

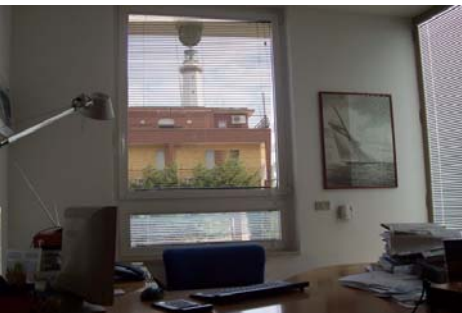
ENGLISH VERSION



cartography on-line



Planetek Italia, innovation and environment



Since 1994 Planetek Italia designs and develops integrated geographical data management systems. The know-how and the technologies mastered by Planetek Italia make the Company one of the main Italian sources for public institutions, service enterprises and companies that need the best skills in the field of geoinformatics.

Thanks to several factors, as the continuous research that combines high reliability with the newest technologies, the continuous update and the qualification of both human resources and company profile, and last but not least its total quality approach, Planetek Italia can create and offer highly innovative and personalized integrated solutions that fit the specific requirements of the customers with the best cost/benefit results.

Planetek Italia s.r.l. is Certified ISO9001: Vision 2000 "Design, realization, and servicing of geographical information system (G.I.S.), topographical surveys, cartographical and Earth Observation data processing (E.O.). Design and provision of training services regarding Geographical Information Systems and Earth Observation".

Planetek Italia has been incessantly moving towards continuous improvement as regards both its products/services and the internal organization management, and keeps working on a "total-quality-system" basis aiming at the overall fulfillment of the customer expectations.





**Cart@net, your database
is on-line with a single
click**



Cart@net is the WebGIS solution developed by Planetek Italia for the management and consultation of large raster and vector datasets, easy to use and to update.



In the last years the importance of geographical information has arisen both in the traditional market of cartography users and in emergent markets, who is considered today the new consumers of geospatial information.

These technological innovations opens new frontiers towards new great opportunities of enhancing and empowering your activities and services. In this sector the market is expanding and, as a consequence they grow more and more both the dimension of the archives and the dimension of a the single image file.

To answer these needs today we can give an answer friendly, revolutionary and reliable with Cart@net.

Cart@net is a versatile and revolutionary WebGIS application that enables the management and sharing of large cartographic databases, with extremely rapid response time and an accessing mode not limited by technical limitations.

Easy to use, high performances, reliability, flexibility, upgradability, protection: Cart@net is a perfect solution both for small applications and for enterprise architectures.



Future is now, Cart@net revealed

Designed by Planetek Italia, Cart@net is an all-purpose solution easy to use and to update, to distribute and share satellite images, ortophotos, raster and vector data.

Cart@net is an innovative ebGIS application easy accessible both through traditional browser on a Microsoft Windows O/S and through every computer equipped with a Java Virtual Machine.



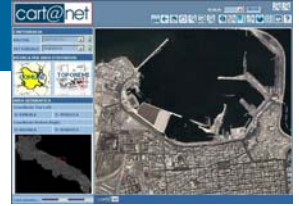
With Cart@net anybody can count on a system for the publication of cartography on Web that, thanks to its flexibility and modularity, can fit the demands of any kind of user, from the small Municipality to the Public Regional or Central Administration, from the tourist firms to big territorial corporate agencies.

Cart@net, the big challenge for the future at a hand **Discover the surprising features and extraordinary potentials of Cart@net**

- @ Publish and share cartography on-line
- @ Create customized and upgradeable cartographic portals
- @ Access and share via Internet raster and vector maps of any dimension (up to TeraBytes)
- @ View images on-the-fly and browse in real time, this without waiting too long for heavy data to download
- @ Use the imagery inside GIS and CAD applications
- @ Allow the access to multiple archives and connect to different Internet Map Servers (IMS) and different projection systems
- @ Update continuously the catalogue of data in a fast and easy way

Why Cart@net?

