

AfricanGaz

Gazetteer Application

Presented at the 25th Session of UNGEGN

Presented by : Yoseph Mekasha

Software Engineer, UNECA

AfricanGaz

- Is a name given to the tool being developed by UNECA/GiSS to collect geographical names (Toponyms)
- The name can be contested

Why AfricanGaz ?

- Provide African countries a free tool
- Nationally approved (Correct) names
- Makeup African SDI->UNGEGN Geographical Names DB

Background

- Ethiopian mapping authority was using an MS XL form for collecting geographic names.
- Came to UNECA-Geoinfo for a better solution
- web based intranet solution
- Ethiopia is still using.

EthioGaz



EthioGaz Ethiopia's National Gazetteer

Thursday, 16-Aug-2007; 15:08
EthioGaz server: 172.22.23.226
You are at: ceproxy.uneca.un.org

Authenticated as: guest
Permissions role: guest
Current users: 3

[HOME](#) | [DATA](#) | [MAP VIEWER](#) | [REPORTS/GRAPHS](#) | [ABOUT](#)

Welcome to **EthioGaz**, the Ethiopian Mapping Authority's National Gazetteer database maintenance application.

EthioGaz has been developed and tested to conform to IE 5.5+, since this is EMA's deployed and supported web browser. To use **EthioGaz** you must have [Macromedia's Flash Player](#) installed (v.7+).

GET macromedia
FLASH
PLAYER

EthioGaz



EthioGaz
Ethiopia's National Gazetteer

Thursday, 16-Aug-2007; 14:08
EthioGaz server: 172.22.23.226
You are at: 157.150.128.66

Authenticated as: guest
Permissions role: guest
Current users: 2

[HOME](#) | [DATA](#) | [MAP VIEWER](#) | [REPORTS/GRAPHS](#) | [ABOUT](#)

Details for (this will be assigned automatically when committed to the database)

Point Details

Coordinates

Metadata

FeatureID * this will be assigned automatically when committed to the database

FeatureName *

FeatureType * Area name

AdminRegion Area name

Notes

Cemetery

Church

Clinic

Court house

Save

Cancel

EthioGaz



EthioGaz
Ethiopia's National Gazetteer

Thursday, 16-Aug-2007; 15:08
EthioGaz server: 172.22.23.226
You are at: ceproxy.uneca.un.org

Authenticated as: guest
Permissions role: guest
Current users: 3

[HOME](#) | [DATA](#) | [MAP VIEWER](#) | [REPORTS/GRAPHS](#) | [ABOUT](#)

Details for (this will be assigned automatically when committed to the database)

Point Details	Coordinates	Metadata
Latitude		
	* <input type="text" value="9"/> ° <input type="text"/> ' <input type="text"/> "	<input type="text" value="9"/> °N
Longitude		
	* <input type="text" value="39"/> ° <input type="text"/> ' <input type="text"/> "	<input type="text" value="39"/> °E
Valid Coordinates:	<input type="text" value="This location is valid within Ethiopia"/>	
Coordinates in Grid:	<input type="text" value="0939C3"/>	
<input type="button" value="Save"/> <input type="button" value="Cancel"/>		

EthioGaz



EthioGaz
Ethiopia's National Gazetteer

Thursday, 16-Aug-2007; 15:08
EthioGaz server: 172.22.23.226
You are at: ceproxy.uneca.un.org

Authenticated as: guest
Permissions role: guest
Current users: 3

[HOME](#) | [DATA](#) | [MAP VIEWER](#) | [REPORTS/GRAPHS](#) | [ABOUT](#)

Details for (this will be assigned automatically when committed to the database)

Point Details	Coordinates	Metadata
Data Entered On		<input type="text" value="this will be assigned automatically when committed to the database"/>
Data Entered By		<input type="text" value="this will be assigned automatically when committed to the database"/>
UUID		<input type="text" value="this will be assigned automatically when committed to the database"/>
Page Processing Time (ms)		<input type="text" value="n/a -- this is a new record"/>
SQL		<input type="text" value="no SQL SELECT -- this is a new record"/>

EthioGaz



EthioGaz
Ethiopia's National Gazetteer

HOME | DATA | MAP VIEWER | REPORTS/GRAPHS | ABOUT

Charts

- Features by Type
- Features by Administrative Region

Reports

PDF Report Generator

By Feature Type(s)

By Administrative Region(s)

By Grid

By Date Entered

By Validity

By Substring Search

Substring to search for (e.g., 'baba' will find 'Addis Ababa')

By Extent Limits

Exclude Admin Region from Report?

