

# **Administering GeoNetwork with GAST**

Andrea Carboni

FAO

# Summary

- Overview
- Configuration: behind the scenes
- Setup operations
- Migration of old sites

# Overview

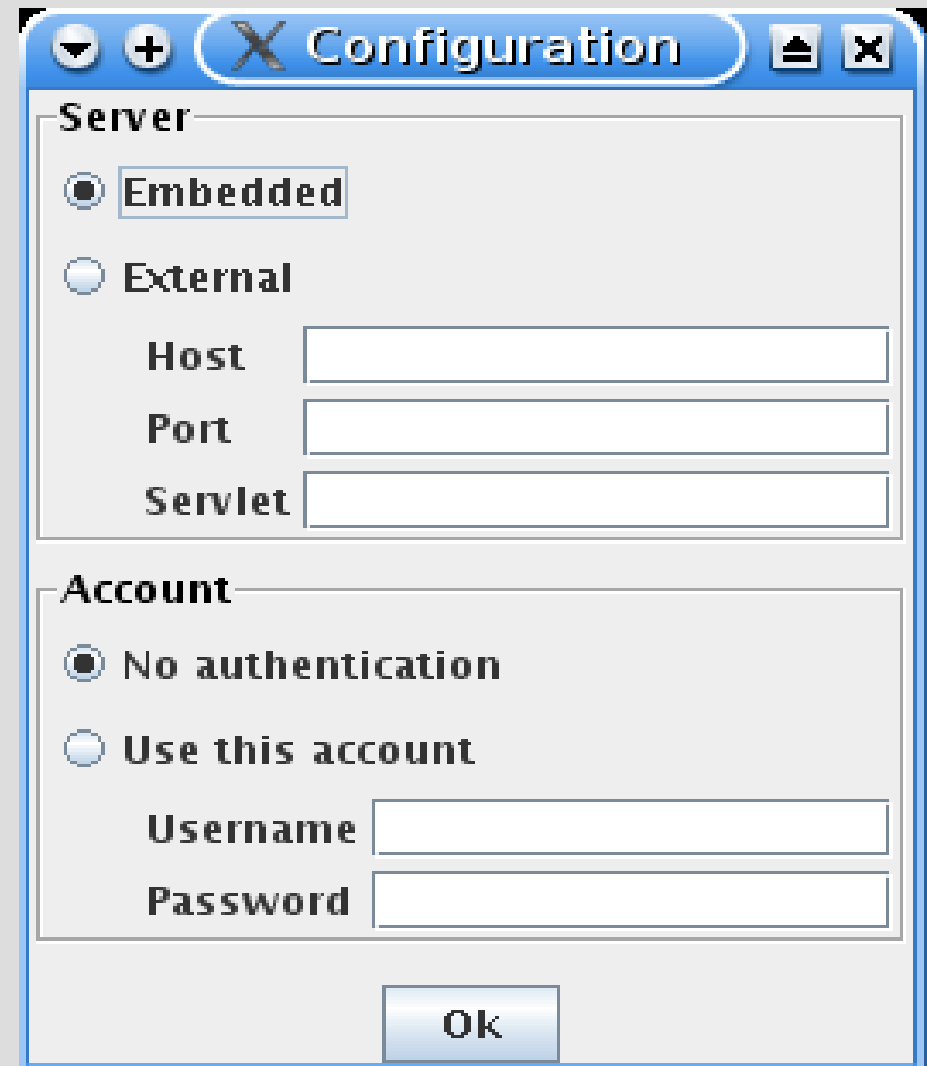
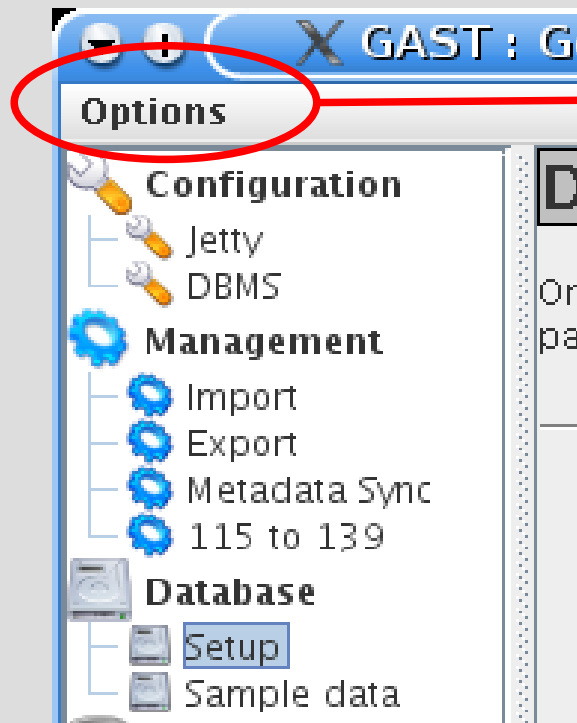
# GAST's Overview

- It is a standalone java application whose purpose is to simplify GeoNetwork's administration
- Why GAST? Some options cannot be set using the web interface (servlet or DBMS)
- Works with the associated GeoNetwork
- Some functions can work with Tomcat
- Starting GAST: `java -jar gast/gast.jar`