The strength points of a friendly, revolutionary and reliable system



Adopting Cart@net means to be equipped with a robust and efficient system, developed with highest quality standards and innovative tools

Look at its strength points:



SPEED

With Cart@net you can manage hundreds of GigaBytes of imagery and share it via internet easier and faster.

This happens as it uses an efficient transmission protocol to optimize the internet connection of the client and the access time to the raster cartography are faster as Cart@net makes it independent from the file dimension.

This let the system offer big and wide consultation windows that, unlike traditional systems, can be as large as the entire screen still maintaining a low load of the server and thus fast response time even with a huge number of connections.

QUALITY OF THE DATA

Cart@net high quality standard is due to efficient systems using very high compression, as ECW (Enhanced Compressed Wavelet) and JPEG2000, enabling file size decrements of tenth of the original dimension still keeping intact the quality of the image.



Combining with the power of Image Web Server for the distribution of the images, the ECW and JPEG2000 compression enables a kind of decompression on-the-fly that is targeted to the desired image porting allowing an interactive pan and zoom through the entire extension of the dataset in real time, even if the connection speed is very low.

Viewing operations are made in real time, even using standard modems for the internet connections. Image Web Server sends from the server only the quantity of data needed to display the chosen area at the proper resolution instead of the entire database.

Why Cart@net? The strength points of a friendly, revolutionary and reliable system



RELIABILITY

Cart@net needs very low maintenance and runs continuously without interruptions giving the users the possibility to access information whenever they are needed.

The experience gained with big customers at a national and international level is a guarantee of high balance, also due to a not intrusive approach towards the software that it integrates with.

From the design to the development, and to the installation and then the technical support, every step is managed taking into account the real needs of the customer and it is done with innovative developing tools and technologies in order to let Cart@net satisfy users' expectations.

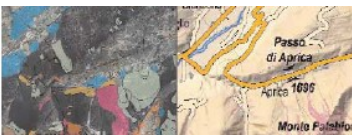
USABILITY AND UPDATES

The intuitive interface, the easy navigation and viewing of the database let also the inexperienced customers use Cart@net without doubt and problems.

Thanks to extremely intuitive command menus it is very soon possible to choose the raster and vector cartography, upload a short description and publish your cartography on-line.

To manage the entire system is extremely easy.

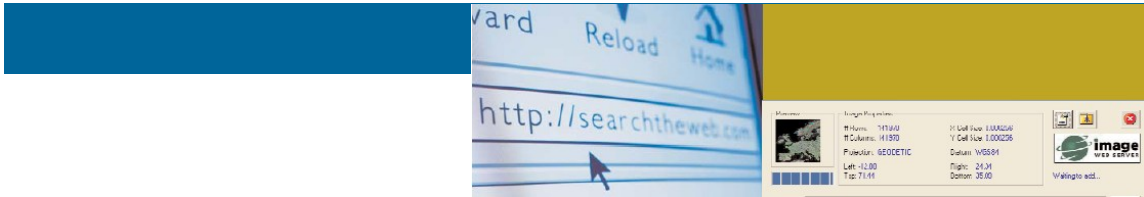
Cart@net is equipped with a private section, accessible via browser, that enables administrators to maintaining and updating the database, to managing users subscriptions and external servers: a complete control with few clicks of the mouse.



REVOLUTIONARY DATA HANDLING

Cart@net is the only solution that enables the integrated distribution of raster and vector cartography, without any limitation on the image file size.

A revolutionary technology that absolutely avoids all the viewing problems of the ortophotos, satellite images and background raster cartography for the vector data.



ADDING VALUE TO EXISTING SYSTEM

Cart@net does not require any kind of setting, modification or adaptation of data and information owned by the customer, but uses and adds value to what previously has been chosen by the customer in terms of base technologies, environment software, databases and skills.

The final result is a more rational and efficient organization of data and resources. Cart@net turns WebGIS infrastructures based solely on a traditional IMS (Internet Map Server) into a powerful integrated environment, efficient and able to dialogue with other systems, amplifying, thus, the potential application fields scenarios.

