompting of the network (closely related with the temperature);
- the considering of the **customers variety** on the network, for more adaptability;
- the considering of the network topology, upstream of calculations, that **makes** the application and the simulation while integrating its state in pseudo real time **reliable**. ● ● ●

Forecasters, study functionalities will allow you :

- to evaluate your network capacity to consider the demand evolutions;
- to analyse your network optimal development: extensions, reinforcement of pipe, installation of source stations ;
- to make your network reliable by simulating its behaviour in extreme situation. ● ● ●

Network operators, make the good choices by optimising the impact of your operations on the network :

- prepare your interventions by identifying the strategic points of cut of networks, by calculating times of survival and by simulating gas cut plans ;
- optimise the management of your incidents using a decision-making tool for the necessary operations to the setting in safety of the network. ● ● ●



CARPATHE v5, a performing tool ● ● ●

- ▶ **SIMPLE** : Very easy to install and update, CARPATHE v5 is an ergonomic and intuitive software, allowing to be operational very quickly.
- ▶ **EFFICIENT** : CARPATHE v5 provides an efficient steady-state solver and allows to display or edit results and properties in a very short time. Simulation results are provided in an easy to understand graphical format.

- ▶ **RELIABLE** : A great attention was brought to outfit CARPATHE v5 with a performing calculation engine and to make him robust, easy to maintain and evolutive.
- ▶ **SECURED** : The application secured access to the (physical dongle) and the development of a token system allows to manage network modifications rights and simultaneous access.

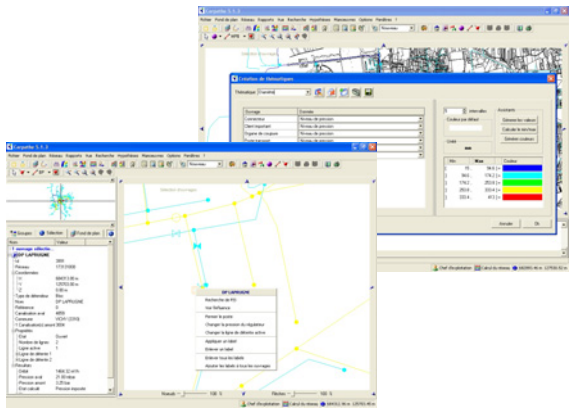


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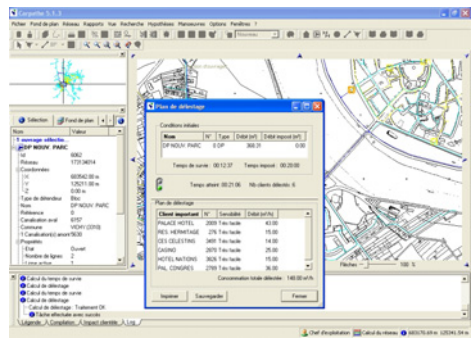
Its user friendly interface allows a simple restitution of complex data :

- Network graphical display allowing to navigate and locate quickly every type of components or computation results ;
- Quick and selective access (features or results);
- Easy interfacing with other cartography tools and insertion of existing geobackground feature easing its integration ;
- Edition modes allow to create, modify and delete elements (pipes or nodes). ● ● ●



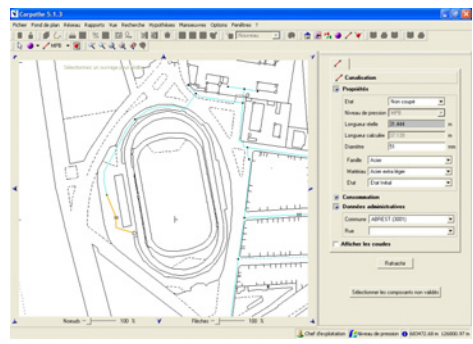
Its ability to support all size of network makes it adapted to your need :

- CARPATHE v5 has no intrinsic limit in size of network, only memory could limitate its use or slow down processes ;
- With a 2.8GHz and 512 MB RAM configuration, loading and computation times are :
 - about 2s with 300km of pipes, 20000 customers including 200 big consumers and 20 stations ;
 - about 15s with 3000km of pipes, 200000 customers including 1200 big consumers and 350 stations. ● ● ●



System requirements :

- Material configuration : PC with 733 MHz and 256 MB RAM minimum, OpenGL graphical display card, graphical display resolution : 800*600 px minimum ;
- Operating system : Windows NT4 SP6, Windows 2000 or Windows XP. ● ● ●



CARPATHE v5, always more advantages ● ● ●

- ▶ **ADAPTABLE** to your specific needs (adaptation to consumption computation modules).
- ▶ **CUSTOMIZABLE** by offering you the ability to custom your reports, the results you want to visualize, the information you wish associate with each component.

- ▶ **INDEPENDANT** of existing data base, you can **INTEGRATE IT** to your Information System or your own data base.
- ▶ **PORTABLE** on every platform, its standard version only relies on OPEN Source solutions.
- ▶ **EVOLUTIVE**, its modularity make the addition of new functionality easier.



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CS Communication & Systèmes, who are we ...

Our job is to design, integrate and operate industrial and scientific applications and computing infrastructure. CS provides his customers the most innoving technologies to build global solutions of high performance. CS is among the European leaders in these markets, due to his ability to innovate and to his human and technologic potential.



For further information : www.c-s.fr



Gaz de France / CS Communication & Systèmes, a complementary partnership ...

This partnership arised from the desire to gather, around the CARPATHE project, complementary skills :

- Gaz de France developped the calculation module requiring a high expertise in the areas of design and operation of gas delivery networks.
- The computerized industrialization and the user graphic interface were entrusted to CS Communication & Systèmes, who also ensure the guarantee and maintenance of CARPATHE v5.

To keep one step ahead ...



CARPATHE V5 succeeds Carpathe software which has been fully tried and tested for many years at Gaz De France and in several areas around the world (Southern Europe, Northern Africa, Latin America...) where it is currently used by gas distribution companies and engineering departments.

It has conserved the **quality and reliability** of its predecessor while gaining **new functionalities** highly appreciate. It appeals straightaway by its **quickness**, its **stability**, its **user-friendly interface** and its **personalization** possibilities.

It helps you to keep one step ahead on futures demands from your customers and to get a good return of investment.

»»» Contact-us :

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