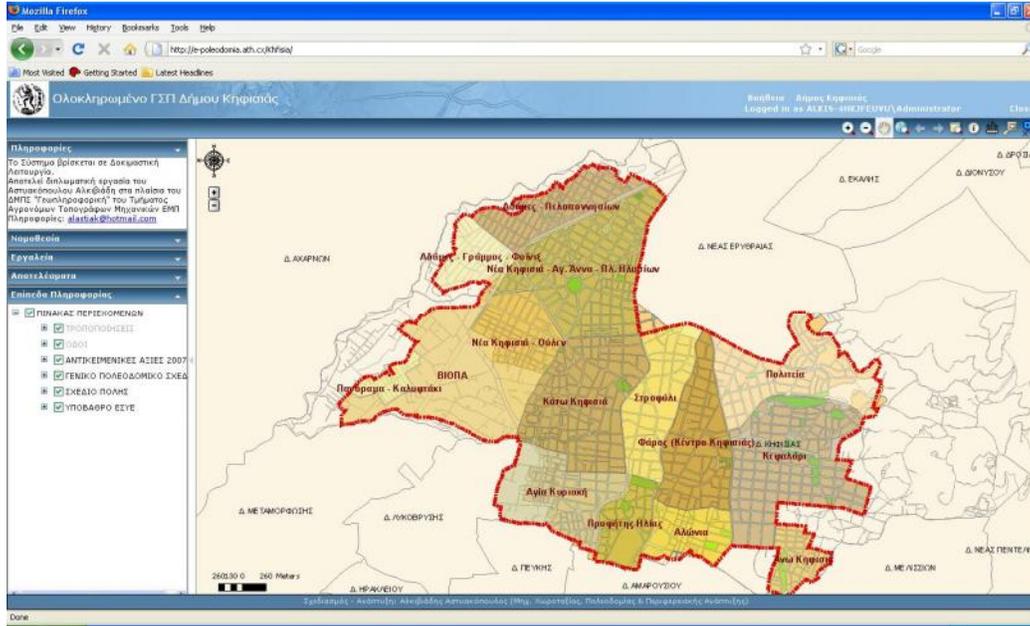




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ArcGIS Server:

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ArcGIS Server:
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alastiak@hotmail.com

Copyright © , 2009

μ . All rights reserved.

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Server: ArcGIS

(/)

ArcGIS Server, Web

Design and implementation of an Integrated Information System for urban data management using ArcGIS Server: Application to the Municipality of Kifissia

ABSTRACT

The fundamental aim of this dissertation is to highlight the design and implementation of an Integrated Information System for urban data management. By this term we mean the management of all these data (hardcopy and digital) which are scattered gathered in various Technical Services of Municipalities and / or Prefectures. The dissertation focuses on the role of G.I.S and particularly of the Web-GIS highlighting their crucial contribution to the rational management, organization and visualization of urban data . The referred approach is applied for the pilot municipality of Kifissia, one of the most well-known municipalities of Attica , which has serious technological problems. Specifically, using the software ArcGIS Server, it is tried to create a system and a uniform database of urban and regional data which in conjunction with existing legislation are published on the Internet as a Web application . This application is addressed to both City officials and citizens contributing from one side to radically improve the methods and modes of municipal services and from the other to disseminate the data information to citizens, businesses, operators of the city and the wider public service .

Key words: web-GIS, web services, web application

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ArcGIS Server

Information System), G.I.S. (Geographic (spatial data)

(geographically referenced)

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- ()
- (spatial data)
- ()

• ()

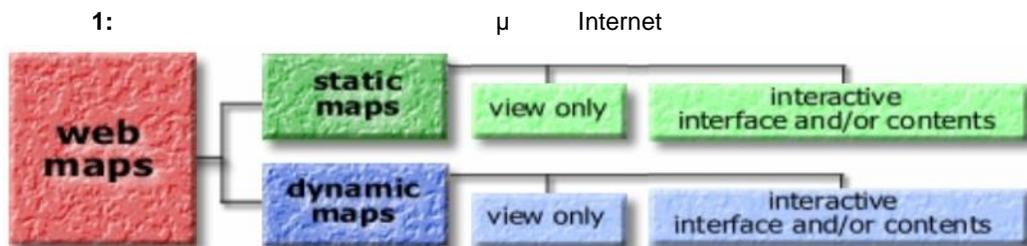
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(,), (x, y).

1 WEB-GIS

manual
 interactive
 (GIS).¹
 (projection)
 (time).
 Internet³:
 • (Static Maps)
 • (Dynamic maps)
 • View Only maps
 • Interactive maps



: <http://kartoWeb.itc.nl/Webcartography/Webmaps/static/s-view.htm>

Internet (static) view only.
 .jpg
 .bmp format.
 Internet.
 interactive.
 "clickable" maps
 (zoom)
 interactive (pan).

¹ Luaces .R. et al (2005) "A Generic Framework for GIS Applications" [<http://www.springerlink.com/content/x1h05bhdq4nefqxh/fulltext.pdf>, 29/08/2009]
² Kraak M.J (2004) "The role of the map in a Web-GIS environment" [<http://www.springerlink.com/content/1dne9f3u0wh7a1p8/fulltext.pdf>, 29/08/2009]
³ Kraak M.J. and Brown A. (2001) "Web Cartography", <http://www.kartografie.nl/webcartography/webbook/contents/contents.htm> : URL:
⁴ Static - View Only <http://kartoWeb.itc.nl/Webcartography/Webmaps/static/s-view.htm>, 29/08/2009
⁵ Static - Interactive <http://kartoWeb.itc.nl/Webcartography/Webmaps/static/s-inter.htm>, 29/08/2009

Internet
 animation.
 interactive
 AVI, MPEG QuickTime format. plug ins media players
 pause, backward forward. Web browsers
 VRML QuickTime VR. Java, JavaScript
 VRML model Schiphol Airport⁷. VRML (Virtual Reality Modeling Language)
 3D
 1995, Internet
 10%) (GIS (1997
 Web) GIS
 Web-GIS.

1.1 ()

1.1.1

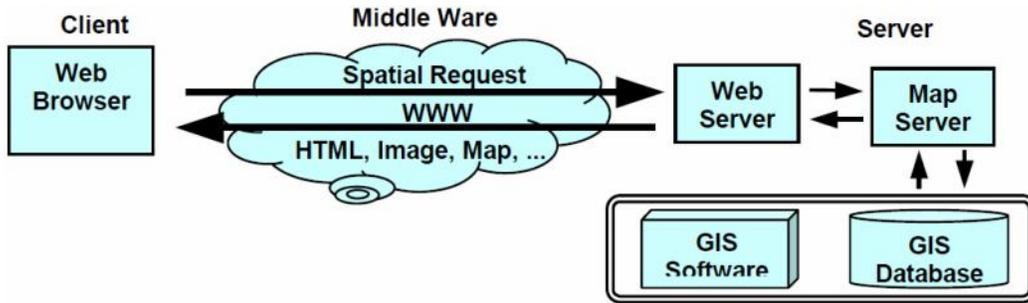
(Web GIS)
 XML) (HTML,
 client Server client/ Server
 Server
 client
 formats
 Internet Web
 zoom in/out). Server
 real-time
)

⁶ Dynamic – View Only URL: <http://kartoWeb.itc.nl/Webcartography/Webmaps/dynamic/d-view.htm>, 29/08/2009
⁷ Dynamic – Interactive URL: <http://kartoWeb.itc.nl/Webcartography/Webmaps/dynamic/d-inter.htm>, 29/08/2009
⁸ Web, URL: <http://www.demography-lab.prd.uth.gr/DDAoG/edu/case/4/WebGIS.htm> [29/08/2009]

1.1.2

- (Client)
- (application Server)
- (Map Server)
-

2:

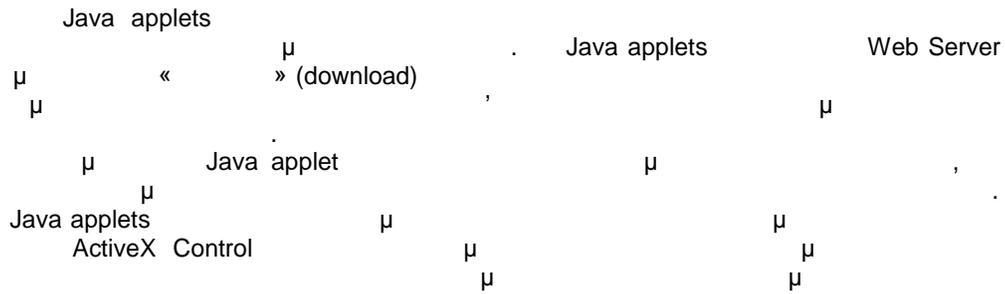


: Penq Z.R. and Tsou M.H, 2003

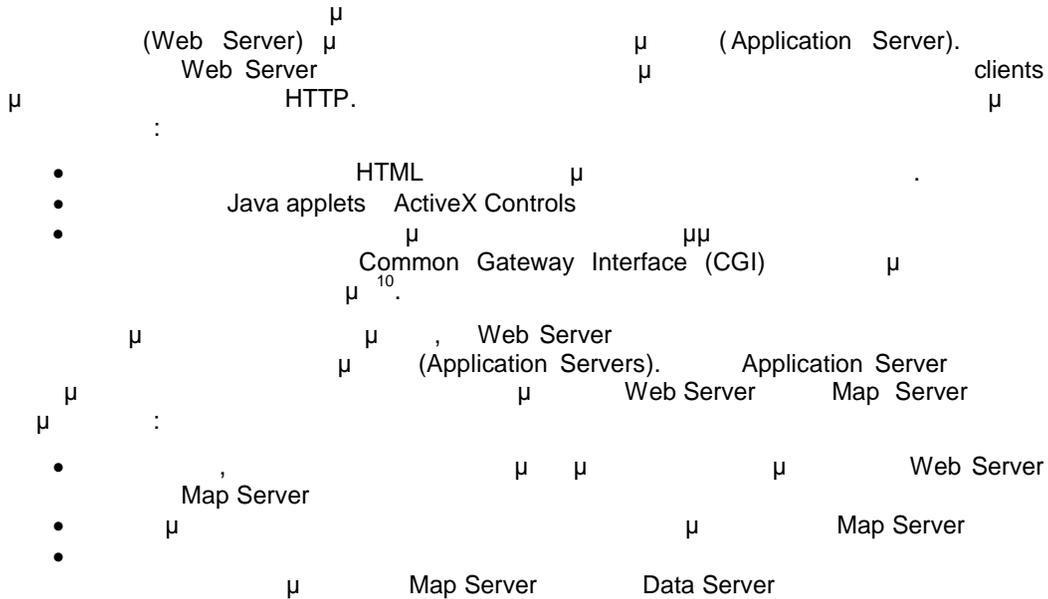
1.1.2.1 Client

Web GIS, (add - on), GIS, Web-GIS, desktop, Java applets, Java beans, Active X Controls, HTML, Java Script, UB Script, Plug-Ins, ActiveX controls, Web browser, Netscape™, Micros oft™, Web browser, HTML, Server. plug-in, (platform-dependant), Plug-in ActiveX control. . . . browsers

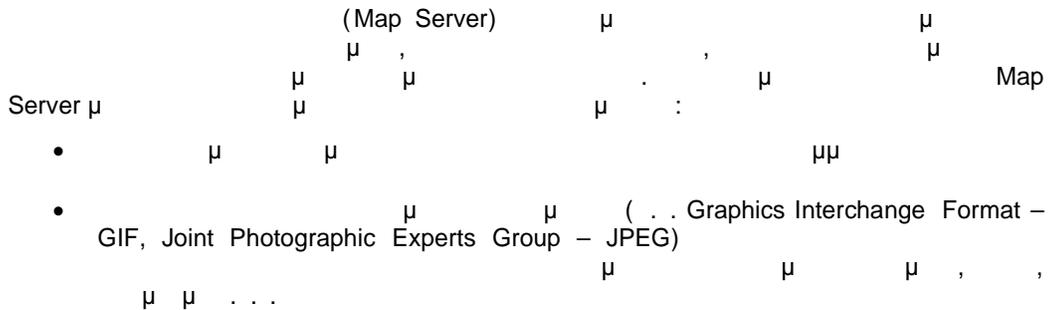
⁹ Penq Z.R. and Tsou M.H. (2003), "Internet GIS: Distributed Geographic Information Services for the Internet and Wireless Networks"



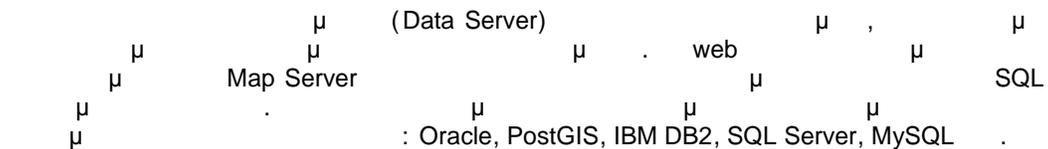
1.1.2.2 Web Server Application Server



1.1.2.3 Map Server



1.1.2.4 Data Server



¹⁰

Common Gateway Interface (CGI)

1.1.3.1

1.1.3 μ

11 μ

- Server (**Server-side**)
- client (**client-side**).

Server-side . . . μ

μ Server, Server.

client-side . . . μ client,

μ Server μ

μ

1.1.3.1 Server – side

Interface (CGI). μ internet CGI μ Common Gateway

μ Web. CGI μ

μμ Server μ μ μ

Web browser. μ μ μ

μ ArcInfo (ESRI, 1999), MapInfo (MapInfo, 1999), Intergraph (Intergraph, 1999), . . .

CGI μμ μ μ μ μ

μ Web browser. μ μ μ

CGI . . . μ Server. μ

Web browser user interface. μ μ

μ CGI script - μ μ

μ CGI scripting HTML Web browsers. μ

μ HTML μ μ μ

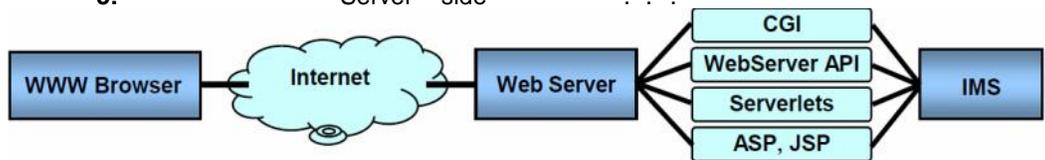
μ μ μ

μ Server. μ CGI

HTTP (internet) μ

μ site μ Server μ μ

3: Server – side . . .



: Alesheikh A.A. et al, 2002

1.1.3.2 Client – side

μ . . . μ Server-side client-side . . .

μ Web browser μμ

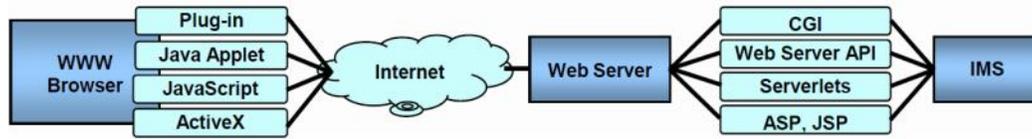
(modules) client μμ client μμ μ μμ

11 μ [μ μ Web, URL: <http://www.demography-lab.prd.uth.gr/DDAoG/edu/case/4/WebGIS.htm>, μ μ 29/08/2009]

12 Alesheikh A.A. et al (2002) "Web GIS: Technologies and its applications" [μ μ Web, URL: <http://www.isprs.org/commission4/proceedings02/pdfpapers/422.pdf>, μ μ 29/08/2009]

Java) « » applet HTML Web browser. site

4: Client – side



: Alesheikh A.A. et al, 2002

1.2 (Web Services)

1.2.1 Web Services

(Web Services).
 Web services μ μ μ
 Internet μ μ Internet,
 μ μ μ μ
 (TCP/IP, Http,) μ μ
 μ μ Internet
 μ W3C μ Web services¹³

1.2.2 Web Services

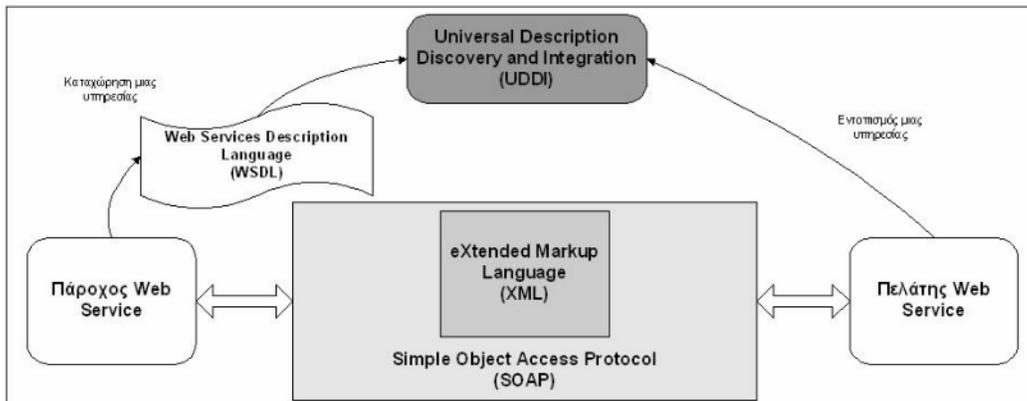
(find) μ Web services μ μ (publish),
 (bind)¹⁴. μ μ
 μ μ μ μ
 μ μ μ μ
 (μ) μ μ μ

¹³ URL: http://www.go-online.gr/ebusiness/specials/article.html?article_id=214
 29/08/2009]

¹⁴ URL: <http://www.it.uom.gr/project/soap/Theory/architecture.html>,
 Information & Communication
 Technologies e-resources μ μ
 29/08/2009]

- Extended Markup Language (XML) (XML: « »)
- (meta language) (WSDL: Web services Web Services Description Language (WSDL). WSDL XML Web service, Web service)
- Web services. (UDDI: « » Web services Universal Description Discovery and Integration (UDDI). Web services UDDI. Web services UDDI. WSDL, UDDI XML.)