MULTIPLE DISPLAYING

Cart@net allows internet consultation and demanding through a wide-range of cartographic databases enabling researches on graphic and alphanumeric criteria, and allows the display of raster cartography (as aerial photos or satellite images) of the requested area.

Together with the common consultation features, Cart@net is featured also with an innovative multiple window displaying mode.



This displaying mode enables side-by-side and overlapped displaying of different scenes, of the same scene or of contiguous areas, facilitating multitemporal or multisource analysis.

ACCESS FROM GIS/CAD

Another feature that let Cart@net be considered unmatched is the possibility to access via Internet/Intranet, by using a GIS/CAD client, directly to the raster cartography.

Thanks to Image Web Server and its ECWP protocol, ArcView or AutoCAD users can access the database of all the Agencies who are equipped with Cart@net by using an URL address.

In this way it is possible, for instance, to overlay the raster data and the Municipality borders, the city plans and all the other data available.

Why Cart@net? The strength points of a friendly, revolutionary and reliable system



MULTIPLE SERVER MANAGEMENT

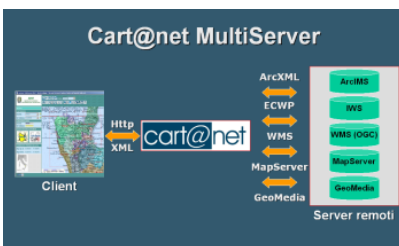
With the Multiserver module it is possible the consultation of multiple archives placed and maintained by different Agencies, without limitations on the number of integrated servers.



This module makes concrete the interoperability of different systems and database sharing. This feature, for instance, gives a regional cartographic department the opportunity to publish, inside its own web portal, all the cartographies made available by remote provinces web portals, creating a unique access point, and avoiding the duplication of the archives. This feature solves the known problems related to duplication of data, often a great discouraging factor.

FLEXIBILITY AND COMPLIANCE

Thanks to this Multistandard module the users of the system are allowed to access cartographic data served by remote servers, even if based on technical solutions different from those of Cart@net.



The system can be easily linked to archives published with a wide range of Internet Map Servers (IMS), both raster and vector, such as Image Web Server, UMN MapServer, OGC WMS, ArcIMS and Open Source systems, and with a huge systems of projection, datum and fuse, among the common ones normally used to produce cartography all over the national territory.





CUSTOMIZATION

With more than a decade of experience Planetek Italia can guarantee to all its customers the highest commitment in system customization.

The graphic design engineering and the development of a layout coherent with the web portal hosting the cartography leads to achieve exterior uniformity, full usability and service results.



PROTECTION

All the raster and vector data published and displayed on the website can be protected from unauthorized download. In order to further guarantee the global protection of the system, the html/javascript code of the webpages is encrypted.

The protection of the data published with Cart@net is made with the IWSES system (Image Web Server Enhanced Security) designed and developed by Planetek Hellas.

IWSES can recognize who is accessing consultation through Internet browser and who is using the data by inside a professional GIS/CAD application. Customizing the levels of protection allows to identify the customers' accesses to the database and admit only subscribed and authorized users.



READY TO USE SERVICE

Planetek Italia can set up and prepare everything is requested to publish a Cart@net system: from the server configuration, to the system installation ending with the on-line publishing of the website.

During installation and publishing activities a training course is also performed to customers, in order to transfer them the know-how to properly use Cart@net and to manage the databases updates. The service is completed with a thematic data harmonization and a mosaicing and compression of raster data as ortophotos and satellite images: Planetek Italia prepares your images as one single homogeneous file which, after the conversion in ECW format, is installed on the server together with Cart@net.



Cart@net COMPLETELY SCALABLE AND CUSTOMIZED

Cart@net has distinctive features of scalability and flexibility that makes it be considered as a perfect solution for any customer's need.