Use Conventional Report Format?

PDF Report



EthioGaz
Ethiopia's National Gazetteer

Thursday, 16-Aug-2007; 15:08
EthioGaz server: 172.22.23.226
You are at: [ceproxy.uneca.un.org](#)

Authenticated as: guest
Permissions role: guest
Current users: 3

HOME | DATA | MAP VIEWER | REPORTS/GRAPHS | ABOUT

Charts

- Features by Type
- Features by Administrative Region

Reports

PDF Report Generator

By Feature Type(s)

<input type="checkbox"/> Area name	<input type="checkbox"/> Cemetery	<input type="checkbox"/> Church	<input type="checkbox"/> Clinic
<input type="checkbox"/> Court house	<input type="checkbox"/> Factory	<input type="checkbox"/> Forest	<input type="checkbox"/> Higher education
<input type="checkbox"/> Hill	<input checked="" type="checkbox"/> Hospital	<input type="checkbox"/> Island	<input type="checkbox"/> Lake
<input type="checkbox"/> Market place	<input type="checkbox"/> Marsh/swamp	<input type="checkbox"/> Mosque	<input type="checkbox"/> Mountain
<input type="checkbox"/> Mountain range	<input type="checkbox"/> National park	<input type="checkbox"/> Not Verified	<input type="checkbox"/> Others n.e.c.
<input type="checkbox"/> Plain	<input type="checkbox"/> Plantation	<input type="checkbox"/> Police station	<input type="checkbox"/> Pond
<input type="checkbox"/> Populated place	<input type="checkbox"/> Post office	<input type="checkbox"/> Power station	<input type="checkbox"/> Reservoir
<input type="checkbox"/> Ridge	<input type="checkbox"/> River	<input type="checkbox"/> School	

By Administrative Region(s)

By Grid

By Date Entered

By Validity

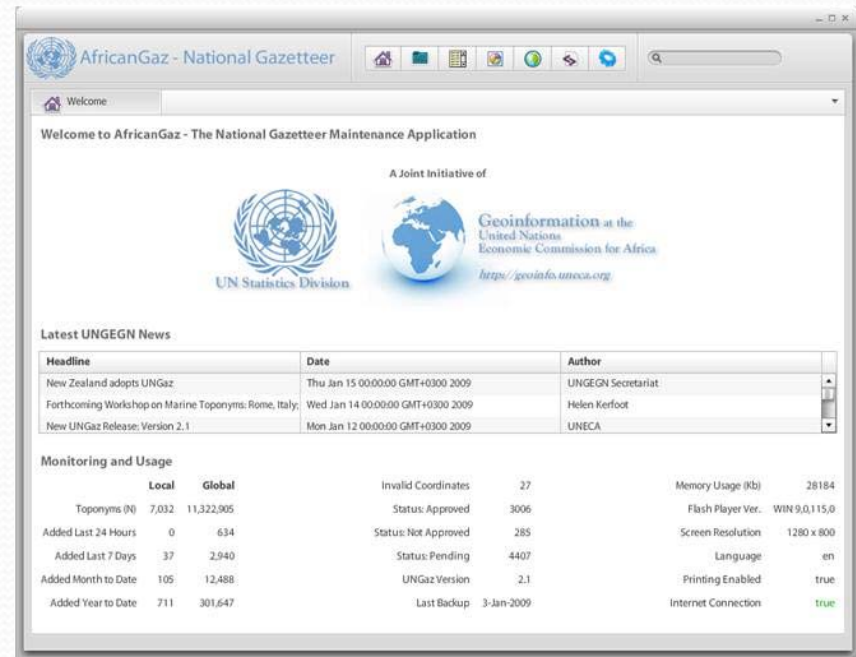
By Substring Search

UNGEEN's Interest

- On the 24 th session a presentation was made by UNECA representative on EthioGaz and its features
- suggestion was made to develop a tool that can serve any country in need of such a tool.
- ECA/Geoinfo took the assignment

