SMARTER DECISIONS FOR GEOSPATIAL



Smarter GIS for South African Challenges

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Hexagon is dedicated to delivering actionable information through design, measurement, and visualization technologies.

The Geospatial Ecosystem

INTERGRAPH[®]



MUSIC TIMELINE





EMPOWERING THE MASSES WITH MUSIC



- Fusion of musical genres to blend styles, beats, themes and harmonies to make music relevant to a global and new generation
- Anyone can make music
- Anyone can sell music
- Anyone can buy music
- Anyone can share music
- Anyone can listen to music

... DIGITALLY!



GEOSPATIAL TIMELINE







We have all the geospatial genres... but are we empowering the world to make **New** geospatial music for a new generation?

Authoritative Image Exploitation

Ingest, visualize, manipulate, analyze, and extract intelligence from satellite and airborne imagery, terrain, and point data for image processing, photogrammetry and/or LiDAR workflows.



Powerful GIS Data Production & Analysis

Generate and update vector layers, perform dynamic spatial analysis and reporting, and automatically update maps and manage data and map production.



Click to zoom or prepress and drag to pan

ESC Altitude: 39.26 m 1:971

What do you actually want?

Geospatial Information Lifecycle





Rapid Publishing

Create and publish data products and spatial models that can be accessed and executed by consumer users, on demand, from 2D and 3D clients.

Robust Data Management & Delivery

Management of massive amounts of geospatial data, including discovery, describing, cataloging, analyzing, and delivery.

A user should be able to draw a *bounding box* on a map, declare a slice of time, and be able to discover and access all the *available*, *relevant* & *authorized information within that area.*

Sensor Data

EO, Spectral, Radar, LiDAR, Infrared, FMV, in situ, GPS, etc.

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Location References in Structured Data

Relational Databases, Travel Itineraries, Financial Transactions, Corporate Data, Personnel Records, Statistical Data, etc.

Access from Any Device

Desktop, Laptop, PDA, Wireless, Smartphone

Geospatial Data

Maps, Imagery, Features, Terrain, Place Names, Buildings, Infrastructure, Roads, Political Boundaries, Hydrographic, Geodetic, etc

Location References in Unstructured Data

News Reports, Publications, Manifests, Internet, World Wide Web, Audio, Video, etc.

Rapid Publishing

Create and publish data products and spatial models that can be accessed and executed by consumer users, on demand, from 2D and 3D clients.

Robust Data Management & Delivery

Management of massive amounts of geospatial data, including discovery, describing, cataloging, analyzing, and delivery.



Dynamic Geoprocessing

Execute robust and complex on-the-fly geoprocessing (such as change detection, site analysis, or elevation change) through the OGC Web Processing Service (WPS) implementation.



Waiting for gg.google.com.

Web-based Workflow Optimization

Utilize highly configurable workflows leveraging advanced geospatial functionality via intuitive, map-based tools.



Business Driver



How can you provide simple-to-use, cost-effective, and manageable geospatial workflows to non-GIS experts?

Some challenges





Our Solution



GeoMedia Smart Client 1. 1+ P = 0x Themen V ORSTKARTE Administrator Workflow Manager Smart Client JFIS AQIS BESITZSTAND ROHSTOFFKATAS **Geospatial Server – GeoMedia WebMap**

	Portal	Administr 🗵		
	222			?
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SECORITY		NAME	CATEGORY	GÜLTIG
User Roles/Claims	→	Fire Brigade	ORGANIZATION	Ja
Organisations				
	1/1			NEW
PORTAL	3			
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Operation Area Type				
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Document Type				
Message Type				
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Creating a user that has roles and privileges of logging in the IPR and creating tasks

Secu	rity, Governmen	it & Infrastructure
		Planning & Response
	BO	
	Site	IPR -
	User	PRUser
	Password	•••••
		Login Cancel
	Logging	g in with the user created in the administrator

Security, Government & Infrastructure

Planning & Response



Operation filter	Current	-
Operation	Current Planned	
Function	Completed Template	
	Last 24h Last week	
Substitution	Last month	
	Logistics	-
	Login	Cancel

Selecting the status of the operation

Security, Governmen	t & Infrastructure	
	Planning & Re	sponse
Operation filter	Current	•
Operation	9/17/2012 - Flooding	-
	(No operation)	
Function	9/17/2012 - Flooding	
Substitution	 Flooding Area Commander EOC Commander Logistics 	
	Login Cancel	▼

Choosing an operation

	Planning &	Response
R		
Operation filter	Current	*
Operation	9/17/2012 - Flooding	-
Function	Area Commander	-
Substitution	 Flooding Area Commander EOC Commander Logistics 	
	Login	Cancel