Three different versions - **Silver, Gold, Enterprise** – to satisfy your actual need: from classic standard tools to complex professional services. Each solution can furthermore be enriched whenever it is needed by integrating the **Optional Modules** that makes Cart@net an extremely customizable product, taking care of customers needs.

Cart@net	Silver	Gold	Enterprise
Single View	*	*	*
Side by side Views		*	*
Overlapped Views		*	*
Basic Protection	*	*	*
Advanced Protection		*	*
Administration Area	*	*	*
Raster Management via Image Web Server		*	*
Accesses Administration via IWSES			*
Module for Research of Toponyms/Streets			*
Optional Modules			
Multiserver			
Multistandard			
GeoHarP: harmonizing geographic data			
3D Viewing			
Interactive Localization			
Multiband: Multispectral analysis on satellite images			



Multiserver: is the module that allows integration of cartographic information served by remote servers.

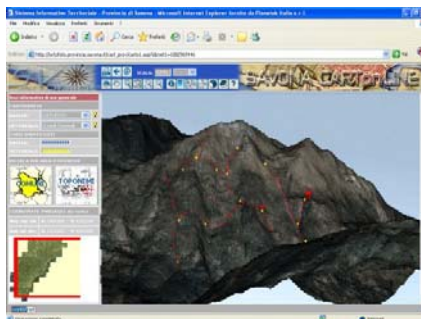
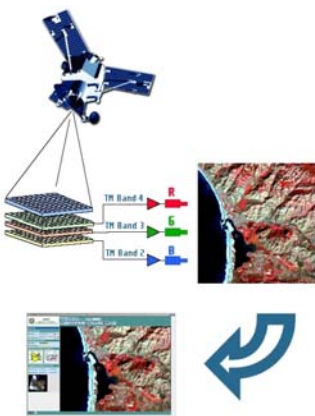
Multistandard: is the module that integrates cartographic information served by different servers and that are based on different protocols of transmission and standards as ArcIMS, MapServer, WMS OGC (Open GIS Consortium) and Image Web Server.

GeoHarP: module for the integration and distribution of cartographic data served by remote servers based on different systems of projection, datum and fuse, among the common ones normally used to produce cartography all over the national territory.

3D Viewing: this module enables the 3D viewing of raster and vector cartography, with the possibility to change the point of view and to move in Flythrough (free flight) mode inside the three-dimensional scenario.

Interactive Localization: this module enables interaction with users giving them the possibility to point out, with an interactive tool, specific cartographic items (punctual, linear or polygonal) placed on the territory. This is particularly important to start a project of geocoding of roads breakdowns or works, or for civil protection activities.

Multiband: an unmatched solution in the scenario of information systems dedicated to the on-line distribution of imagery. This module is specifically dedicated to the on-line publishing of satellite images as Landsat, SPOT, Ikonos, etc., that enables the Multispectral viewing and analysis of Multiband images.





The world of Cart@net

Cart@net is an extraordinary system that surprises for its multiple application scopes and its simplicity in use. Its success is assigned by the customers, Agencies and Public Institutions that since long period are taking profit of its innovative and unmatched qualities.

MAIN REFERENCES

Atlante Italiano: the entire Italian cartography on the web

From Ministry of Environment the color orthophoto of the entire Italian territory and the geocoded maps of the Reference Cartographic System.

<http://www.atlanteitaliano.it>



MAIS: the Italian Geospatial Information Access Module

In compliance with the strategy of distribution of territorial data on a national level, APAT (Agency for the Protection of the Environment and for the Technical Services) choose Cart@net to publish and share the cartographic archive and enable the consultation of the data supplied from the PFRs (Regional Focal Points) and from the National Module of the SINAnet network. Through the integration of the modules Multiserver and Multistandard, MAIS is a comprehensive environment where is possible the consultation of data archived on remote servers spread all over the territory and based on different IMS technologies (ESRI, Geomedia, Mapserver) and exchange protocols.