7: Web Services (2)



: <http://www.it.uom.gr/project/soap/Theory/architecture.html>

1.2.3 Web Services

- Web Services hardware.
- Web service Internet
- Web service
- Web service on-line
- Web service Website

¹⁵ Fremantle P. et al (2002) "Enterprise Services" [Web, URL: <http://delivery.acm.org/10.1145/580000/570935/p77-fremantle.pdf?key1=570935&key2=0947261521&coll=GUIDE&dl=GUIDE&CFID=50606833&CFTOKEN=49939076>, 29/08/2009]

- Websites
- Web service

1.3 (Geospatial Web Services)

1.3.1 Geospatial Web Services

(Open Geospatial Consortium – OGC). OGC¹⁶ 330 (Geospatial Web Services)

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1.3.2 Geospatial Web Services

OGC

1.3.2.1 Web Map Service (WMS)¹⁷

Web Map Service (WMS), raster PNG (Portable Network Graphics), GIF (Graphics Interchange Format) JPEG (Joint Photographic Expert Group), Scalable Vector Graphics (SVG) Web Computer Graphics Metafile (WebCGM). Styled Layer Descriptor (SLD).

¹⁶ <http://www.opengeospatial.org>, OGC URL: 06/09/2009

¹⁷ URL: <http://www.opengeospatial.org/standards/wms>, OGC URL: 06/09/2009

1.3.2.2 Web Feature Service (WFS)¹⁸

Web Feature Service (WFS) (features) (Geography Markup Language), WMS, WFS, GML XML (eXtensible Markup Language).

1.3.2.3 Web Coverage Service (WCS)¹⁹

Web Coverage Service (WCS) coverage (OGC – coverage format ArcInfo), WCS clients, coverages, clients. WCS clients, WMS, WFS, Server.

1.3.3 Geospatial Web Services

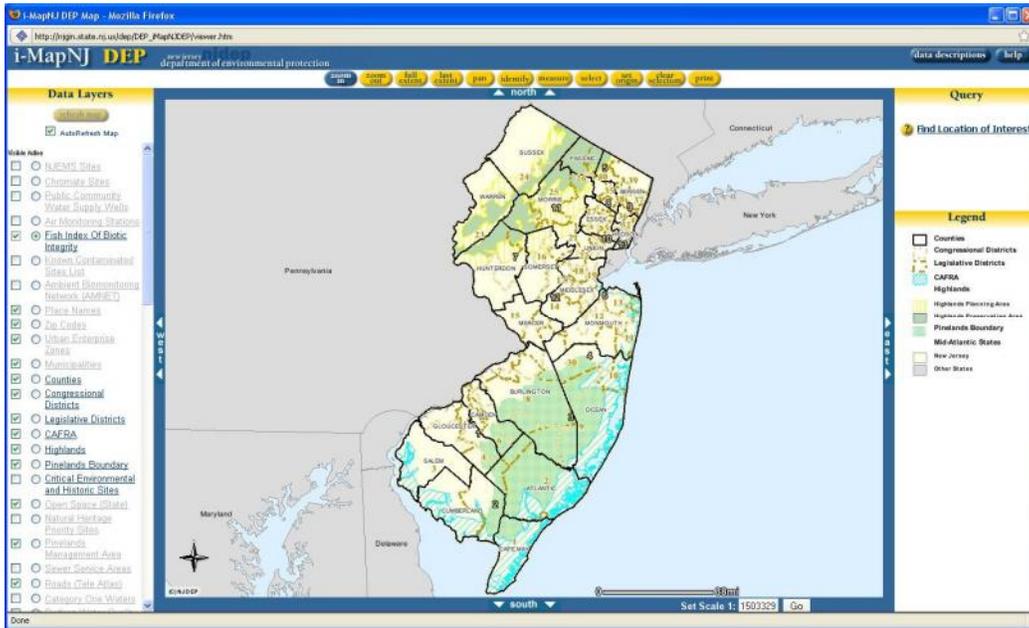
1.3.3.1 i-MapNJ DEP²⁰

i-MapNJ DEP, URL: http://www.opengeospatial.org/standards/wfs, URL: http://www.opengeospatial.org/standards/wcs, http://njgin.state.nj.us/dep/DEP_iMapNJDEP/Run.htm.

18 URL: http://www.opengeospatial.org/standards/wfs, 19 URL: http://www.opengeospatial.org/standards/wcs, 20 http://njgin.state.nj.us/dep/DEP_iMapNJDEP/Run.htm.

OGC 06/09/2009, OGC 06/09/2009, i-MapNJ DEP URL: 04/09/2009

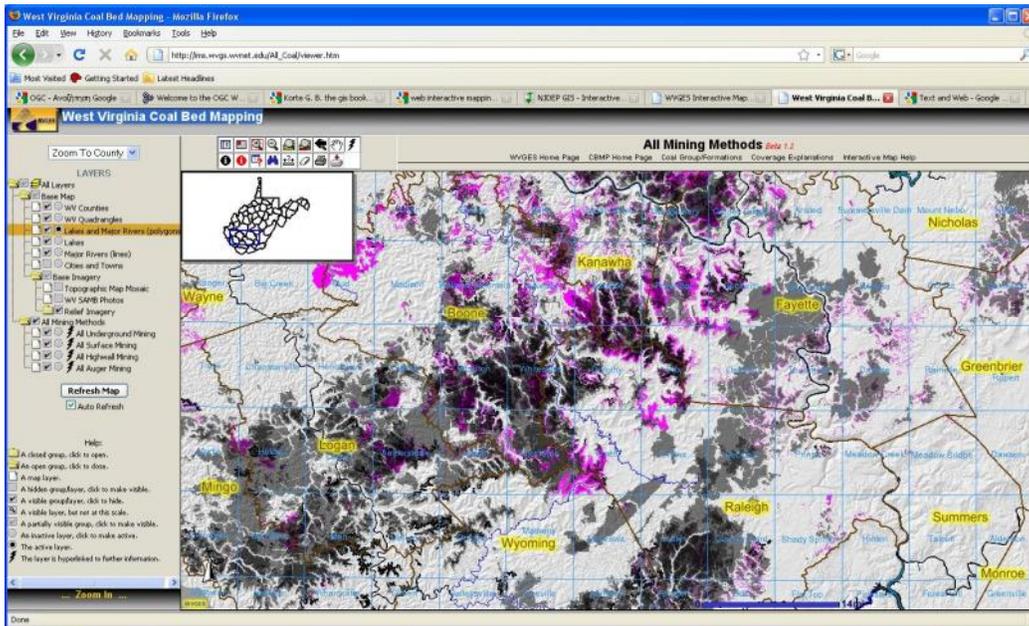
8: μ Web μ i-MapNJ DEP



: http://njin.state.nj.us/dep/DEP_iMapNJDEP/Run.htm

1.3.3.2 West Virginia Coal Bed Mapping²¹

μ Virginia μ
μ , μ MOSAIC μ
9: μ Web μ West Virginia Coal Bed Mapping



: http://ims.wvgs.wvnet.edu/All_Coal/viewer.htm

²¹ μ μ μ i- West Virginia Coal Bed Mapping URL: http://ims.wvgs.wvnet.edu/All_Coal/viewer.htm, μ μ μ 04/09/2009

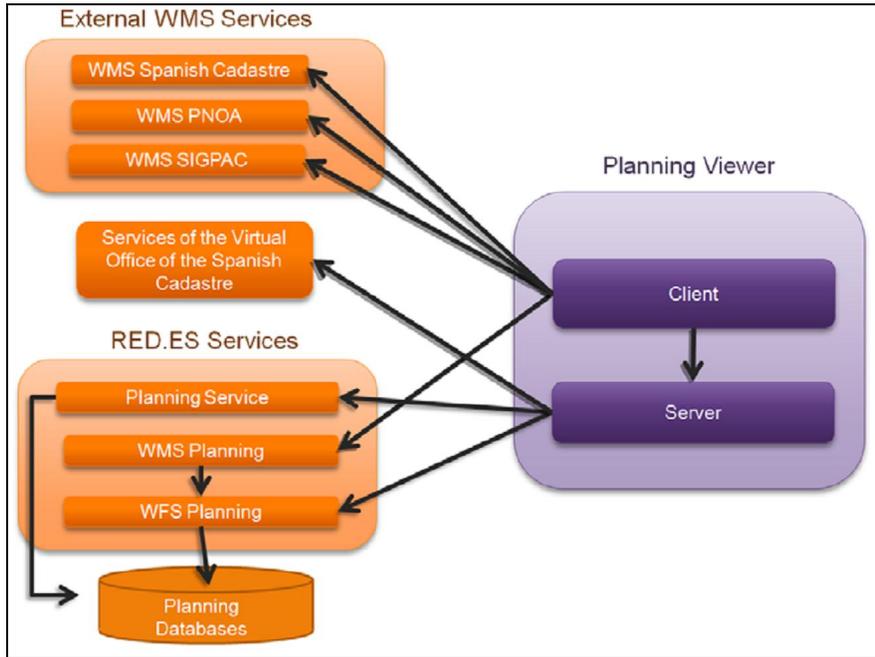
1.4.3.1 **Abegondo**

Urban Planning Web Viewer light clients μ Abegondo²² μ web-based querying μ red.es services μ « $\mu\mu$ ».

μ Abegondo μ open source μ OGC, μ INSPIRE.

AJAX / μ DHTML μ plugins applets

10: μ Viewer μ Abegondo Urban Planning Web



: Luaces M.R. et al, 2008

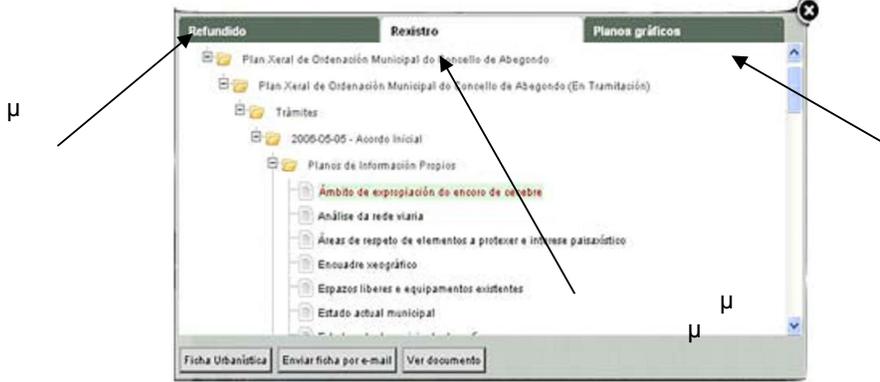
user interface μ :

- Map Window
- panels
- toolbars

Map Window layers μ Web Map Services (WMS) μ WMS National Plan of Air Ortophotograph (PNOA) μ WMS Geographical Information System of the Agricultural Plots (SIGPAC). μ panels μ

²² Miguel R. Luaces et al (2008) "An Urban Planning Web Viewer based on AJAX" [μ μ Web, URL: http://lbd.udc.es/lbd/./%5CPlainConsulta%5CArchivosAdministracion%5Cficheros_publicaciones%5CAnUrbPlaWeb.pdf, μ μ 04/09/2009]

12: Urban Planning Web Viewer Abegondo



: Luaces M.R. et al, 2008

Measuring Toolbar: Map Window

Map and Urban Planning Report Generation Toolbar:

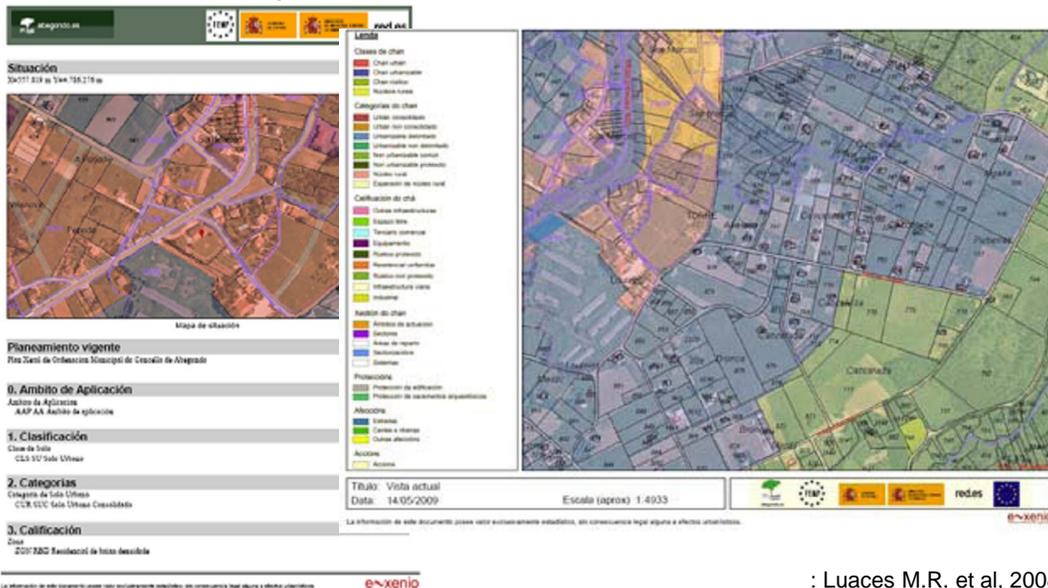
PDF format.

Map Window

e-mail.