New AfricanGaz Application

- Designed around three core non-functional requirements (Ideas)
- Increase usability and availability



AfricanGaz Application

1. Open source
2. Platform Independence
3. Architectural Interoperability

Open source

- No proprietor tools employed
 - Development: Adobe Flex AIR/ActionScript 3.0
 - RDBMS: SQLite
- GPL : no payment of any sort
- Member states can extend it to cater for their special need

Note:

- Responsible body to form user community and coordinate initiatives (UNECA with UNGEGN/UNSD) can take this responsibility

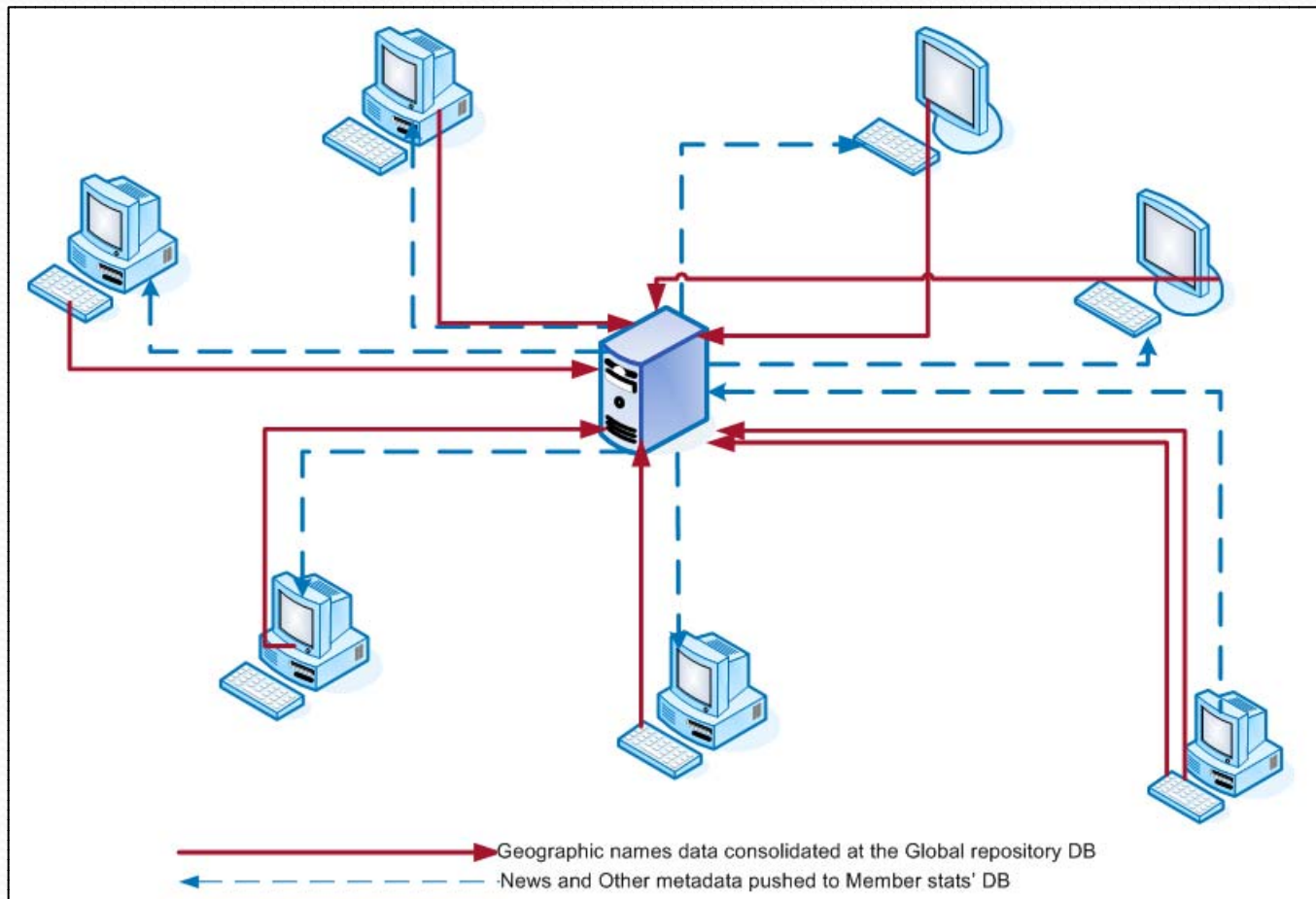
Platform Independence

- Runs on all known platforms
- AIR applications built with Flex use the high-performance, cross-operating system virtual machine from Adobe Flash[®] Player 9 software
- Use proven, open technologies such as Tamarin, WebKit, and SQLite.

Architectural Compatibility

- With African SDI names database
- News Items , Application Settings -
>Member States
- Geographical Name records
(Feature Data) -> Global DB.

Architectural Compatibility Cond.



The background is a blue gradient with decorative wavy lines and dotted patterns at the top. The word "Demonstration" is centered in a light blue font.



Demonstration

Welcome page

The screenshot shows a web browser window titled "AfricanGaz - National Gazetteer". The page content includes a welcome message, logos for the UN Statistics Division and Geoinformation at the United Nations Economic Commission for Africa, and two tables: "Latest UNGEGN News" and "Monitoring and Usage".

Welcome to AfricanGaz - The National Gazetteer Maintenance Application

A Joint Initiative of

  <http://geoinfo.uneca.org>

Latest UNGEGN News

Headline	Date	Author
New Zealand adopts UNGaz	Thu Jan 15 00:00:00 GMT+0300 2009	UNEGN Secretariat