<http://www.sinanet.apat.it/mais>



Italian Landslides Inventory

The first homogeneous and updated landslide inventory of the entire Italian territory, realized by the APAT Department for Soil Protection – Italian Geological Service.

<http://www.mais.sinanet.apat.it/cartanetiffi>



Cartographic WebPortal of Regione Lombardia

The entire cartography of the Territorial Information System of Regione Lombardia on line with Cart@net.

Available Also in English. 

<http://www.cartografia.regione.lombardia.it>



Regione Lazio Geographic Information System

On-line the cartography of the Regional Department for Territory and Town Planning of Regione Lazio.

http://www.urbanisticaecasa.regione.lazio.it/cartografia_on_line





Provincia di Roma Geographic Information System

The system enables the management and distribution of cartographic data of Provincia di Roma. More than 100 complex maps and raster data (on-line with Image Web Server) archived with Oracle Spatial database. The user can manage a big number of GIS tools to consult, on-line edit, download cartography and prepare analysis on multiband satellite images.

<http://websit.provincia.roma.it>



Provincia di Savona CartOnLine

This web portal publishes the thematic cartography of the territory of Provincia di Savona. The system has been realized integrating and using MapServer, the Open Source cartographic data server.

<http://cartonline.provincia.savona.it>



PTCP of Provincia di Foggia

The Territorial Information System of Provincia di Foggia with a rich on-line section of thematic cartography publishing the Territorial Plan of Coordination of the Province.

<http://www.territorio.provincia.foggia.it>



Municipality of Venice Orthophoto 10cm

Inside the Base Territorial Framework of the Municipality of Venice, has been published the vectorial cartographic database integrated with a very high resolution ortophoto (10cm resolution) with nominal scale 1:2000

<http://www.comune.venezia.it/territorio/ortofoto.asp>



Territorial Information System of Sangro Aventino

The Territorial Information System of Sangro Aventino has been realized using UMN MapServer, the Open Source cartographic data server and the ortophoto ECW mosaic of the Territorial Pact area.

<http://www.sangroaventino.it/sezioni/SIT>



Mymap: publish your map with Cart@net

An absolutely free service offered by Planetek Italia to publish ECW images creating your own Web section! Plus you can find technical studies, new links to discover Websites, and a huge of free resources.

<http://www.planetek.it/mymap>

Cart@net

Tens of customized tools

To better answer your needs

Cart@net	Atlante Italiano	APAT SINAnet CLC 2000	Regione Lombardia	Regione Lazio	Provincia di Roma	Provincia di Savona	PTCP Provincia di Foggia	of Club Alpino Italiano	Municipality of Venice	Sangro Aventino
Single View	*	*	*	*	*	*	*	*	*	*
Side by side View	*	*	*	*	*					
Overlapped View	*	*	*	*						
Trasparency	*	*	*	*						
Basic Protection	*	*	*	*	*	*	*	*	*	*
Advanced Protection	*	*	*	*						
Raster management via Image Web Server	*	*	*	*	*	*	*	*	*	*
Accesses Administration via IWSES	*	*			*	*	*	*	*	
Module for Research of Toponyms/Streets	*	*	*	*						
Optional Modules										
Multiserver		*	*		*	*	*		*	
Multistandard		*	*							
Interactive Localization										
Multiband: Multispectral analysis on satellite images					*					

TO KNOW MORE ABOUT CART@NET

White Paper

To discover and deepen the knowledge of Cart@net with its features, the architecture and used technologies, please refer to the White Paper, available on-line for free download.
<http://www.planetek.it/eng/cartanet.asp>

Demo On-Line

Cart@net at work. If you wish to discover and use the system directly on the web you can either visit the websites mentioned on the references section or you can surf the web portal of Planetek Italia and find more papers, demo sites and news.
<http://www.planetek.it>

Cart@net is continuously improving and the mentioned feature can change over time.



Enter into the world of Cart@net to discover all the surprising features and tools offered by the system.

<http://www.planetek.it/eng/cartanet.asp>

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