13: Urban Planning Web Viewer Abegondo

Urban Planning Web



: Luaces M.R. et al, 2008

1.4.3.2 μ

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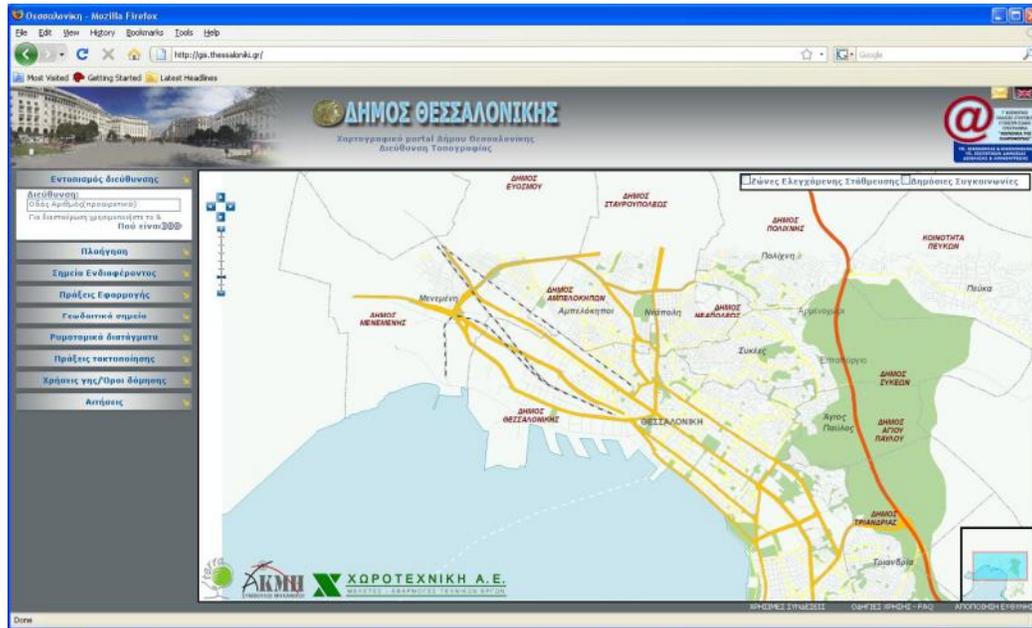
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14: μ

WebGIS μ

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: <http://gis.thessaloniki.gr>

(G.I.S), μ

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<http://gis.thessaloniki.gr>, μ

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04/09/2009

URL:

24

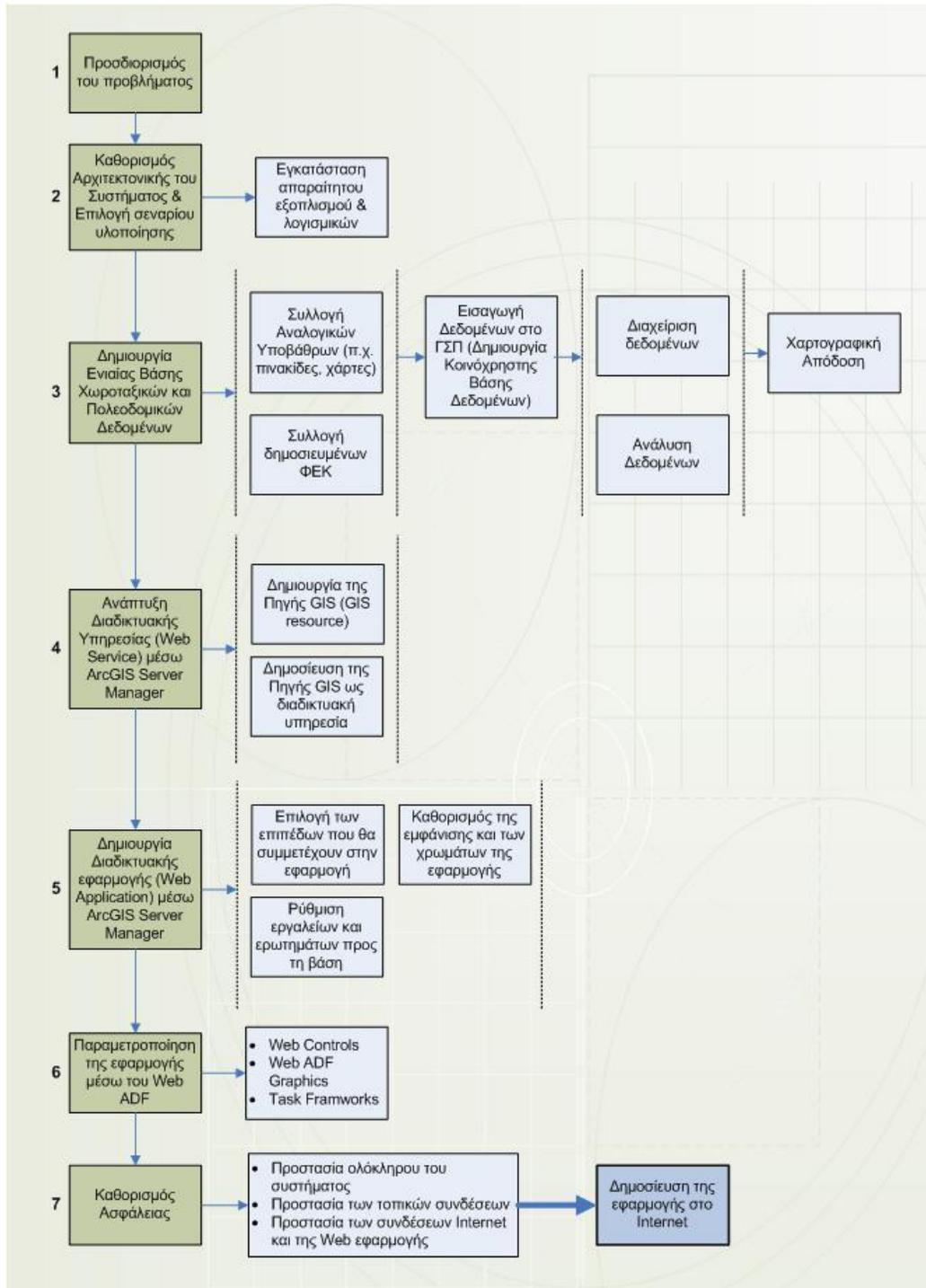
μ 12/ 374 " GIS

Web, URL:

http://portal.tee.gr/portal/page/portal/teetkm/GRAFEIO_TYPOY/TEXNOGRAFHMA_2009/TEXNOGRAFHMA_374/374%2012_13.pdf, μ

04/09/2009]

15:



2.1

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ArcGIS Server
 GIS
 GIS.

2.2

web
 ArcGIS Server
 n-tier
 .NET
 Microsoft,
 ArcGIS Server.

ArcGIS Server 3²⁵.

- GIS Server,
 - Server Object Manager (SOM) server objects
 - Server Object Container (SOC) host server objects
- Web Tier
 - Web Server²⁶
 - Web Application Development Framework (ADF) .NET Java.
- (clients): Web browsers
 - Web Server.
 - HTTP, LAN WAN.

ArcGIS Server
 Managers (SOMs), Server Object Containers (SOCs),
 ArcGIS Server development testing
 3²⁷

2.2.1

ArcGIS Server
 Web Server
 administrative



²⁵ Webhelp ArcGIS Server 9.3 [URL: http://webhelp.esri.com/arcgisserver/9.3/dotNet/index.htm#how_gis_svr_works.htm, 04/09/2009]

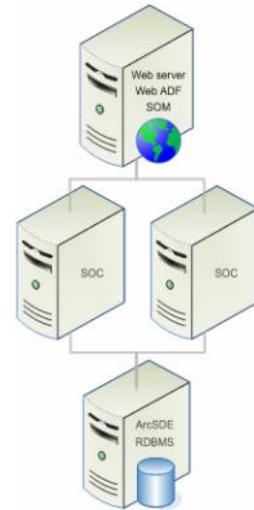
²⁶ .NET, Web Server IIS (Internet Information Services). Java, Web Servers Apache/Tomcat, IIS/Tomcat, IBM Websphere 6.1, Sun Java Application Server 9.0, Weblogic 9.1/9.2

²⁷ Webhelp ArcGIS Server 9.3 [URL: http://webhelp.esri.com/arcgisserver/9.3/dotNet/index.htm#deploy_scenarios.htm, 04/09/2009]

interface ArcGIS Server, Manager. components.

2.2.2

Web Server Web ADF
 SOM
 ArcGIS Server. SOC
 SOC
 CPU SOC
 SOC 16
 Data Server (RDBMS) ArcSDE.
 SOC authentication ArcCatalog.

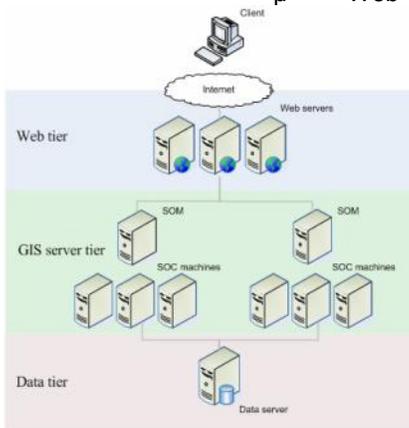


ArcSDE

2.2.3

GIS Server

round-robin Web failover
 SOM.
 Web Web



2.3.5

2.4 ArcGIS Server

(resource) Server web service GIS
 Internet. publish (clients) ArcGIS Server, GIS (resource).
 access GIS
 ArcGIS Server
 • GIS ArcGIS Desktop
 • ArcGIS Server
 • client

2.4.1 GIS ArcGIS Desktop

Desktop GIS (resources) ArcGIS. ArcGIS Server, desktop
 GIS²⁸
 GIS
 1: GIS ArcGIS Server

GIS (GIS resource)	ArcGIS Server	ArcGIS Desktop
Map Document	<ul style="list-style-type: none"> ▪ Mapping ▪ Geoprocessing ▪ Network Analysis ▪ Web Coverage Service (WCS) publishing ▪ Web Feature Service (WFS) publishing ▪ Mobile Data publishing ▪ KML publishing ▪ Geodatabase data extraction and replication 	ArcMap
Address Locator	<ul style="list-style-type: none"> ▪ Geocoding 	ArcCatalog
Geodatabase	<ul style="list-style-type: none"> ▪ Geodatabase query, extraction and replication ▪ WCS publishing ▪ WFS publishing 	ArcCatalog
Globe document	<ul style="list-style-type: none"> ▪ 3D mapping 	ArcGlobe
Toolbox	<ul style="list-style-type: none"> ▪ Geoprocessing 	ArcMap or ArcCatalog

²⁸ Webhelp ArcGIS Server 9.3 [Web, URL: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>, 04/09/2009]

		through ArcToolbox and Model Builder
Raster layers and copied image service definitions	<ul style="list-style-type: none"> ▪ Imaging ▪ WCS publishing 	ArcCatalog, ArcMap, ArcGIS Image Server

: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>,

2.4.2 **Web Service** **ArcGIS Server**

GIS, ArcGIS Server Manager, web, GIS, Server, SOC (Server Object Container), account, GIS, map services globe, mapping globe, GIS, map document Geoprocessing Server, map service, map service, mobile, map services, 29.

2: ArcGIS Server

(Service Type)	GIS (Required GIS Resource)
Map service	Map document (.mxd, .pmf)
Geocode service	Address locator (.loc, .mxs, SDE batch locator)
Geodata service	Database Connection file (.sde) or personal geodatabase or file geodatabase or map document referencing data from a versioned geodatabase
Geometry service	Does not require a GIS resource
Geoprocessing service	Map document with a tool layer or toolbox (.tbx)
Globe service	Globe document (.3dd, .pmf)
Image service	Raster dataset or layer file referencing a raster dataset or compiled image service definition (.ISDDef)

: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>,

3:

(Capability)		
Geocoding	address locator.	Geocode services

²⁹ Webhelp ArcGIS Server 9.3 [Web, URL: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>,
 04/09/2009]

	μ geocode service.	
Geodata	query, extraction replication. μ μ data geodata service. μ μ μ	Geodata services
Geodata Access	data extraction ArcMap. replication μ μ map document μ μ geodata service.	Map services
Geometry	μ μ μ μ project	Geometry services
Geoprocessing	toolbox tool layer. geoprocessing models μ μ μ μ ArcToolbox ArcMap. μ μ map document μ μ geoprocessing service.	Geoprocessing services, map services
Globe	document. μ globe μ μ μ globe service.	Globe services
Imaging	dataset ArcGIS Image service. raster μ μ imaging service. μ	Image services
KML	μ map document μ Keyhole Markup Language (KML)	Map services
Mapping	document. μ map μ μ μ map service.	Map services
Mobile Data	document μ μ map	Map services
Network Analysis	μ μ μ extension Network Analyst	Map services
WCS	μ service μμ μ μ OGC Web Coverage service (WCS)	Geodata services, image services, map services
WFS	μ service μμ μ μ OGC Web Feature service (WFS)	
WMS	μ service μμ μ μ OGC Web Map service (WMS)	Image services, map services

: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>,

2.5 μ Web Mapping Application

ArcGIS Explorer μ ArcGIS Server. μ
ArcGIS Server Manager μ Wizard μ web applications μ
μ μ³⁰:
• μ μ μ μ
• μ μ μ μ

³⁰ Webhelp ArcGIS Server 9.3 [μ μ μ Web, URL:
http://webhelp.esri.com/arcgisserver/9.3/dotNet/index.htm#intro_web_apps_mgr.htm, μ μ
04/09/2009]

3

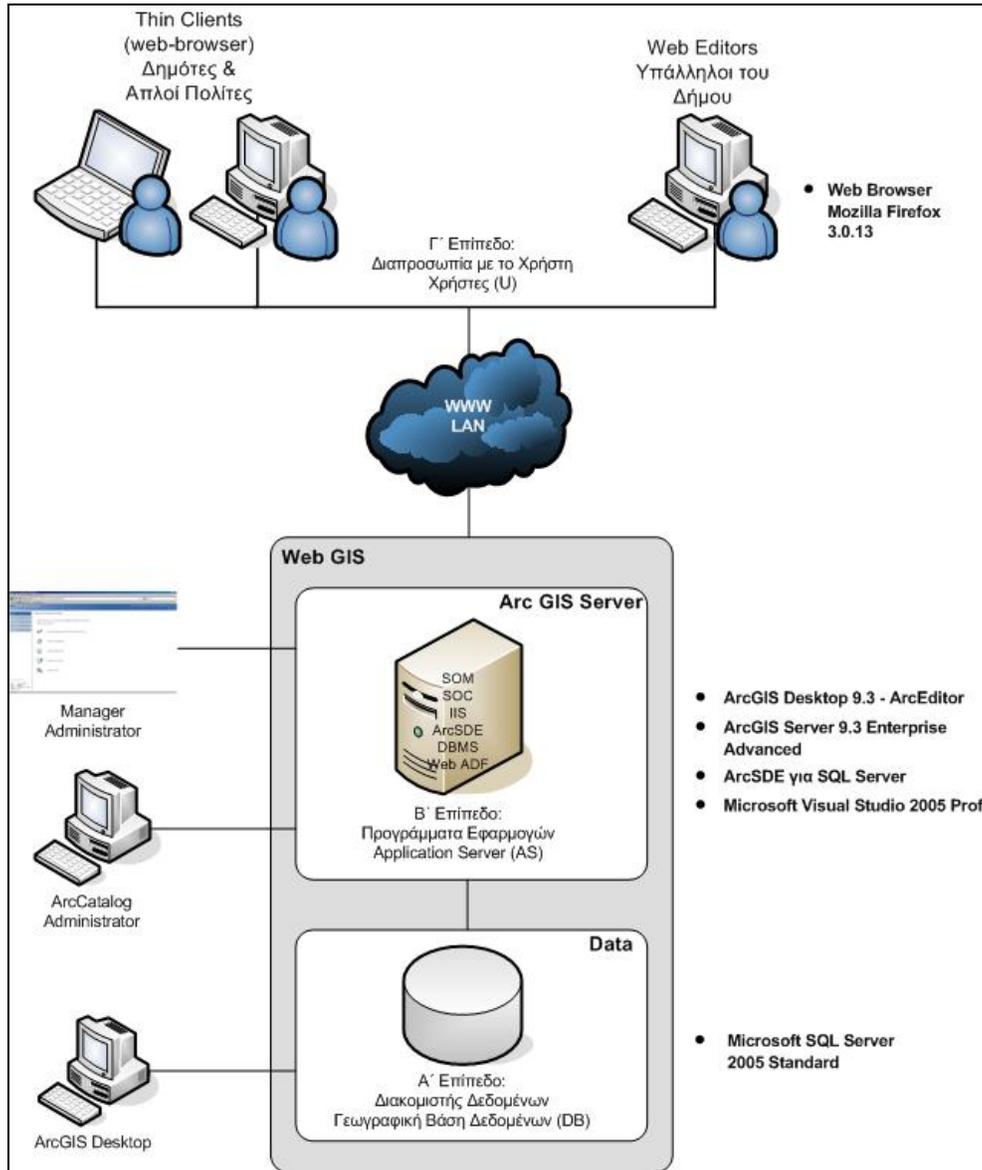
3.1

μ

μ

μ μ :

16: μ . . . μ



3.1.1

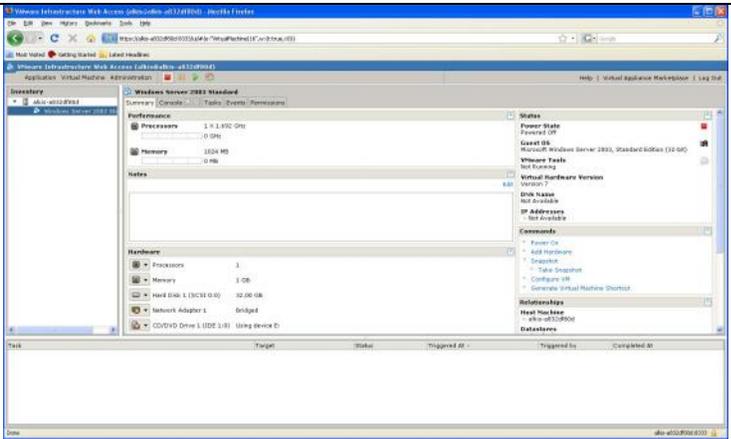
: μ μ

μ μ μ μ μ μ

GIS μ Application Server.
 μ map documents, address locators, globe documents, geodatabases
 geoprocessing tollboxes. (relationships) μ μ
 ArcSDE geodatabase geodata scalability, security, integrity
 performance.