Choosing a function in an organization

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≺ Start						EN R	• • • • • • • • • • • • • • • • • • •

The homepage for the logged in user, has four tabs



The Map Tab

		Portal	Мар	-	Message	Or	rganizat	Edit	task	
	•	lew task	New information	History	Search					
Tasks	(1/1)					Informatio	ons / Notifica	tions (5/5)		
	Time	Number	Receipt	Status		Numbe	er Time		Туре	Abstract
	10/23/2012 11:43:36 AM	A0005	checking on vehicles	Closed		● мооо7	9/17/201	2 9:16:47 AM	Information	Request for information a
	11.45.56 AH			1.00		00006	9/17/201	2 9:16:06 AM	Information	III Unit started to work o
						🔵 моооз	9/17/201	2 9:14:23 AM	Information	II Unit started to work or
						● мооо2	9/17/201	2 9:13:58 AM	Information	I Unit started to work on
						M0001	9/17/201	2 9:13:33 AM	Information	All requested units have
						Ch Time Seno	at der Text	Online (1	.)	
										Send

The Message Tab: it has assigned tasks and notifications



The Organogram: where the structure of the organization is defined



On the PRUser homepage under the Portal Tab, the Tasks command lists all the tasks found for the are found



Portal	Мар	Message	Organizat	Tasks		V-
	P					?
→ Staff	PRIORITY**		STATUS:*		Managem entGro up	
→ Tactical Units		(25 (2012)	New	-		_
+ External Advisors	COMPLETION UNTIL:* 10	(25/2012):				
Verbindungsbeamte	SEND TO:	Planning		-		
	SEND E-MAIL: 🔲					
VINITS/RESOURCES	SEND COPY TO: 1 V	DN 6 AUSGEWÄHLT		0		
	EMAIL NOTICE:					
+ Units						
→ Vehicles	ACT	ON/RESULT				
Operating Resources	ACTION:			A abc		
Individuals						
* Kraiteanforderung						
				×		
VESSAGES/TASKS	RESULT:			aba		
* Messages						
+ Taeke	ETAUCHED AT.					
→ Multiple Tasks	FINISHED AT:					
→ Protocol Entries	LOC	ATION				
+ Staff Information	SEARCH ADDRESS:					
→ Journal						
	SIREEI: 10		NUMBER: U	112311400		
- SEADCH ADDRESS.	ZIP: 21	57 CITY: Johan	nesburg , sunninghill			
SEARCH ADDRESS:	FREE ADDRESS:					
+ Geo Search	HIS	TORY				
	CREATED:		BY: PRUser			
	UPDATED:		BY: DRUser			
			PROPERTY AND			
					SAVE +	SAVE
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Creating a task and assigning it to a department in the organization e.g. the Planning department

Planning & Respon	PUBLIC SAFETY	Status: O 10/24/2012 9:28 Operation: Flooding Oper	3:24 AM 🛔 User: PRUser ation Unit: Area Comman	der	
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→ Verbindungsbeamte					2
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🎦 Start 🛛 🏭 🔼 🧱	9				EN 🖈 🕞 👘 9:28 AM 10/24/2012
The	e map tab	appears a	fter savin	g the r	newly

created task



Clicking on the map tab directs us to the main map tab allowing us to capture a point of interest



Capturing a point on the map where the task is assigned

Security, Government & Infrastructure

Planning & Response 🕇



Operation filter	Current
Operation	9/17/2012 - Flooding 🔹
Function	Planning *
Substitution	 EOC Commander Logistics Operations Planning
	Login Cancel

Logging in to the Planning function to check the assigned task



_		Portal		Мар	-	Message		Org	anizat		_	
1 0	N	ew task	New info	ormation	History	Search						
Tasks (4/4)							In	ormation	s / Notificati	ons (5/5)		
Time		Number	Receipt		Status			Number	Time	÷	Туре	Abstract
10/2	3/2012	A0005	checking o	n vehicles	Assigned			M0007	9/17/2012	9:16:47 AM	Information	Request for information
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Action:	us r	In pro	gress R	esult:				M0003	9/17/2012	9:14:23 AM	Information	II Unit started to work o
Creator: Owner:	Area Con Planning	Post p	rocess So	ource: Area C eadline: 10/25/	ommander 2012 12:00:0	0 AM		M0002	9/17/2012	9:13:58 AM	Information	I Unit started to work or
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												Send

The right hand menus on the task



Edit the task and return it

The task is received

Some challenges

Welcome_{to} Geospatial

Thank you!

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