Forthcoming Workshop on Marine Toponyms: Rome, Italy;	Wed Jan 14 00:00:00 GMT+0300 2009	Helen Kerfoot
New UNGaz Release: Version 2.1	Mon Jan 12 00:00:00 GMT+0300 2009	UNECA

Monitoring and Usage

	Local	Global				
Toponyms (N)	7,032	11,322,905	Invalid Coordinates	27	Memory Usage (Kb)	28184
Added Last 24 Hours	0	634	Status: Approved	3006	Flash Player Ver.	WIN 9,0,115,0
Added Last 7 Days	37	2,940	Status: Not Approved	285	Screen Resolution	1280 x 800
Added Month to Date	105	12,488	Status: Pending	4407	Language	en
Added Year to Date	711	301,647	UNGaz Version	2.1	Printing Enabled	true
			Last Backup	3-Jan-2009	Internet Connection	true

Feature Editor page

AfricanGaz - National Gazetteer

Welcome | Gazetteer | Meskel Square

General | Location | Notes | Audio / Visual | Metadata | Mapping

General Information

Feature	Meskel Square	Status	Pending
Feature Type	Square	Priority	★★★★★
Admin Division	Region - Tigray Region 14 - Addis Ababa Akali Kaliti Arada Bole Gulele	Feature GUID	BB0079FA-366D-5C26-9E83-AE80E63DFC1B
		Feature ID	1

Alternate Toponyms

Endonyms	Exonyms
Abiot Adebabay	Revolutionary Square
Meskel Adebabay	The True Cross Square

Update | Update and Close | Delete

Feature – Location page

AfricanGaz - National Gazetteer

Welcome | Gazetteer | Meskel Square

General | **Location** | Notes | Audio / Visual | Metadata | Mapping

Location

Lat.	<input type="text" value="9.03"/>	Coordinate System	<input type="text"/>
Long.	<input type="text" value="38.77"/>	UTM Grid	<input type="text"/>
Valid Coordinates	<input type="text" value="false"/>	Bounding Box	<input type="text" value="0"/>
Map Sheet	<input type="text"/>		<input type="text" value="0"/> <input type="text" value="0"/>
Elevation (m)	<input type="text" value="0"/>		<input type="text" value="0"/>