3.

Server 2.0 : Virtual Machine. VMware
 19: μ μ μ μ μ μ

<p>1 Processor with:</p> <ul style="list-style-type: none"> • 1GB Memory • 32 GB Hard Disk • Bridged network connection • CD/DVD Drive 1 (IDE 1:0) 	
--	--

μ : μ Web GIS μ μ μ μ μ μ
 4: μ μ μ μ

Windows Server 2003 Standard
Microsoft SQL Server 2005 Standard
Desktop GIS: ArcGIS Desktop 9.3 – ArcEditor map document web
Web GIS: ArcGIS Server 9.3 Enterprise Advanced .NET Platform (web services)
RDBMSs: ArcSDE, SQL Server ArcGIS Server
Microsoft Visual Studio 2005 Professional
Internet Information Services 6.0 Windows Installer 3.1 .NET Framework 3.5 SP1 DynDNS

3.3 μ & μ

3.3.1 μ

μ μ μ :

- μ μ
- μ μ

(hardcopy). μ μ μ

5: μ

	μ	μ (Hardcopy)
μ	μ μ μ μ (μ , μ μ , μ). μ μ μ μ . μ	μ μ μ (hardcopy), μ μ μ μ / μ μ μ .
μ (Row Data)	μ μ μ μ μ μ μ μ (. . μ μ μ μ μ)	μ μ μ μ μ μ μ (. . μ μ μ μ) , μ ,

3.3.2

μ μ μ μ μ μ μ

μ μ μ μ μ μ μ

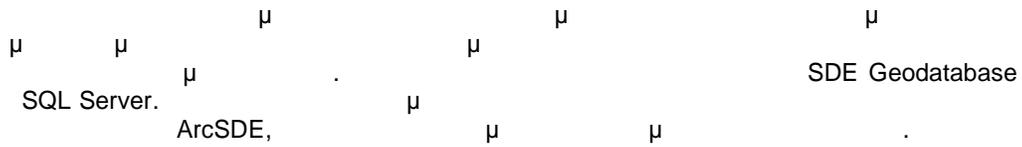
6: μ μ μ μ μ μ μ

μ ()	
μ μ μ (μ	μ
: 1) μ μ (μ : 10)	μ
(μ : 8) μ , ,	
(μ : 4)	

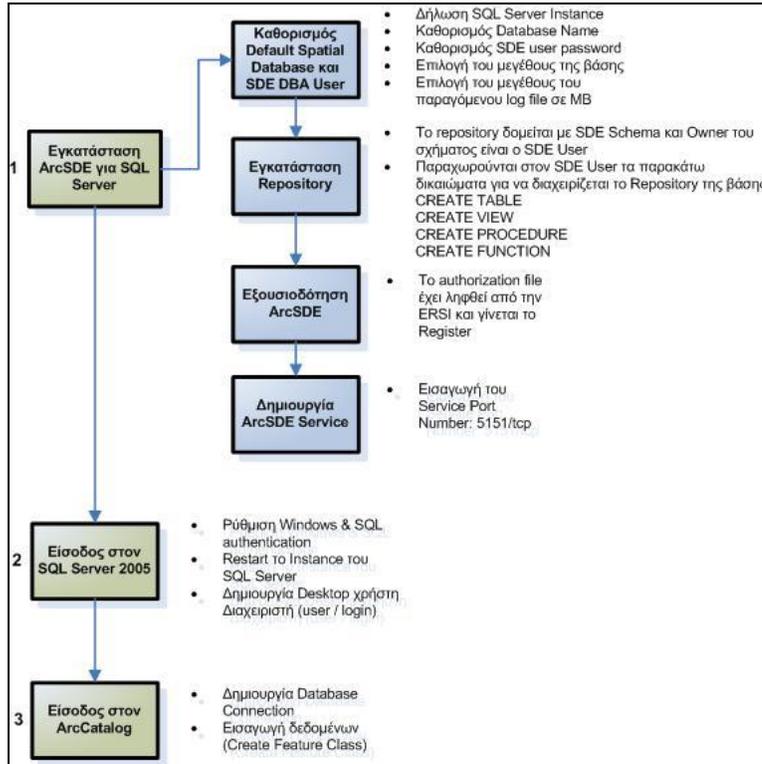
μ	
(μ : 60)	38

³⁸ <http://www.et.gr/etshop/account/login.html>, URL:

3.3.4



20: ArcSDE

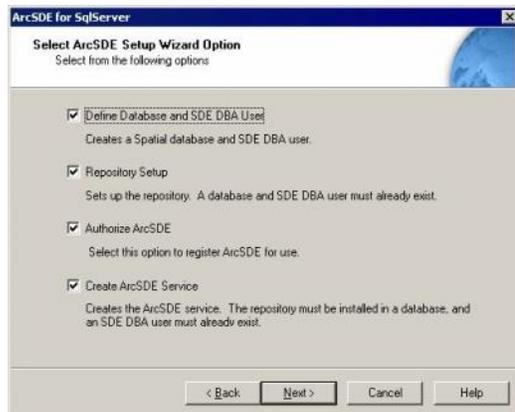


3.3.4.1

ArcSDE

ArcSDE μ 4 :

- μ SDE SQL Server
- (SDE DBA User)
- μ Geodatabase Repository μ ()
- μ Service ArcSDE (5151/esri_sde)



PROCEDURE, CREATE TABLE, CREATE VIEW
SDE
SQL Server 2005.

desktop

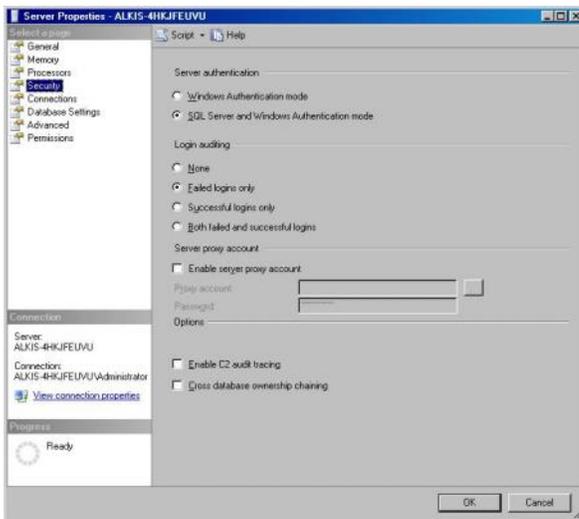
3.3.4.2 SQL Server 2005

Windows Authentication SQL Authentication.

- Windows Authentication

- SQL Authentication

Post Installation ArcSDE
SQL Server. (Server Properties → Security)



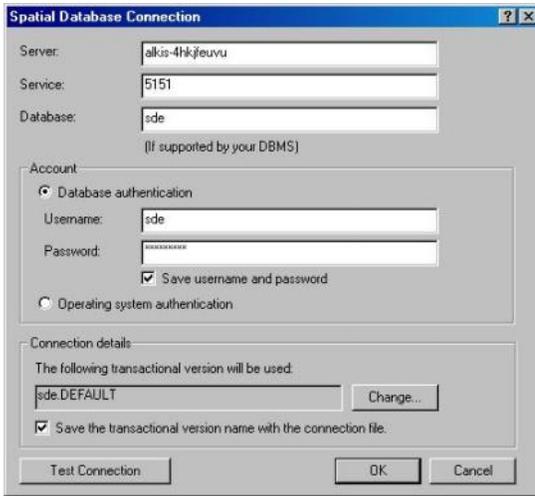
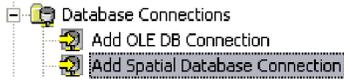
3.3.4.3 ArcCatalog

(Post Installation) Desktop Database Connections, Add
Spatial Database Connection

- **Server:** alkis-4hkjfeuvu, server
- **Service:** 5151, port number service ArcSDE
- **Database:** sde, SQL Server
- **Account:** Post Installation (Username: sde, Password: sql270285)

40 ESRI URL:
http://webhelp.esri.com/arcgisdesktop/9.3/index.cfm?TopicName=Granting_and_revoking_privileges_on_datasets_
04/09/2009

41 ESRI URL:
http://webhelp.esri.com/arcgisdesktop/9.3/print.cfm?TopicName=Creating%20spatial%20database%20connections_
04/09/2009

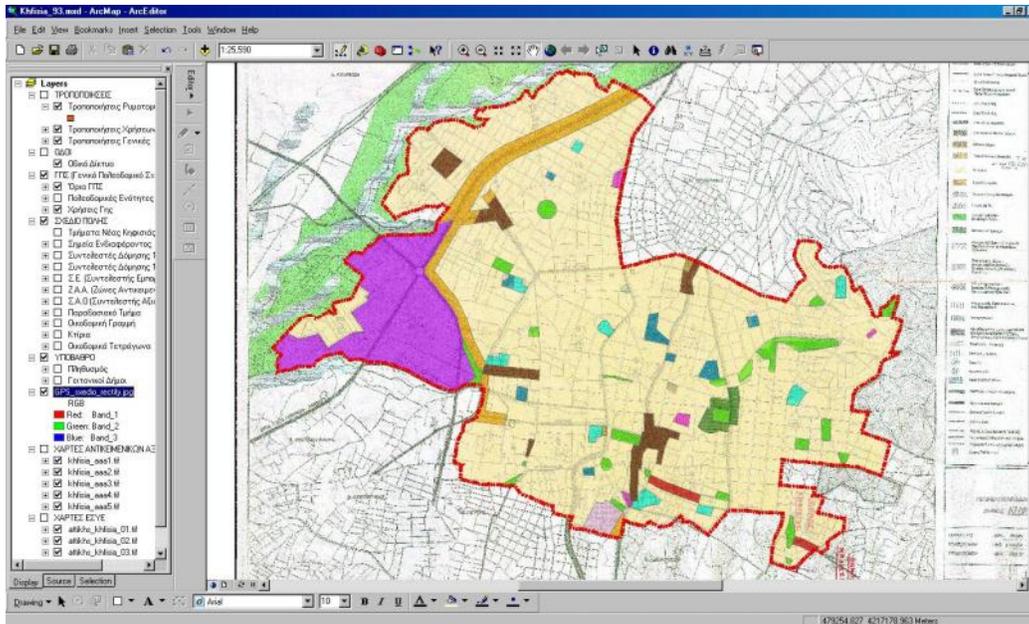


3.3.5

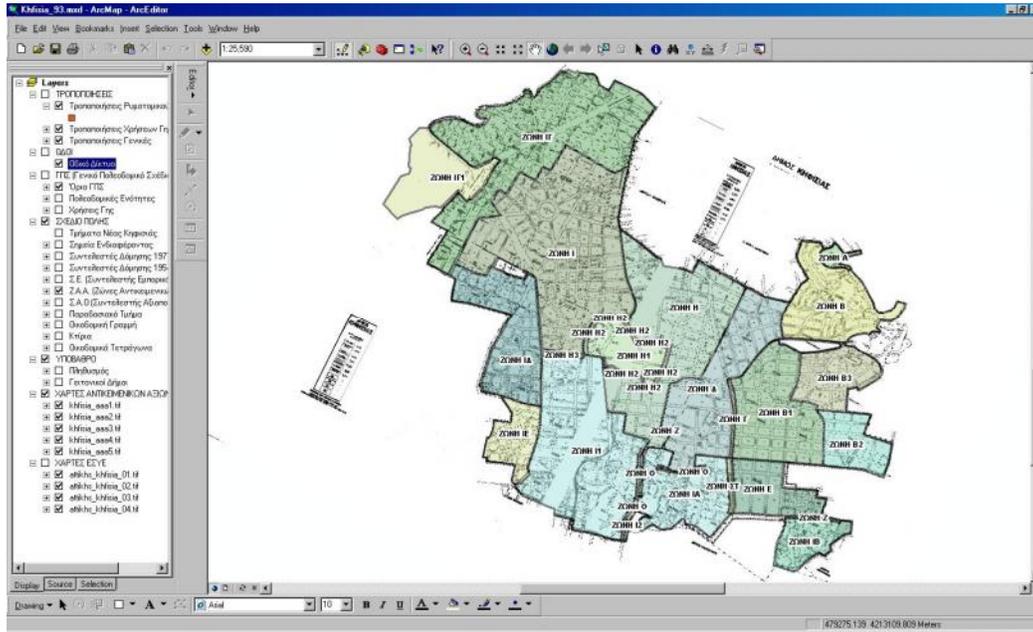
μ

3.3.5.1

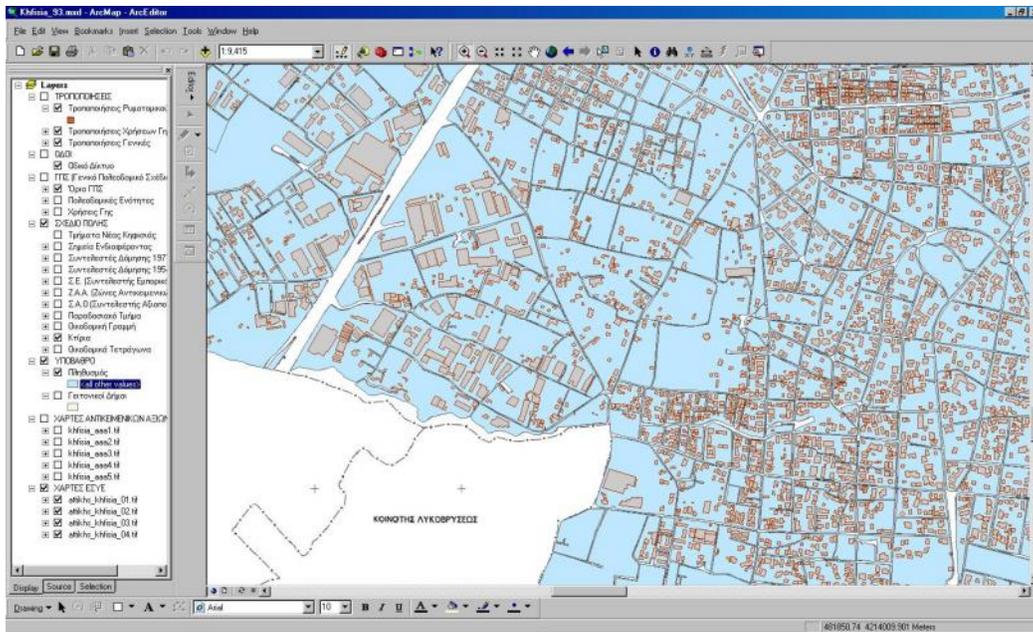
μ ArcGIS Desktop – ArcMap.
 ArcMap,
 Georeferencing).
 (Feature Classes) μ
 μ μ)
 21: μ μ μ « »



22: μ μ μ « μ. »



23: μ μ μ « »



μ , μ

3.

7: μ μ

/	μ	μ	μ	μ
1	μ	Vector (Area)	μ μ μ	
2		Vector (Area)	μ	μ (800 /10-11-1999)
3	μ	Vector (Area)	μ	μ (800 /10-11-1999)
4		Vector (Area)		μ (800 /10-11-1999)
5	μ	Vector (Area)	μ μ	μ μ
6	μ μ $\mu\mu$	Vector (Line)	μ μ $\mu\mu$	μ μ
7	μ $\mu\mu$	Vector (Line)	μ $\mu\mu$	μ μ
8	μ	Vector (Area)	μ μ μ 1977	μ μ
9	μ μ	Vector (Area)	μ μ μ 1977	μ μ
10	μ	Vector (Area)	μ μ	(μ 2007) μ
11		Vector (Area)		(μ 2007) μ
12	μ	Vector (Area)	μ	(μ 2007) μ
13	μ μ	Vector (Point)	μ μ	
14		Vector (Point)	μ μ μ	
15		Vector (Point)		
16	μ	Vector (Point)	μ	Internet
17		Vector (Area)	μ	(2001)
18	μ	Vector (Area)	μ (2001)	(2001)
19	μ μ	Vector (Area)	μ μ	μ μ
20		Vector (Line)		Google Maps
21	μ μ	Vector (Point)	μ μ μ	

3.3.5.2 μ

Attribute Table (

) μ μ μ (. . integer, text , date . .). μ

3.3.5.3 μ

hyperlinks.