# Functional Overview

<b>Function</b>	<b>GN's status</b>	<b>Tomcat?</b>	<b>Authorization?</b>
Jetty config	reloaded	-	-
DBMS config	reloaded	-	-
MEF Import	running	Yes	Yes
MEF Export	running	Yes	Yes
Metadata Sync	stopped	-	-
19115 to 19138	stopped	-	-
Setup	stopped	-	-
Sample data	running	Yes	Yes
Migration	stopped	-	-

# Authentication



# **Configuration: behind the scenes**

# Configuration

- \* is web/geonetwork
- Embedded Jetty server (servlet, port)
  - changes bin/jetty.xml (servlet, port)
  - changes \*/WEB-INF/web.xml (servlet)
  - copies gast/data/index.html to \*/index.html (servlet)
- DBMS (account & driver)
  - changes config.xml (account & JDBC driver)
  - McKoi: \*/WEB-INF/db/db.conf (port)

# Management

- Metadata synchronization
  - Purpose : update server URL in all metadata
  - Calculate base site URL from public host & port (http://HOST/SERVLET/srv/en)
  - Select all metadata (not templates)
  - Apply an XSL transformation to each metadata using the calculated base URL
    - Stylesheet : \*/xml/schemas/xxx/update-fixed-info.xsl

# Management

- ISO 19115 to 19139 conversion
  - Purpose : convert old GN2.0 metadata to new ISO 19115:2003 (19139) format
  - Select all 19115 metadata present in GN 2.1
  - Apply conversion stylesheets (main.xsl, unmapped.xsl)
    - Location: \*/conversion/iso19115-iso19139
  - Set namespace prefix (needed by the editor)
  - Replace the old metadata with the new one
  - Write unmapped elements to log file

# Database

- Setup
  - Same operations as DB setup

# Setup operations

# Setup Overview

- Installer just unpacks files and runs GAST with `-setup` option on the command line
- The same can be done on a svn checkout
  - Usefull when something is changed (like db)
- Headless installation
  - Install anywhere, use GAST, copy into target
  - `java -Djava.awt.headless=true -jar gast/gast.jar -setupdb`
  - The database must be ready
    - For McKoi, datafiles must be already created

# Operations (-setup)

- Copy `gast/data/index.html` to `*/index.html` substituting the servlet name (from Jetty)
- Create McKoi datafiles
- Update `*/WEB-INF/config.xml` with database account and JDBC driver (McKoi)
- Run DB setup
- Ask to install sample data
  - Taken from `gast/setup/sample-data` (MEF)
  - Execute metadata synchronization

# DB Setup (-setupdb)

- Same as 'DBMS/Setup' in GAST's GUI
- Remove old objects from database
  - Taken from `gast/setup/sql/create-db-XXX.sql`
  - If an old DB is present, possible cyclic ref errors
- Create new objects (tables and indexes)
- Fill tables with initial/internal data
  - Tables' data taken from `gast/setup/db` folder
  - Data files are in DDF format. Druid can be used

# DB Setup (-setupdb) (2)

- Setup site id
  - Generate a new UUID
  - copy gast/images/dummy.gif to \*/images/logos
  - Store UUID in **Settings** table
- Setup GeoNetwork's version
  - Version taken from \*/WEB-INF/server.prop
  - Version stored in **Settings** table

# DB Setup (-setuppdb) (3)

- Add templates and subtemplates
  - Taken from `gast/setup/templates/<schema>`
  - Files are in XML format
  - Subtemplates must have the sub- prefix
  - A new UUID is generated for each template
  - Set **view** privilege for group **all**
- Remove Lucene's index
  - Remove files in `*/WEB-INF/lucene`

# **Migration of old sites**

# Migration Overview

- Option present in GAST
- Migrates only versions 2.0.X and **not** 2.1
- Both GeoNetworks (2.0 and 2.1) must not be running
- New release will migrate GeoNetworks running on Tomcat
- GN 2.1 must not be separated from GAST
  - On Unix, a symbolic link should do the trick

# Operations

- Open PATH/[web]/WEB-INF/config.xml
- Open connections to 2.0 and 2.1 DBMSs
- Clear the 2.1 database
- Migrate users
  - **Users** copied 'as is'. Passwords are scrambled
- Migrate groups
  - **Groups** copied 'as is', **GroupDes** filled in all lang
  - **UserGroups**: copied 'as is'

# Operations (2)

- Migrate categories
  - **Categories** copied 'as is', **CategoriesDes** filled in all languages
- Migrate metadata
  - Get id, uuid, schemald, isTemplate, createDate, lastChangeDate, source
  - Harvested metadata are skipped. Harvesting must be setup with the web interface

# Operations (3)

- Retrieve all privileges for current metadata
  - First group with ADMIN privilege is the groupOwner
  - First editor in that group is the owner
  - Raise exception if one of them is missing
- Insert migrated metadata in GN 2.1
- Migrate privileges
  - EDIT and ADMIN privileges are skipped
  - Privileges are copied 'as is' for all previous metadata that were found

# Operations (4)

- Migrate metadata categories
  - MetadataCateg copied 'as is'
- Migrate settings (go into **Settings** table)
  - Network and netmask
  - Public host and port
  - Z39.50 port

# Operations (5)

- Restore localized labels (if possible)
  - Works for groups and categories
  - Loads localized strings from DDF files
  - Works if names were not changed
- Clear GN 2.1 indexes

That's all