Geography / Locational Notes

Feature - Note page

The screenshot displays the 'AfricanGaz - National Gazetteer' web application. The interface includes a header with the logo and title, a navigation bar with tabs for 'Welcome', 'Gazetteer', and 'Meskel Square', and a sub-menu with 'General', 'Location', 'Notes', 'Audio / Visual', 'Metadata', and 'Mapping'. The 'Notes' tab is active, showing two text input areas: 'Miscellaneous Feature Notes' and 'Historical Narrative / Notes'. The 'Miscellaneous Feature Notes' area contains the text 'It is near the UNECA compound'. The 'Historical Narrative / Notes' area contains the text 'It got the name 'Abiot Adebabay' from the revolution, Abiot->revolution in Amaharic...'. At the bottom, there are three buttons: 'Update', 'Update and Close', and 'Delete'.

AfricanGaz - National Gazetteer

Welcome Gazetteer Meskel Square

General Location **Notes** Audio / Visual Metadata Mapping

Miscellaneous Feature Notes

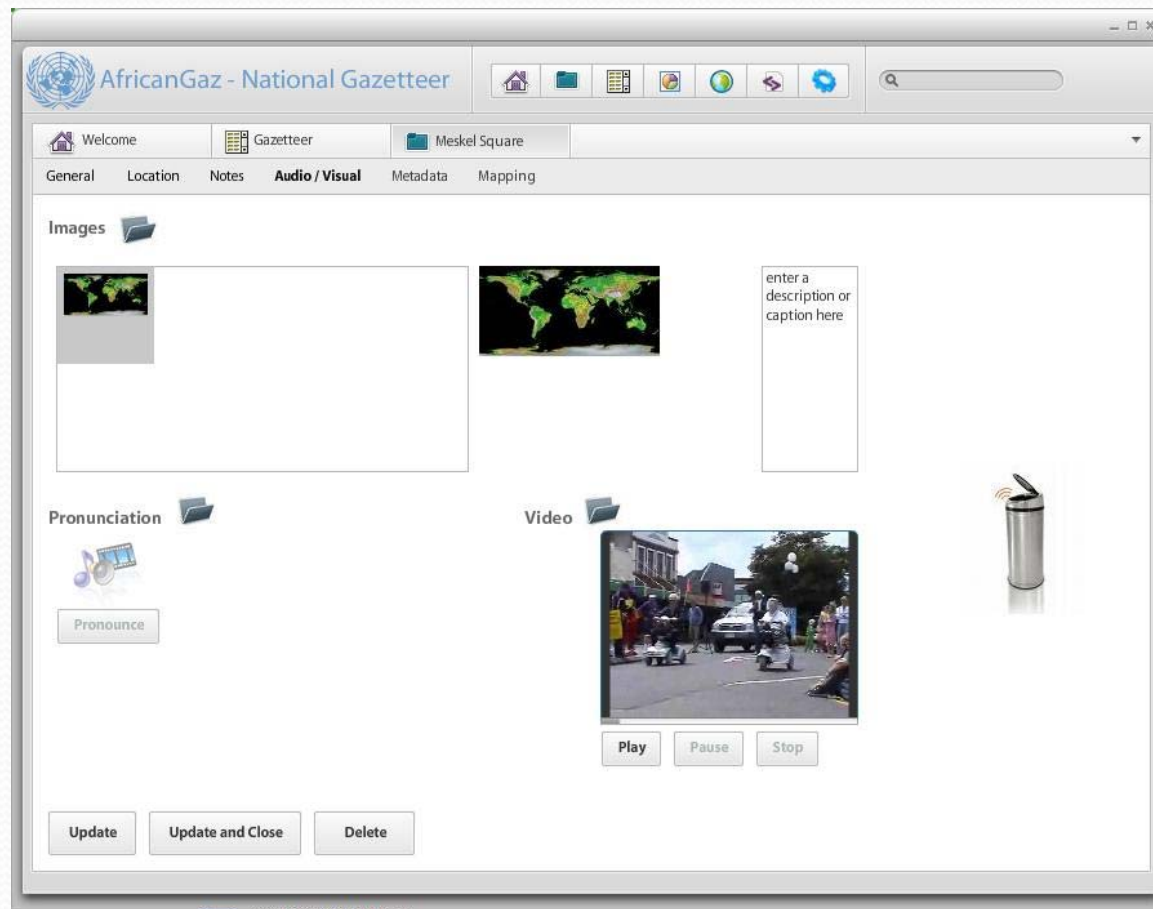
It is near the UNECA compound

Historical Narrative / Notes

It got the name 'Abiot Adebabay' from the revolution, Abiot->revolution in Amaharic...

Update Update and Close Delete

Feature – Audio/Visual



Feature - Metadata page

AfricanGaz - National Gazetteer

Welcome | Gazetteer | Meskel Square

General | Location | Notes | Audio / Visual | **Metadata** | Mapping

Data Source(s)

Ethiopian Mapping office

Metadata

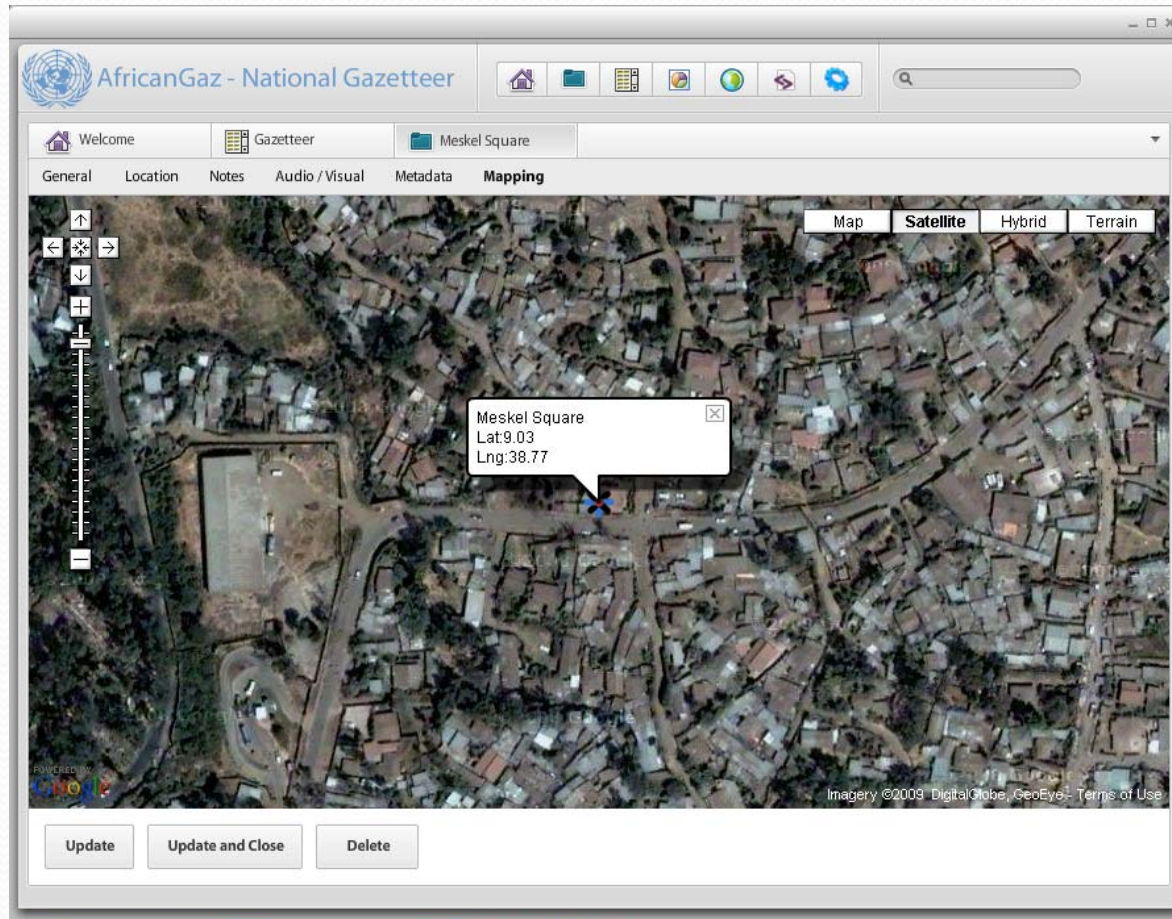
Created By: yoseph mekasha | Last Edited By: |