μ μ , μ μ .pdf wwwroot μ μ Internet path μ 42:

```
<a href="http://www.esri.com" target="_blank">ESRI</a>
```

24:



ΧΡΗΣΕΙΣ ΓΗΣ

ΟΤ 514α, 515α, 514, 515, 516, 528,529, 548, 591, 579, 575, 557, 496, 492, 489, 488, 474, 476, 477, 429α, 526, 558, 426, 428, 430, 475, 472, 471, 493, 494, 498, 499, 525, 549, 556, 555, 554, 841, 859, 858, 861

1. Έχουν πρόσβαση στην Εθνική Οδό ή τις παραπλεύουσες αυτής και σε βάθος ως έχει το οικοπέδο κατά τη δημοσίευση του παρόντος Δ/τος:

- a) Κατοικία
- b) Ξενώνες έως 20 κλίνες
- c) Εμπορικά καταστήματα μόνο που εξυπηρετούν τις καθημερινές ανάγκες των κατοίκων της περιοχής, στο ισόγειο μόνο και μέχρι 100 τ.μ (max εκμετάλλευση) ανά ιδιοκτησία
- d) Κτίρια κοινωνικής πρόνοιας
- e) Κτίρια πρωτοβάθμιας και δευτεροβάθμιας εκπαίδευσης
- f) Αθλητικές εγκαταστάσεις
- g) Θρησκευτικοί χώροι
- h) Πολιτιστικά κτίρια
- i) Γραφεία, τράπεζες, ασφαλείες. Για την εξυπηρέτηση των χρήσεων αυτών επιτρέπονται στους ίδιους χώρους, εστιατόρια, αθλητικές εγκαταστάσεις, αναψυκτήρια που δεν υπερβαίνουν συνολικά το 5% του ΣΔ του οικοπέδου και επιφάνεια 1000 τ.μ, τοποθετούνται δε στο εσωτερικό των ΟΤ χωρίς πρόσβαση επί των οδών
- j) Οι χώροι στάθμευσης αυτοκινήτων που εξυπηρετούν τις παραπάνω χρήσεις, τοποθετούνται υποχρεωτικά σε κλειστό χώρο

2. Στο υπόλοιπο των ΟΤ:

- Αμνηχ. Κατοικία***
και ειδικότερα:
- a) Κατοικία
 - b) Ξενώνες έως 20 κλίνες
 - c) Κτίρια κοινωνικής πρόνοιας
 - d) Κτίρια πρωτοβάθμιας και δευτεροβάθμιας εκπαίδευσης
 - e) Αθλητικές εγκαταστάσεις
 - f) Θρησκευτικοί χώροι
 - g) Πολιτιστικά κτίρια και εν γένει πολιτιστικές εγκαταστάσεις

* Καθορίζονται χρήσεις αμνηχ. κατοικίας σύμφωνα με το άρθρο2 του από 23.2.1987 Π/Δτος (Δ' 166) με εξαίρεση τις χρήσεις της παρ. 3 (εμπορικά καταστήματα, για την εξυπηρέτηση των καθημερινών αναγκών των κατοίκων) και τις ιδιωτικές κλινικές σύμφωνα με την παρ. 12 του άρθρου 11 του Ν. 2052/1992 (Α' 94).

ΦΕΚ1423/24-06-1993



ΧΡΗΣΕΙΣ ΓΗΣ

ΟΤ 580, 530, 491, 485, 432, 470, 501, 502, 524

1. Στα οικοπέδα των παραπάνω ΟΤ*, των οποίων το πρόσωπο προβάλλεται στον άξονα της ΕΟ εν όλω ή εν μέρει χωρίς την παρεμβολή άλλου ΟΤ πλην των κοινόχρηστων χώρων επιτρέπονται οι χρήσεις γης της παρ. 5α του άρθρου 2 του από 6.1.93 Π.Δ/τος (Δ' 142)

- a) Κατοικία
- b) Ξενώνες έως 20 κλίνες
- c) Εμπορικά καταστήματα μόνο που εξυπηρετούν τις καθημερινές ανάγκες των κατοίκων της περιοχής, στο ισόγειο μόνο και μέχρι 100 τ.μ (max εκμετάλλευση) ανά ιδιοκτησία
- d) Κτίρια κοινωνικής πρόνοιας
- e) Κτίρια πρωτοβάθμιας και δευτεροβάθμιας εκπαίδευσης
- f) Αθλητικές εγκαταστάσεις
- g) Θρησκευτικοί χώροι
- h) Πολιτιστικά κτίρια
- i) Γραφεία, τράπεζες, ασφαλείες. Για την εξυπηρέτηση των χρήσεων αυτών επιτρέπονται στους ίδιους χώρους, εστιατόρια, αθλητικές εγκαταστάσεις, αναψυκτήρια που δεν υπερβαίνουν συνολικά το 5% του ΣΔ του οικοπέδου και επιφάνεια 1000 τ.μ, τοποθετούνται δε στο εσωτερικό των ΟΤ χωρίς πρόσβαση επί των οδών
- j) Οι χώροι στάθμευσης αυτοκινήτων που εξυπηρετούν τις παραπάνω χρήσεις, τοποθετούνται υποχρεωτικά σε κλειστό χώρο

* Σε περίπτωση συνένωσης οικοπέδων, μετά τη δημοσίευση της παρούσας απόφασης, που εμπλέκουν σε τμήματα των ΟΤ με διαφορετικές χρήσεις, εξακολουθεί να ισχύει η αρχική (πριν από τη συνένωση) χρήση.

2. Στο υπόλοιπα ΟΤ επιτρέπονται οι χρήσεις γης της παρ. 5β

- Αμνηχ. Κατοικία***
και ειδικότερα:
- a) Κατοικία
 - b) Ξενώνες έως 20 κλίνες
 - c) Κτίρια κοινωνικής πρόνοιας
 - d) Κτίρια πρωτοβάθμιας και δευτεροβάθμιας εκπαίδευσης
 - e) Αθλητικές εγκαταστάσεις
 - f) Θρησκευτικοί χώροι
 - g) Πολιτιστικά κτίρια και εν γένει πολιτιστικές εγκαταστάσεις

* Καθορίζονται χρήσεις αμνηχ. κατοικίας σύμφωνα με το άρθρο2 του από 23.2.1987 Π/Δτος (Δ' 166) με εξαίρεση τις χρήσεις της παρ. 3 (εμπορικά καταστήματα, για την εξυπηρέτηση των καθημερινών αναγκών των κατοίκων) και τις ιδιωτικές κλινικές σύμφωνα με την παρ. 12 του άρθρου 11 του Ν. 2052/1992 (Α' 94).

ΦΕΚ1740/24-03-2003

-
-
-

queries by attribute.

3.3.7

(Symbology)

3.4

3.4.1 GIS

GIS. map document mapping buffer. geoprocessing toolbox

8: GIS

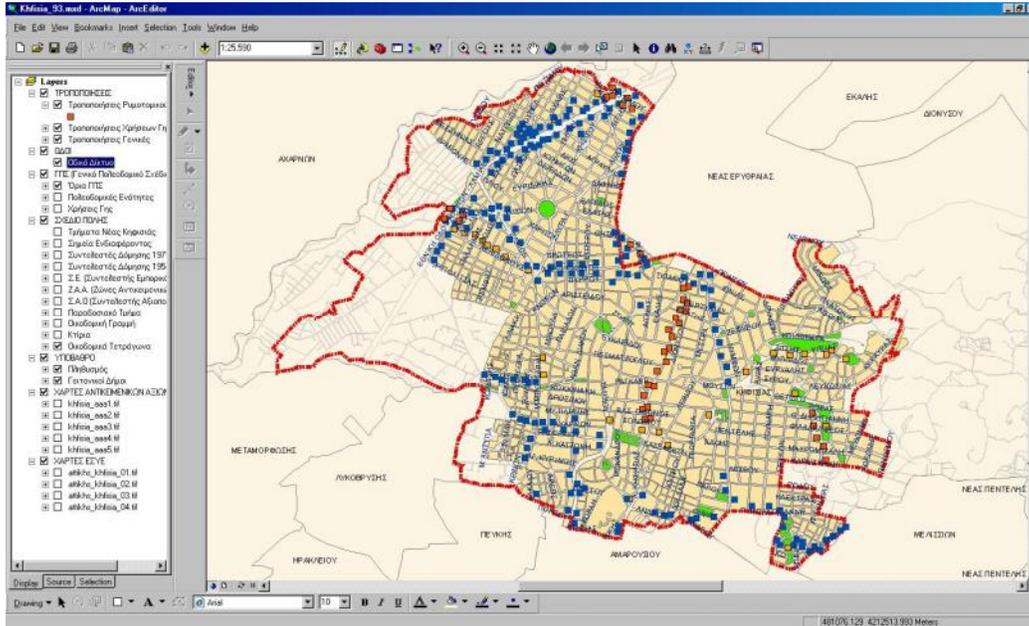
GIS	ArcGIS Server	ArcGIS Desktop
Map Document	<ul style="list-style-type: none"> • Mapping • Geoprocessing • Network Analysis • Web Coverage Service (WCS) publishing • Web Feature Service (WFS) publishing • Mobile Data publishing • KML publishing • Geodatabase data extraction and replication 	ArcMap
Toolbox	<ul style="list-style-type: none"> • Geoprocessing 	ArcMap or ArcCatalog through ArcToolbox and Model Builder

: <http://webhelp.esri.com/arcgisserver/9.3/dotNet>,

3.4.1.1 Map Document

Map Document ArcGIS Desktop ArcMap . mxd. Map Document web Server. ArcMap, visible scale range Map Document

26: map document



3.4.1.2 Geoprocessing Toolbox

Model Builder, Buffer Toolbox, Model Builder.

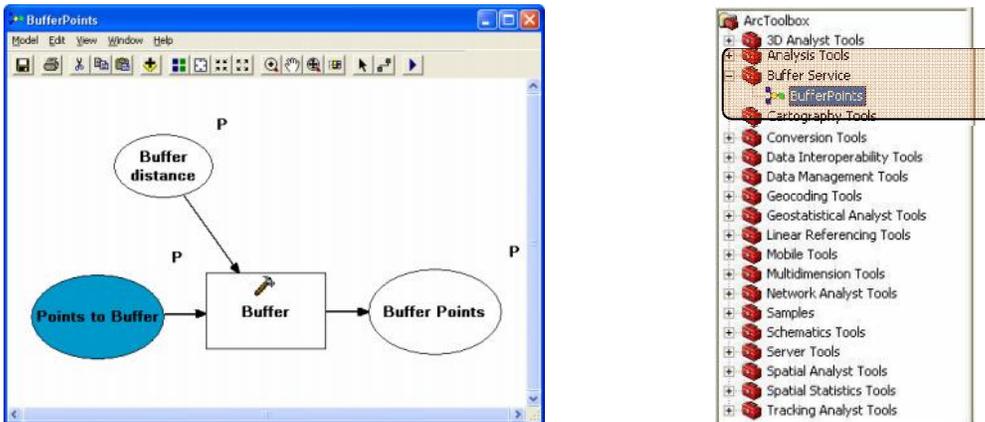
Model Builder, GIS.

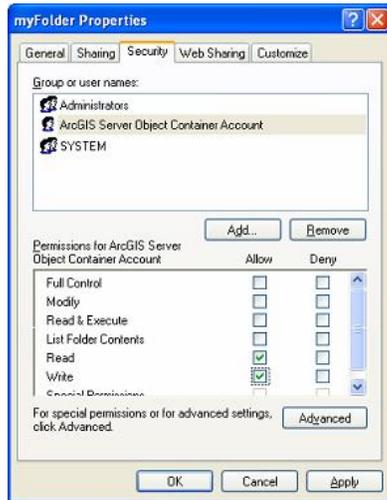
44. Input Data

Buffer scratch geodatabase.

ArcMap

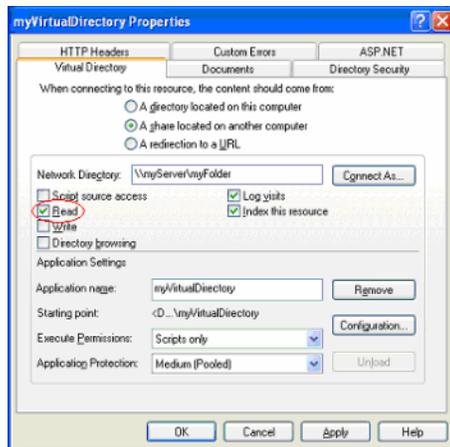
27: geoprocessing model





3.4.2.4 Server Directories

Server URL (. . . ,
 (/fek, /xriseis)
 Read access

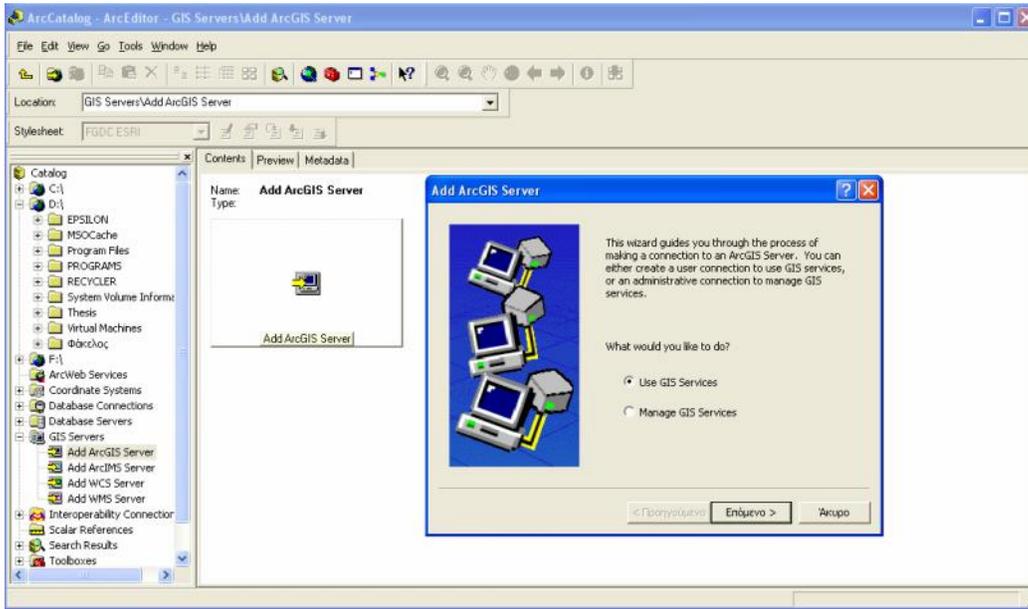


3.4.2.5 ArcGIS Server

ArcGIS Server Manager ArcCatalog Manager
 "Web Applications" component
 ArcGIS Server. ArcCatalog

- Manage GIS Services. GIS Servers
- URL ArcGIS Server instance :
<http://alkis-a832df80d/arcgis/services>
- Host Name Server, : alkis-a832df80d

28: ArcGIS Server μ ArcCatalog



Manager, μ : μ GIS Server μ

29: ArcGIS Server μ Manager



Log In

User name: Example: Domain\UserName

Password:

ArcGIS server:



3.4.3 μ GIS Web Services⁴⁶

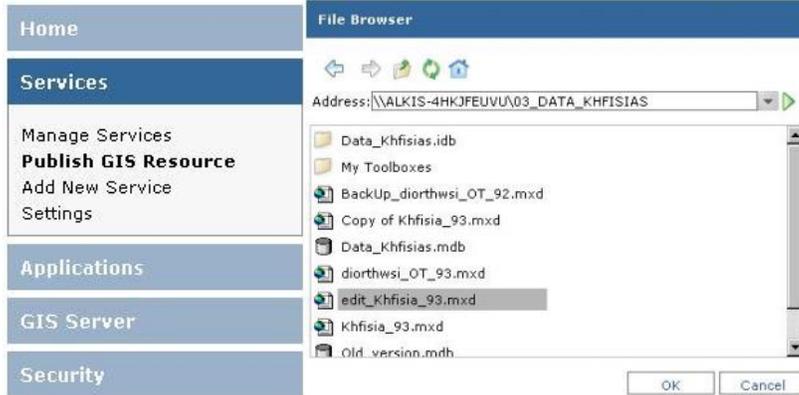
Service. μ μ (Map Document, Geoprocessing Toolbox), Web Services, : Map Service Geoprocessing μ

46 μ μ ESRI μ o URL: http://webhelp.esri.com/arcgisserver/9.3/dotNet/index.htm#publish_resource.htm, μ μ 04/09/2009

3.4.3.1 Map Document

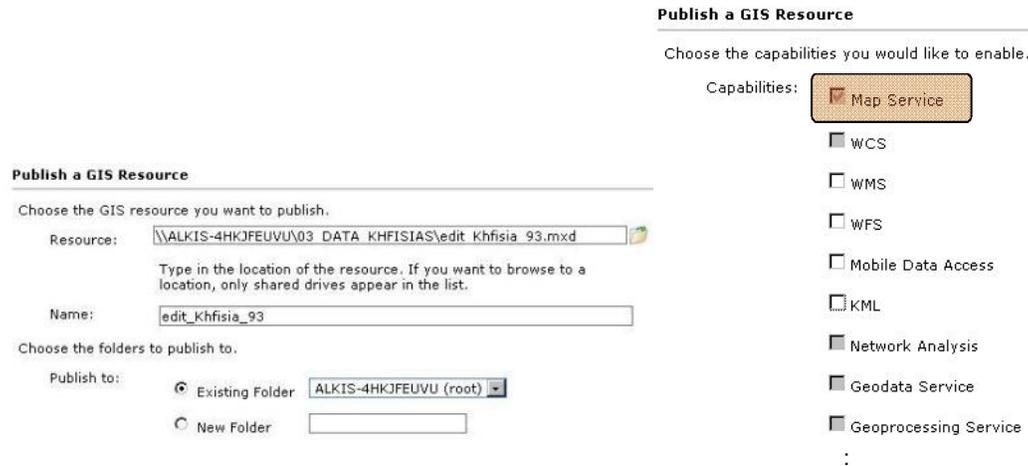
Resource, Manager, Services → Publish GIS
 File Browser Map Document
 Map Document

30: map document ArcGIS Server Manager



map document
 mapping Service.
 Directory: http://alkis-4hkjfeuvu/ArcGIS/services/edit_Khfsia_93/MapServer

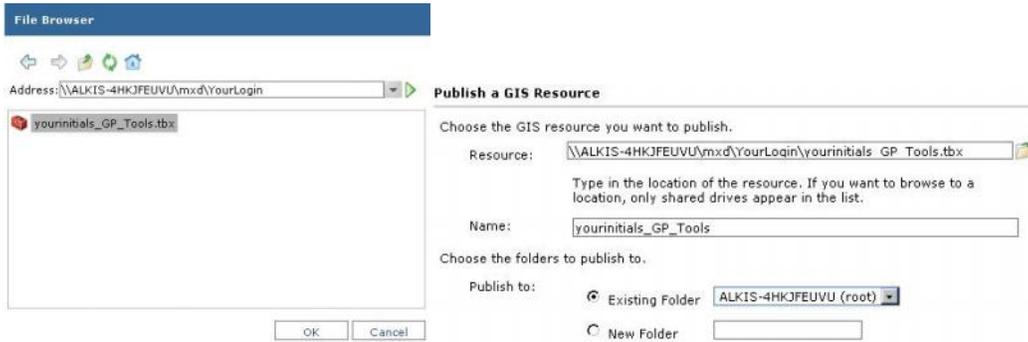
31: Map Service (mapping)



3.4.3.2 Buffer Toolbox

Geoprocessing Buffer Toolbox
 Geoprocessing Buffer Toolbox Service
 Directory: http://alkis-4hkjfeuvu/ArcGIS/services/yourinitials_GP_Tools/GPServer

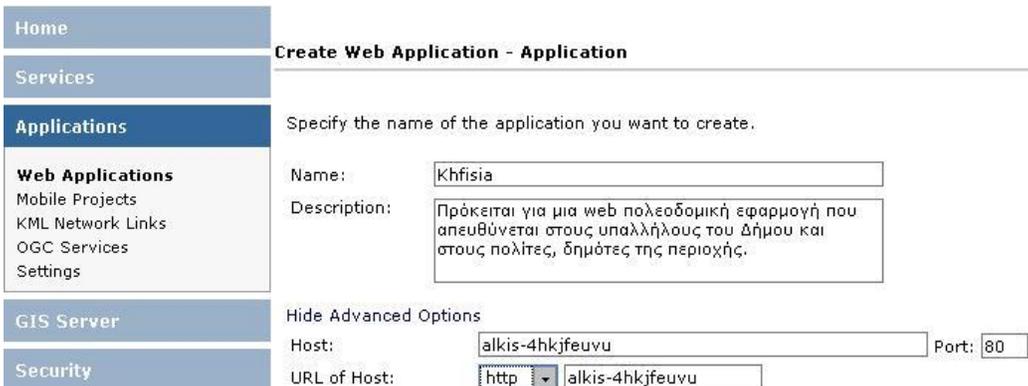
32: Buffer Toolbox ArcGIS Server Manager



3.5 ArcGIS Server Manager

Manager Applications → Web Applications → Create Web Application.
 (Khfsia)
 Web Host
 alkis-a832df80d 80.

33: web



3.5.1

- browse map service
- (Alias)
- Editor. HTML

47 http://webhelp.esri.com/arcgisserver/9.3/dotNet/index.htm#intro_web_apps_mgr.htm, 04/09/2009

3.5.3

μ « μ μ ».
 μ , μ μ links.
 μ link μ ESRI μ ,
 μ μ .

38: μ

Create Web Application - Page Properties

Select the properties to apply to the web page.

Title text:

Theme: 

Web page links:

Name	URL		
Help	Help/Default.htm		
Δήμος Κηφισιάς	http://www.khfsisia.gr		
Add New Link			

3.6 μ

μ

μ μ μ ArcGIS Server Manager
 μ panels μ , μ
 μ μ μ μ μ
 , μ :

3.6.1 μ Panels

- panel μ μ μ « μ », μ
 - panel « μ » (edit, buffer, μ , μ) μ μ μ
 - « μ » panel μ μ μ μ μ .pdf μ μ μ .
 μ μ μ
- panels:

39: panel « »

```

<div id="Div5" style="width: 100%; border: solid 1px #666666; height: auto">
<asp:Panel ID="Info_Panel_Header" runat="server" CssClass="MapViewWindowTitleBarStyle"
Height="24px">
  <div style="padding:4px; cursor: default; vertical-align: middle;">
    <div id="Div6" class="appFloat1" style="vertical-align: middle;"> </div>
    <div id="Div7" class="appFloat2" style="vertical-align: middle;">
      
    </div>
  </div>
</asp:Panel>
<asp:Panel ID="Info_Panel_Collapse" runat="server" CssClass="MapViewCollapsePanel"
style="display: block;">
  <asp:Panel ID="Panel4" runat="server" Height="90" style="padding: 0px 0px 10px 0px; width:
100% ">
    <div id="Div8" style="width: 100%; height: 100%;">
      <br />
      " " " "
      <br />
      : <a href="mailto:alastiak@hotmail.com">alastiak@hotmail.com</a>
    </div>
  </asp:Panel>
</asp:Panel>
</div>

```

40: panel « »

```

<div id="Div1" style="width: 100%; border: solid 1px #666666; height: auto">
<asp:Panel ID="Tasks_Panel_Header" runat="server" CssClass="MapViewWindowTitleBarStyle"
Height="24px">
  <div style="padding:4px; cursor: default; vertical-align: middle;">
    <div id="Div2" class="appFloat1" style="vertical-align: middle;"> </div>
    <div id="Div3" class="appFloat2" style="vertical-align: middle;">
      
    </div>
  </div>
</asp:Panel>
<asp:Panel ID="Tasks_Panel_Collapse" runat="server" CssClass="MapViewCollapsePanel"
style="display: none;">
  <asp:Panel ID="Panel3" runat="server" Height="90" style="padding: 0px 0px 10px 0px; width:
100% ">
    <div id="Div4" style="width: 100%; height: 100%;">
      <div id="Div13">
<asp:Menu ID="TaskMenu" runat="server" Style="left: 0px; position: relative; top: 0px;
Orientation="Vertical" DynamicMenuItemStyle-Height="10" BackColor="Transparent"
DynamicHorizontalOffset="2" Font-Names="Verdana" Font-Size="8pt" ForeColor="Black"
StaticSubMenuIndent="10px" Height="12px" CssClass="appFloat1"
DynamicPopOutImageUrl="~/images/expand_right2.gif" StaticPopOutImageUrl="~/images/expand.gif">
</asp:Menu>
      </div>
    </div>
  </asp:Panel>
</asp:Panel>
</div>

```

41: panel « μ »

```

<div id="Div9" style="width: 100%; border: solid 1px #666666; height: auto">
<asp:Panel ID="Fek_Panel_Header" runat="server" CssClass="MapViewWindowTitleBarStyle"
Height="24px">
<div style="padding:4px; cursor: default; vertical-align: middle;">
  <div id="Div10" class="appFloat1" style="vertical-align: middle;"> μ </div>
  <div id="Div11" class="appFloat2" style="vertical-align: middle;">
    
  </div>
</div>
</asp:Panel>
<asp:Panel ID="Fek_Panel_Collapse" runat="server" CssClass="MapViewCollapsePanel"
style="display: none;">
  <asp:Panel ID="Panel5" runat="server" Height="150" style="padding: 0px 0px 10px 0px; width:
100% ">
    <div id="Div12" style="width: 100%; height: 100%; overflow:scroll">
      &bull; <a href=".. /fek/ _589 _2005.pdf" target="_blank"> _589 /20 05</a> <br />
      &bull; <a href=".. /fek/ _1415 _2005.pdf" target="_blank"> _1415 /2005</a> <br />
      &bull; <a href=".. /fek/ _84 _2003.pdf" target="_blank"> _84 /2003</a> <br />
      &bull; <a href=".. /fek/ _273 _2003.pdf" target="_blank"> _273 /2003</a> <br />
      &bull; <a href=".. /fek/ _274 _2003.pdf" target="_blank"> _274 /2003</a> <br />
      &bull; <a href=".. /fek/ _502 _2003.pdf" target="_blank"> _502 /2003</a> <br />
      &bull; <a href=".. /fek/ _526 _2003.pdf" target="_blank"> _526 /2003</a> <br />
      &bull; <a href=".. /fek/ _783 _2003.PDF" target="_blank"> _783 /2003</a> <br />
      &bull; <a href=".. /fek/ _1405 _2003.PDF" target="_blank"> _1405 /2003</a> <br />
      &bull; <a href=".. /fek/ _1099 _2001.PDF" target="_blank"> _1099 /2001</a> <br />
    </div>
  </asp:Panel>
</div>

```

```

&bull; <a href=" ../fek/ _201_1999.pdf" target="_blank"> _201 /1999</a> <br />
&bull; <a href=" ../fek/ _299_1999.pdf" target="_blank"> _299 /1999</a> <br />
&bull; <a href=" ../fek/ _423_1998.PDF" target="_blank"> _423 /1998</a> <br />
&bull; <a href=" ../fek/ _1020_1998.pdf" target="_blank"> _1020 /1998</a> <br />
&bull; <a href=" ../fek/ _55_1997.pdf" target="_blank"> _55 /1997</a> <br />
&bull; <a href=" ../fek/ _858_1997.pdf" target="_blank"> _858 /1997</a> <br />
&bull; <a href=" ../fek/ _1099_1997.pdf" target="_blank"> _1099 /1997</a> <br />
&bull; <a href=" ../fek/ _755_1996.pdf" target="_blank"> _755 /1996</a> <br />
&bull; <a href=" ../fek/ _89_1995.pdf" target="_blank"> _89 /1995</a> <br />
&bull; <a href=" ../fek/ _124_1995.pdf" target="_blank"> _124 /1995</a> <br />
&bull; <a href=" ../fek/ _655_1995.pdf" target="_blank"> _655 /1995</a> <br />
&bull; <a href=" ../fek/ _837_1994.pdf" target="_blank"> _837 /1994</a> <br />
&bull; <a href=" ../fek/ _1394_1994.pdf" target="_blank"> _1394 /1994</a> <br />
&bull; <a href=" ../fek/ _142_1993.pdf" target="_blank"> _142 /1993</a> <br />
&bull; <a href=" ../fek/ _1273_1993.pdf" target="_blank"> _1273 /1993</a> <br />
&bull; <a href=" ../fek/ _1294_1993.PDF" target="_blank"> _1294 /1993</a> <br />
&bull; <a href=" ../fek/ _1311_1993.pdf" target="_blank"> _1311 /1993</a> <br />
&bull; <a href=" ../fek/ _1326_1993.pdf" target="_blank"> _1326 /1993</a> <br />
&bull; <a href=" ../fek/ _1487_1993.pdf" target="_blank"> _1487 /1993</a> <br />
&bull; <a href=" ../fek/ _127_1992.pdf" target="_blank"> _127 /1992</a> <br />
&bull; <a href=" ../fek/ _601_1992.pdf" target="_blank"> _601 /1992</a> <br />
&bull; <a href=" ../fek/ _105_1991.pdf" target="_blank"> _105 /1991</a> <br />
&bull; <a href=" ../fek/ _550_1991.pdf" target="_blank"> _550 /1991</a> <br />
&bull; <a href=" ../fek/ _517_1990.pdf" target="_blank"> _517 /1990</a> <br />
&bull; <a href=" ../fek/ _166_1987.pdf" target="_blank"> _166 /1987</a> <br />
&bull; <a href=" ../fek/ _373_1987.pdf" target="_blank"> _373 /1987</a> <br />
&bull; <a href=" ../fek/ _1035_1987.pdf" target="_blank"> _1035 /1987</a> <br />
&bull; <a href=" ../fek/ _168_1986.pdf" target="_blank"> _168 /1986</a> <br />
&bull; <a href=" ../fek/ _474_1986.PDF" target="_blank"> _474 /1986</a> <br />
&bull; <a href=" ../fek/ _100_1984.PDF" target="_blank"> _100 /1984</a> <br />
&bull; <a href=" ../fek/ _365_1979.pdf" target="_blank"> _365 /1979</a> <br />
&bull; <a href=" ../fek/ _279_1977.pdf" target="_blank"> _279 /1977</a> <br />
&bull; <a href=" ../fek/ _104_1975.pdf" target="_blank"> _104 /1975</a> <br />
&bull; <a href=" ../fek/ _24_1971.pdf" target="_blank"> _24 /1971</a> <br />
&bull; <a href=" ../fek/ _200_1971.pdf" target="_blank"> _200 /1971</a> <br />
&bull; <a href=" ../fek/ _113_1965.pdf" target="_blank"> _113 /1965</a> <br />
&bull; <a href=" ../fek/ _100_1964.pdf" target="_blank"> _100 /1964</a> <br />
&bull; <a href=" ../fek/ _72_1963.pdf" target="_blank"> _72 /1963</a> <br />
&bull; <a href=" ../fek/ _75_1963.pdf" target="_blank"> _75 /1963</a> <br />
&bull; <a href=" ../fek/ _93_1963.pdf" target="_blank"> _93 /1963</a> <br />
&bull; <a href=" ../fek/ _197_1963.pdf" target="_blank"> _197 /1963</a> <br />
&bull; <a href=" ../fek/ _168_1962.pdf" target="_blank"> _168 /1962</a> <br />
&bull; <a href=" ../fek/ _133_1960.pdf" target="_blank"> _133 /1960</a> <br />
&bull; <a href=" ../fek/ _142_1959.pdf" target="_blank"> _142 /1959</a> <br />
&bull; <a href=" ../fek/ _179_1959.pdf" target="_blank"> _179 /1959</a> <br />
&bull; <a href=" ../fek/ _95_1954.pdf" target="_blank"> _95 /1954</a> <br />
&bull; <a href=" ../fek/ _304_1954.pdf" target="_blank"> _304 /1954</a> <br />
&bull; <a href=" ../fek/ _169_1925.pdf" target="_blank"> _169 /1925</a> <br />
</div>
</asp:Panel>
</asp:Panel>
</div>

```

3.6.2 Web Control

Web Control (Go to XY location),

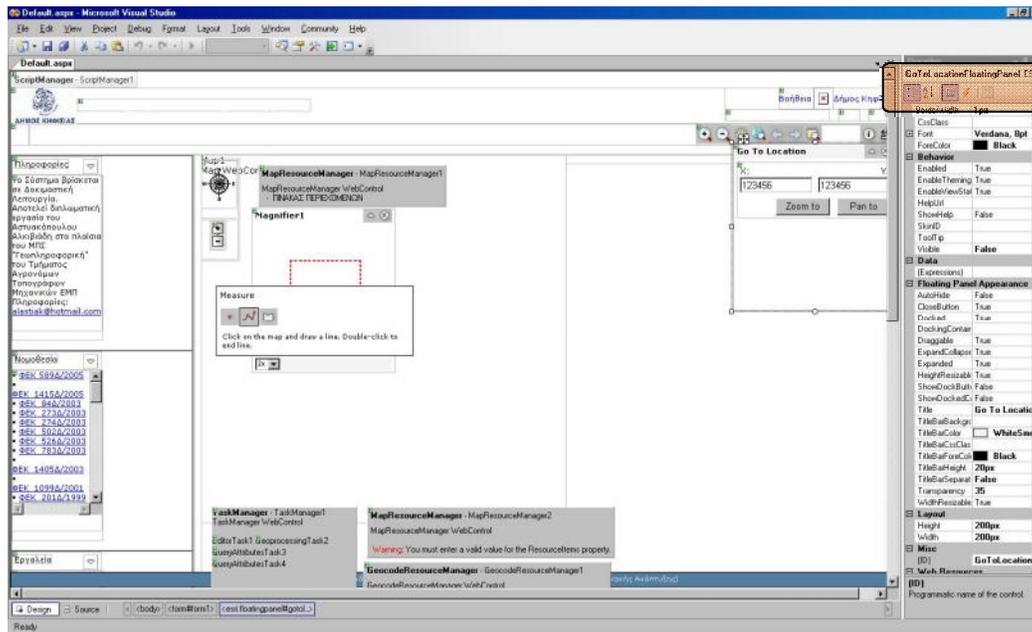
(X, Y sample ESRI.)