Created On: | April 2009 |

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Update | Update and Close | Delete

Map



The image features a blue gradient background. The top edge is wavy, with a lighter blue area above it. A dotted line in a light blue/cyan color runs horizontally across the upper portion of the image. The text "Next Step" is centered in a large, bold, light blue font.

Next Step

Phase I

Automated metadata setup utility

- pre-usage metadata setup facility
- Enable users to set up the system with their metadata

Authentication/Authorization module

- Authentication->Protecting the system
- Authorization ->Provide different level of access
- Authorization -> Enforce working procedure
- **Multi-lingual skin**

Phase I

Search:

- Search by name by geographical location (Lat/Long), by Feature type, By Administrative division ...

Import:

- Batch Importing feature data from XL, XML, and formatted text file ...
- Verification module that would let the user

Export:

- Export to XL, XML, formatted text file

Phase II

Map based Record Entry:

- Using Google Map – satellite imagery or a better precision source, providing users the option of creating feature records.


Data Synchronization Tool(s)

- Extracts member states data in the format that can be imported into the African SDI/UNGEGN DB
- Pulls News, metadata setups from African SDI/UNGEGN database to the Member states'


Phase II

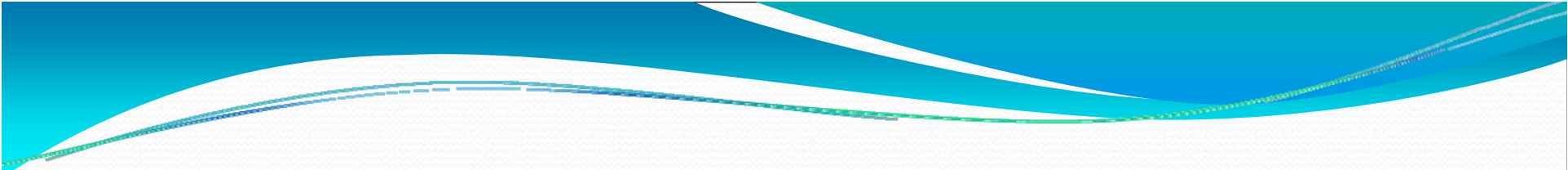
Statistical Reports (Including charts):

- Generating pre-formatted reports on Data Statistics such as number of features per admin division and producing different
- Charts to depict the information clearly and more easily

The background is a blue gradient, transitioning from a lighter blue at the top to a darker blue at the bottom. A wavy, white dashed line runs across the top of the image, just below the lighter blue section. The text "Way Forward" is centered in a bold, light blue font with a slight shadow effect.

Way
Forward

- 
- Complete Development
 - Prepare/setup access points and community site
 - Conduct workshops on Methodology and tool
 - Support and encourage member states to populate DB

- 
- Integrate African Toponyms/
African SDI -> UNGEGN DB
 - Develop African toponyms
website
 - Assist African countries to
develop/host their own toponym
website
 - Promote/ensure the usage of these
DBs

The background is a blue gradient, transitioning from a lighter blue at the top to a darker blue at the bottom. A wavy, dark blue line runs across the top, and a dashed white line follows a similar path just below it. The word "Discussion" is centered in a large, bold, light blue font.

Discussion

The background is a solid blue gradient, darker at the bottom and lighter at the top. The top edge is wavy, and a dotted line in a light blue/cyan color follows the curve of the top edge.

Thank you.