Web Site Go to XY location :

- Default.aspx: Web MapResourceManager, Map, Toolbar Controls Web ADF User Control (GoToLocation.ascx)
- GoToLocation.ascx: panel textboxes zoom pan User Control
- GoToLocation.ls: JavaScript file zoom pan WebADF JavaScript

- Web Site
 - Control
 - absolute and z-index: 1000,
 - ID = GoToLocationFloatingPanel
 - Title = Go To Location
 - Visible = false
 - tool,
 - DefaultImage = ~/GoToLocation/GoToLocation.png
 - HoverImage = ~/GoToLocation/GoToLocation.png
 - SelectedImage = ~/GoToLocation/GoToLocation.png
 - Name = GoToLocation
 - ClientAction = \$find('GoToLocationFloatingPanel_GoToLocation1').toggle()

42: Design View MS Visual Studio Floating Panel:



43: panel «Go to Location»

```
#GoToLocationFloatingPanel {
    position:absolute;
    z-index:1000;
    top:100px;
    right:0;
}
<esri:FloatingPanel ID="GoToLocationFloatingPanel" runat="server" BackColor="White"
    BorderColor="Gray" BorderStyle="Solid" BorderWidth="1px" Font-Names="Verdana"
    Font-Size="8pt" ForeColor="Black" Height="200px" Title="Go To Location" TitleBarColor="WhiteSmoke"
    TitleBarHeight="20px" TitleBarSeparatorLine="False" Transparency="35" Visible="False"
    Width="200px">
    <uc3:GoToLocation ID="GoToLocation1" runat="server" />
</esri:FloatingPanel>
```

3.6.3

- Panels μ (. . Results \rightarrow μ)
- Footer μ

44: Footer

```
#footer {
  position:absolute;
  bottom:0;
  height:15px;
  width:100%;
  background-color:#527EA3;
  border:1px solid black;
  padding: 2px;
  font-size:x-small;
  color:#DDD;
  text-align:center;}

<div id="footer">
   $\mu$  - : ( . . ,  $\mu$  &
)
</div>
```

- μ logo μ 

45: logo μ

```
</div>

<div style="padding-top:15px">
<asp:Label ID="PageTitle" runat="server" Text="  $\mu$   $\mu$  " Font-Size="12pt"
Font-Names="Verdana" ForeColor="White" Font-Bold="True" style=" z-index: 100; padding: 0px 5px 0px
5px" CssClass="appFloat1"></asp:Label>
</div>
```


Επίπεδα Πληροφορίας

- ΠΙΝΑΚΑΣ ΠΕΡΙΕΧΟΜΕΝΩΝ
 - ΤΡΟΠΟΠΟΙΗΣΕΙΣ
 - Τροποποιήσεις Ρυμοτομικού Σχεδίου
 - Τροποποιήσεις Χρήσεων Γης κατά Π.Μ.
 - Τροποποιήσεις Γενικές
 - ΟΔΟΙ
 - Οδικό Δίκτυο
 - ΑΝΤΙΚΕΙΜΕΝΙΚΕΣ ΑΞΙΕΣ 2007
 - Συντελεστής Εμπορικότητας
 - Ζώνη Αντικειμενικών Αξιών
 - Συντελεστής Αξιοποίησης Οικοπέδου
 - ΓΕΝΙΚΟ ΠΟΛΕΟΔΟΜΙΚΟ ΣΧΕΔΙΟ
 - Όρια ΓΠΣ
 - Πολεοδομικές Ενότητες
 - Χρήσεις Γης
 - ΣΧΕΔΙΟ ΠΟΛΗΣ
 - Τμήματα Νέας Κηφισιάς
 - Σημεία Ενδιαφέροντος
 - Τομείς Συντελεστών Δόμησης
 - Παραεκλίσεις Συντελεστών Δόμησης
 - Παραδοσιακό Τμήμα
 - Ρυμοτομική Γραμμή
 - Οικοδομική Γραμμή

() μ
(zoom in – zoom out)

3.7.4



- Web μ μ
- μ μ (zoom in)
- μ μ (zoom out)
- (pan)
- (zoom extend)
- μ
- μ μ (zoom preview)
- μ μ (zoom next)
- (identify)
- (Measure)
- (overview map)
- μ μ μ (Go to XY)

9:

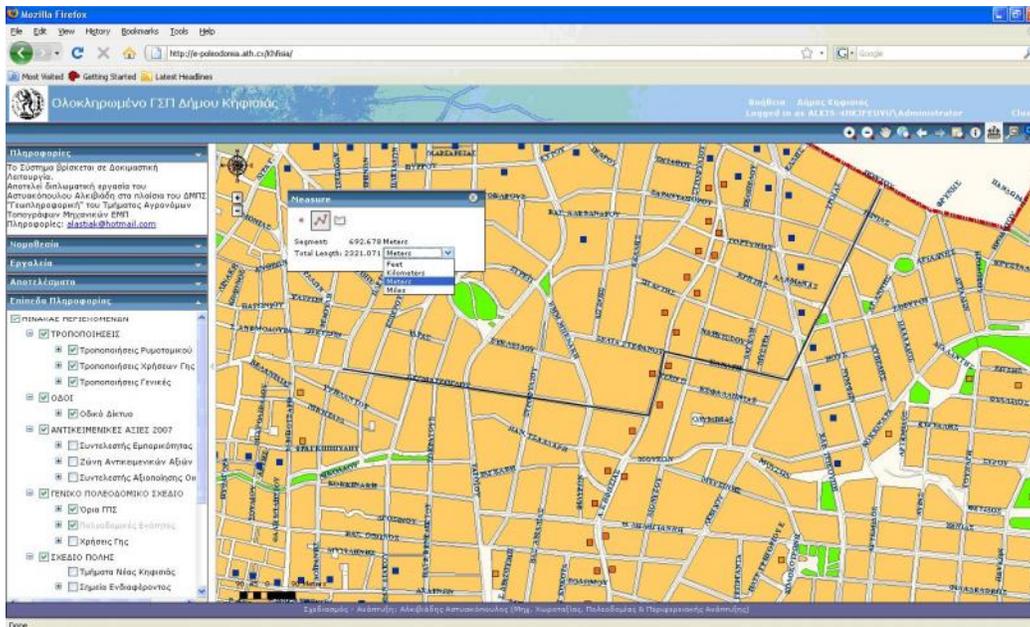
μ

	μ μ
 Pan tool	μ
 Overview map	μ μ μ μ

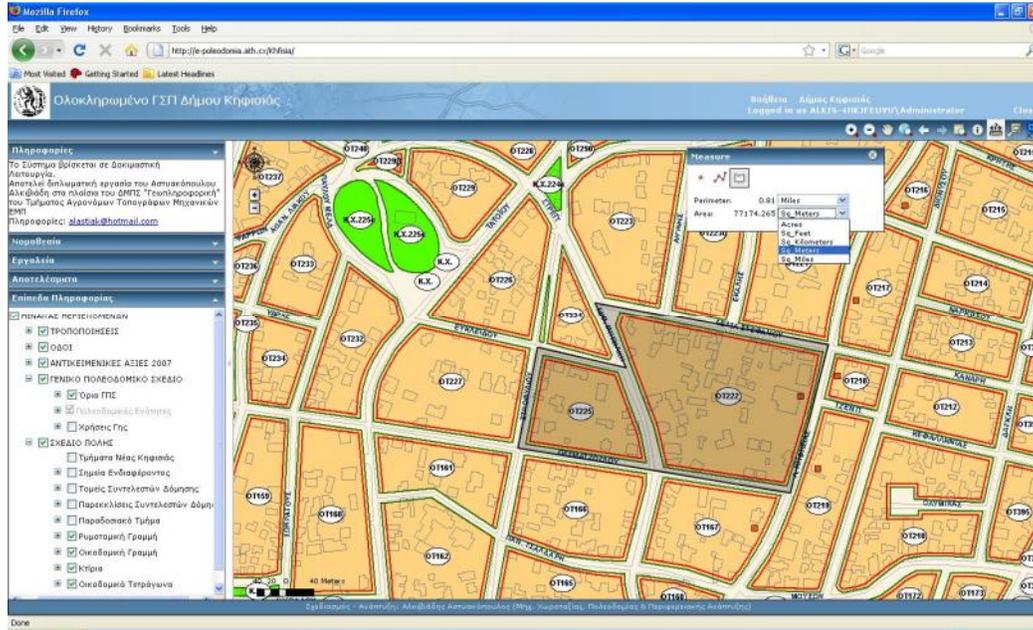
10:

Zoom In	Mouse wheel 	Zoom In μ μ
	Shift+Left mouse 	μ μ μ Shift μ
	Zoom in tool 	μ μ μ
Zoom Out	Mouse wheel 	μ Out μ μ
	Zoom out tool 	μ μ μ
Zoom Out to full map	Zoom full extent 	μ

47:

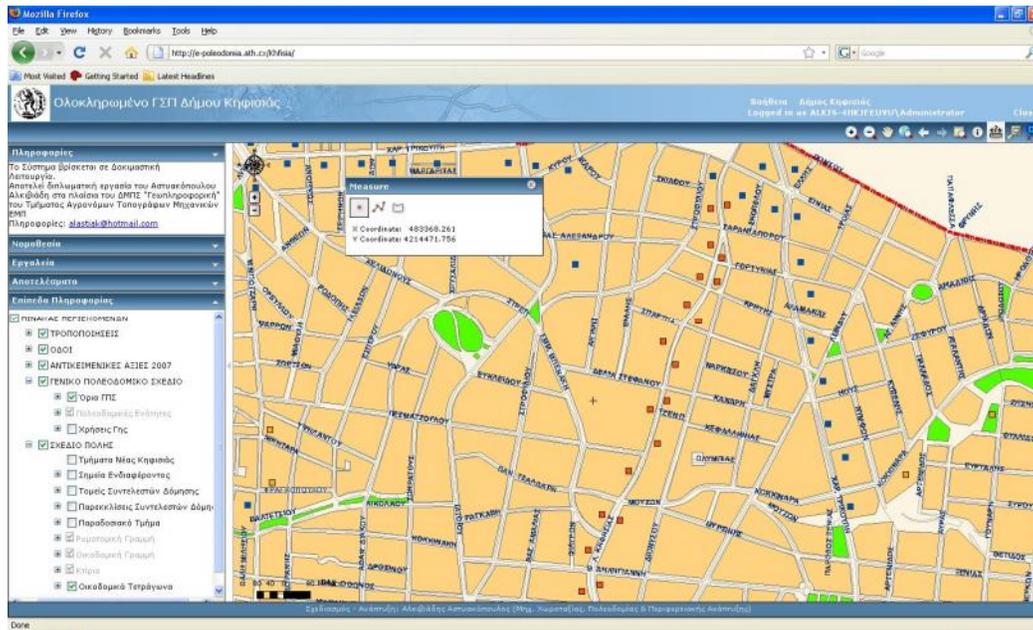


48: μ



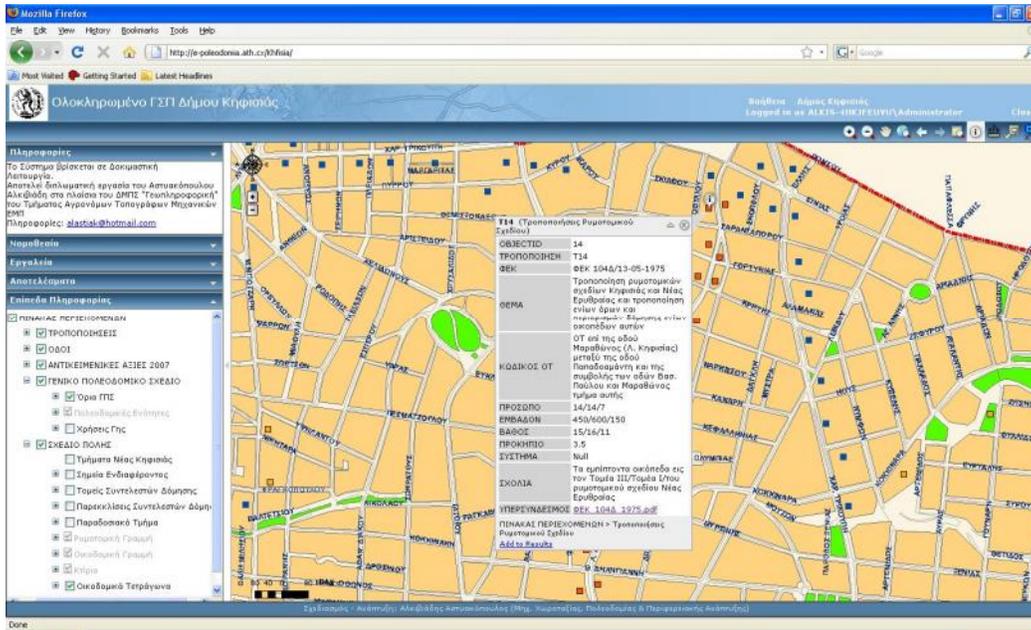
μ μ , μ μ μ μ μ μ μ

49: μ



μ μ μ μ μ μ μ Identify μ μ μ μ μ μ μ

50:



3.7.5

Panel, 1925 μ, pop-up window, .pdf.



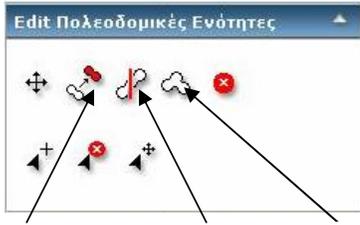
3.7.6

(Editor) buffer, desktop format.



3.7.6.1

(Editor) drop-down list



(copy features)

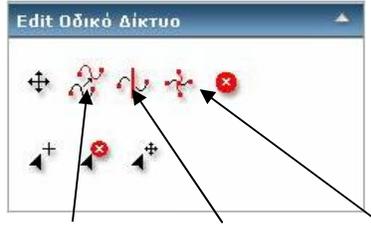
μ

(split)

μ

(merge)

μ



(copy features)

μμ

(split)

μμ

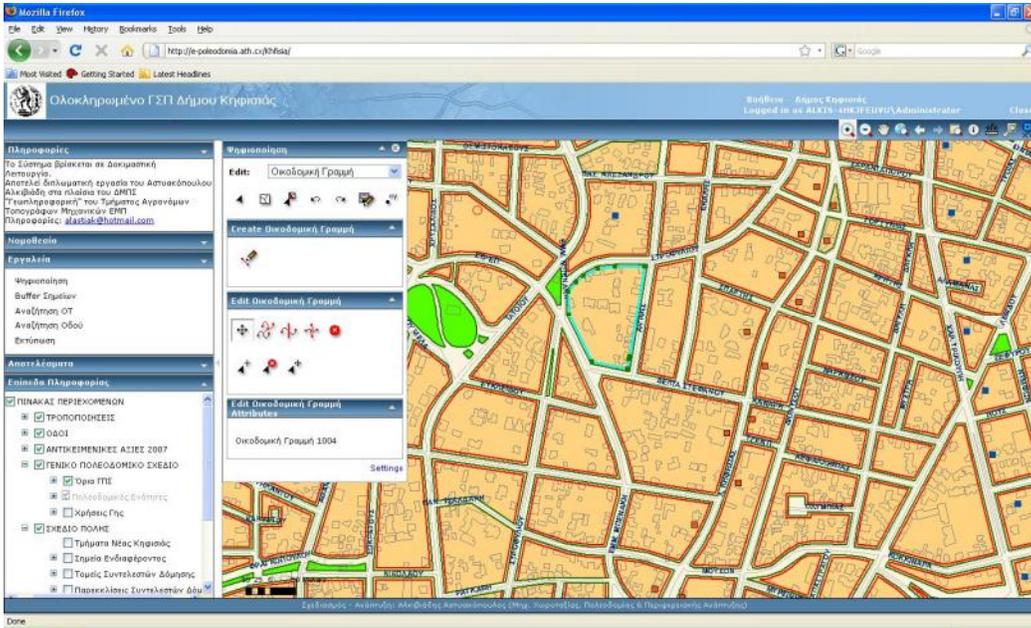
(merge)

μμ

52:

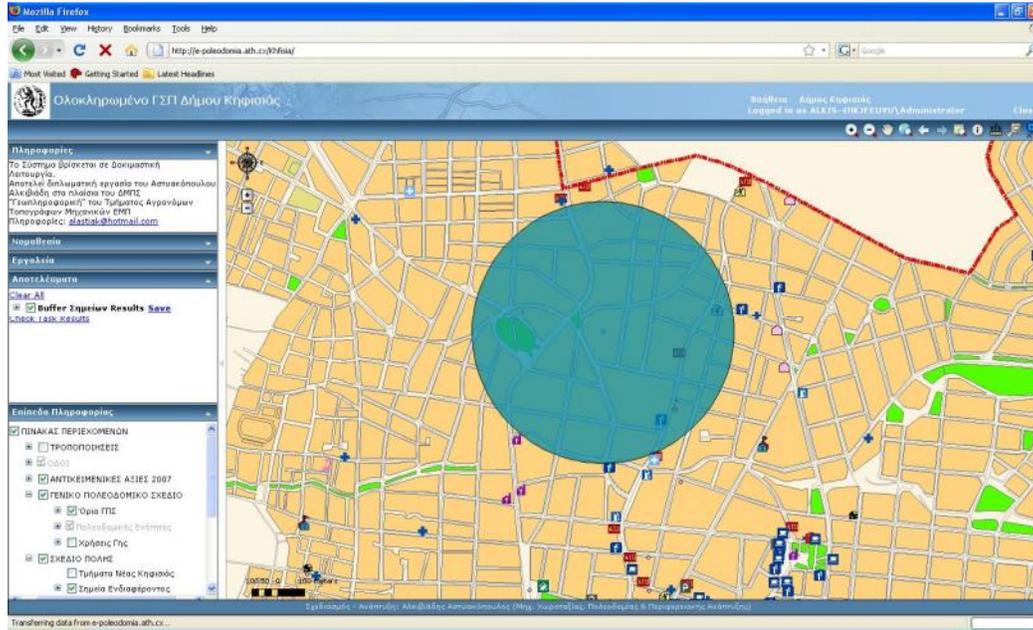
μ

μ



μ . μ , μ μ μ
 μ (μ , μ , μ μ μ) . μ μ .

55: μ Buffer



3.7.6.3

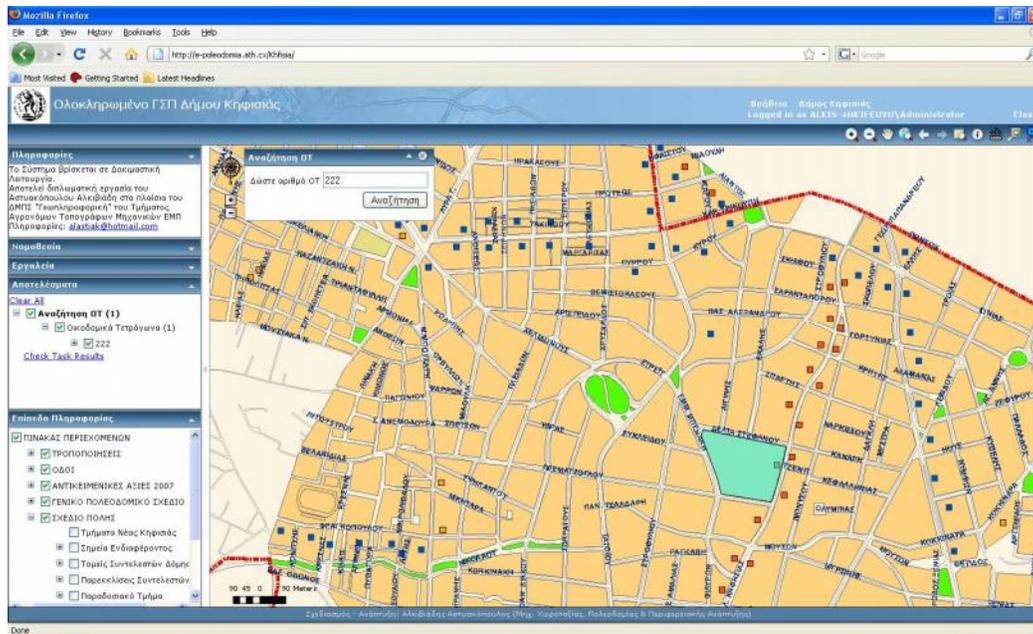
μ

2

μ

μ

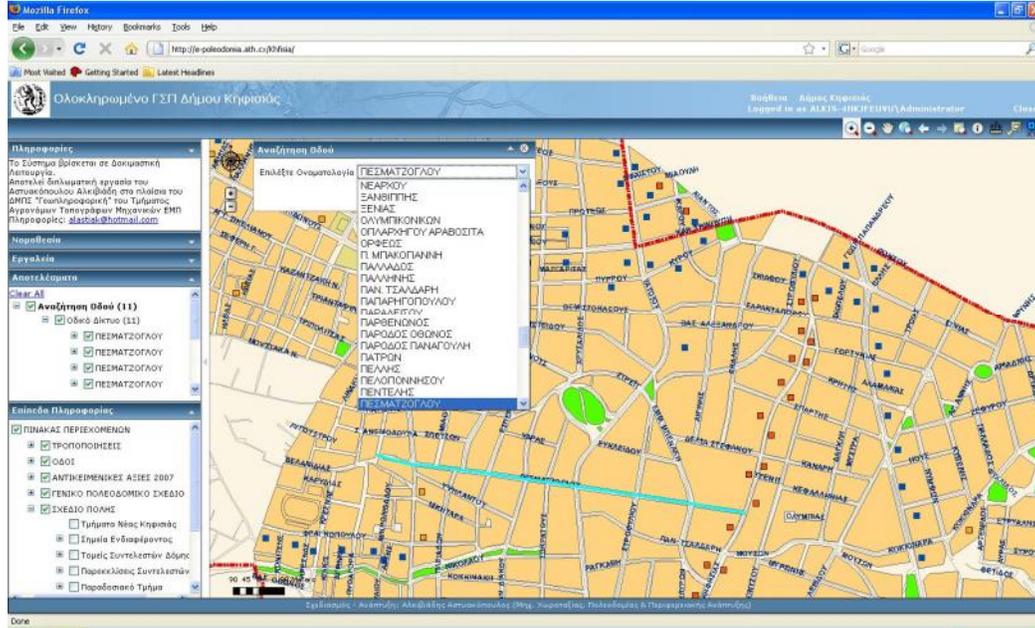
56: μ



3.

(μ) : μ μ ()
 : “ ”
 μ (zoom to) (μ)

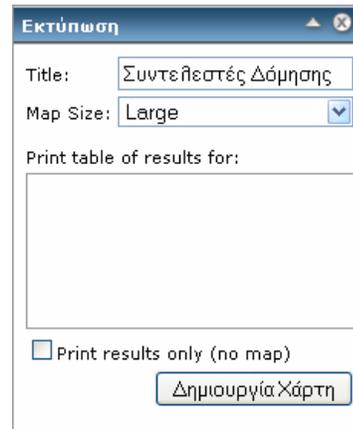
57:



(μ) : μ μ
 “ ”
 μ μ μ μ μ μ (zoom to) (μ)

3.7.6.4

μ
 μ (μ , μ , μ)
 μ μ μ



12:		
Location	<ul style="list-style-type: none"> ↻ Run task again 🔄 Refresh ✖ Remove 	<hr/> <p style="text-align: center;">μ</p> <hr/> <p style="text-align: center;">Location</p> <hr/>
Location in Location	<ul style="list-style-type: none"> 🔍 Zoom To Selected Features ✖ Remove 	<hr/> <p style="text-align: center;">μ</p> <hr/> <p style="text-align: center;">μ</p> <hr/>
Feature in Location	<ul style="list-style-type: none"> 🔍 Zoom to 🖱 Pan to ✖ Remove 	<hr/> <p style="text-align: center;">(feature)</p> <hr/> <p style="text-align: center;">μ</p> <hr/> <p style="text-align: center;">μ</p> <hr/>

3.8

3.8.1 Windows Authentication IIS

- Default Web Sites IIS web
- Windows (Integrated Windows authentication).
- Windows authentication
 - Web Server (IIS)
 - Intranet Internet
 - Windows operating system users
 - (browser) Server, authentication
- IIS, Properties «Khfisia»
- Directory Security access control.
 - (anonymous access)
 - : Integrated Windows Authentication.

μ .

1. (2001), “
2. (2005), “
3. (2003), “
4. (2006), “
5. (n.d.), “G.I.S.”
http://portal.tee.gr/portal/page/portal/teetkm/GRAFEIO_TYPOY/TEXNOGRAFHMA_2009/TEXNOGRAFHMA_374/374%2012_13.pdf (11/10/2009)
6. (2007), “
7. (2007), “
8. Alesheikh A.A. et al (2002), “*Web GIS: Technologies and its applications*”, Symposium on Geospatial Theory, Processing and applications, Ottawa,
<http://www.isprs.org/commission4/proceedings02/pdfpapers/422.pdf>
9. Baker B. and Doshier K. (2007), “*Securing ArcGIS Server for the Microsoft .NET Framework*”, US Technical Session.
http://www.cica.es/PDFS/Impresos/ESRI/CD_1/tws/tw_768.pdf (11/10/2009)
10. Baker B. and Doshier K. (2007), “*Getting started with ArcGIS Server*” US Technical Session.
<http://www.igic.org/training/pres/conf/2008/Getting%20Started%20with%20ArcGIS%20Server.pdf> (11/10/2009)
11. Batty M. et al. (2009), “*New Developments in GIS for Urban Planning*”
<http://gis-ir.org.ir/images/content/New%20Developments%20In%20GIS%20For%20Urban%20Planning.pdf> (11/10/2009)
12. Benner J. et al. (2009), “*Public Participation and Urban Planning supported by OGC Web Services*”, Proceedings REAL CORP 2009 Tagungsband.
http://programm.corp.at/cdrom2009/papers2009/CORP2009_31.pdf (11/10/2009)
13. Ghaemi P. et al. (2009), “*Design and implementation of a web-based platform to support interactive environmental planning*”, Computers, Environment and Urban Systems.
http://www.sciencedirect.com/science?_ob=MIimg&_imagekey=B6V9K-4WJG8GT-1-F&_cdi=5901&_user=83473&_orig=search&_coverDate=06%2F18%2F2009&_sk=999999999&_view=c&_wchp=dGLzVtz-zSkzV&_md5=b4136ff32b580285dd7727ef62b6ded7&_ie=/sdarticle.pdf (11/10/2009)
14. Dang A. et al. (n.d.), “*Study on the System of Technical Methods for Digital Urban Planning*”, ISPRS Workshop on Service and Application of Spatial Data Infrastructure.
http://www.commission4.isprs.org/workshop_hangzhou/papers/167-170%20Anrong%20Dang-A085.pdf (11/10/2009)
15. Drummond W. and French S. (n.d.), “*The Future of GIS in Planning*”.
http://www.coa.gatech.edu/cgis/reports/french_JAPA_GIS.pdf (11/10/2009)

16. Frankland A. (2006), "Customizing and Developing Desktop and Server Solutions using ArcObjects", ESRI User Conference, Technical Workshop. μ
http://www.infograph.com.jo/meauc/Conf_Materials/Customizing%20and%20Developing%20Desktop%20and%20Server%20Solutions%20using%20ArcObjects.pdf (11/10/2009)
17. Fremantle P. et al (2002) "Enterprise Services", Communications of the ACM, Vol. 45, No 10
18. Hansen R. (2008), "Developing Web Applications with .NET", ESRI User Conference, Technical Workshop. μ
http://www.cica.es/PDFS/Impresos/ESRI/CD_1/tws/tw_644.pdf (11/10/2009)
19. Kevin A. (2008), "ArcGIS Server: Geoprocessing Tasks", Serug, ESRI User Conference, Technical Workshop. μ
http://proceedings.esri.com/library/userconf/serug08/papers/esri_tech_presentations/arcgis_server-geoprocessing_tasks.pdf (11/10/2009)
20. Kraak M.J (2004), "The role of the map in a Web-GIS environment", Journal of Geographical Systems, Vol. 6, N . 2 pp. 86-93. μ
<http://www.springerlink.com/content/1dne9f3u0wh7a1p8/fulltext.pdf> (11/10/2009)
21. Kraak MJ. and Brown A. (2001), "Web Cartography", Taylor and Francis, London. μ
<http://www.kartografie.nl/webcartography/webbook/contents/contents.htm> (11/10/2009)
22. Krauszova K. and Tansley C. (2007), "Indoor GIS Web Application using ArcGIS Server, Set B", BCIT Geographic Information Systems. μ
http://gisweb.athena.bcit.ca/students2006/kkrauszova/project_proposal.pdf (11/10/2009)
23. Luaces M. et al. (2005), "A Generic Framework for GIS Applications", Y.-J. Kwon, A. Bouju, and C. Claramunt (Eds.): W2GIS 2004, LNCS 3428, pp. 94 –109. μ
http://lbd.udc.es/lbd/..%5CPlainConsulta%5CArchivosAdministracion%5Cficheros_publicaciones%5CAGenFrafor.pdf (11/10/2009)
24. Luaces M. et al. (n.d.), "An Urban Planning Web Viewer based on AJAX". μ
http://lbd.udc.es/lbd/..%5CPlainConsulta%5CArchivosAdministracion%5Cficheros_publicaciones%5CAnUrbPlaWeb.pdf (11/10/2009)
25. NEARC ESRI Technical Session (2007), "Authoring and Publishing Map Services with ArcGIS Server", Boston, ESRI User Conference, Technical Workshop. μ
<http://www.northeastarc.org/archive/2007/esritalks/Nearc07AuthoringPublishingArcGIS.pdf> (11/10/2009)
26. Penq Z Patil R. and Looney C. (n.d.), "Developing Dynamic GIS Web Applications", University of Nevada, Department of Computer Science. μ
http://www.scs.unr.edu/~rohit/Prof_Paper.pdf (11/10/2009)
27. .R. and Tsou M.H. (2003), "Internet GIS: Distributed Geographic Information Services for the Internet and Wireless Networks", John Wiley & Soncs Inc., Hoboken, New Jersey
28. Rodenberg E. (2008), "Advanced Topics with ArcGIS Server", Indiana GIS Conference, ESRI User Conference, Technical Workshop
29. Rodenberg E. (2008), "Conference Getting Started with ArcGIS Server", Indiana, ESRI User Conference, Technical Workshop.
30. Schepers M. (1999), "The Internet as Geographical Information Highway!". μ
<http://www.amfmgis-belux.be/gispdf/schepers.pdf> (11/10/2009)
31. Song X. et al. (2004), "The development of Web Mapping Application using open source GIS solution", International Symposium on Geoinformatics for Spatial Infrastructure Development in Earth and Allied Sciences. μ http://www.cp-idea.org/nuevoSitio/documentos/tecnologia/1_viewpaper.pdf (11/10/2009)

-
- 95 /05-05-1954 “ μ μ μ (μ).”
 - 169A/10-07-1925 “ μ .”

INTERNET (11/10/2009)

- <http://webhelp.esri.com>
- <http://support.esri.com>
- <http://forum.esri.com>
- <http://edndoc.esri.com>
- <http://www.demography-lab.prd.uth.gr>
- <http://kartoWeb.itc.nl/Webcartography/Webmaps/static/s-view.htm>
- <http://www.go-online.gr>
- <http://www.it.uom.gr>
- <http://www.opengeospatial.org>
- http://njgin.state.nj.us/dep/DEP_iMapNJDEP/Run.htm
- http://ims.wvgs.wvnet.edu/All_Coal/viewer.htm
- <http://info.ssl.com>
- <http://gis.thessaloniki.gr>
- <http://gis.volos.gr>
- <http://87.203.2.163/webgis>
- http://www.rethymno.gr/Rethymno_Public