Table of Contents

Running Indri	2
Indexing	2
Indexing – Alternate Approach	4
Searching with Indri	5
Running OpenEphyra	8
Allowing OpenEphyra to support French questions	9
Running MEAD	

Running Indri

Using Indri is composed of two parts. First indexing a corpus that will be used for searching. Then searching that corpus.

Indexing

- 1. In a web browser open <u>http://scaiano.com/edu</u>
- 2. Download and run AutoSetup.bat
- 3. To run the Indexer UI, from the start menu click Programs > Indri > Indexer IU



4. In the first screen set the following settings:

Index Name – this is where the index will be store. Both the *Retrieval UI* and *OpenEphyra* will require this path.

Data File(s) – this is the location of the corpus to be indexed. Do not add each file, just the folder that contains all the files.

Recurse into subdirectories – check this box.

Document Format: trectext – the corpus has been prepared in this format.

Stemmer: none or uncheck the box– The stemmer provided are only intended for English.

😿 Indri Index Builde	r			
File				Help
Index Fields Status	3			
Index Name:	C:\indri_index]	Browse	
Data File(s):	C: \frenchXML		Browse Remove	
Filename filter:	*.xml		🔽 Recurse into subdirectories	
Collection Fields:	docno			
Document format:	trectext 👻			
Stopword list:			Browse	
Stem collection	krovetz 👻		Memory limit:	512 MB 👻
		Build Index Quit		
Ready				

5. Switch to the field tab and set the following settings

Add Field > title

Add Field > text

File					Help
Index Field	ls Status				
		Field Name	Is Numeric?		
		title			
		text			
		Add Field	Remove Field		
		Data File	Offset Annotation File		
		C:\frenchXML			
		Path to Anchor Text:		Browse	
		Build Index	Quit		
Ready					

6. Click Build Index

Indexing – Alternate Approach

These are the steps use to build the index that OpenEphyra uses.

- 1. Open a Command Line
 - a. Click the start menu
 - b. Type: **cmd** in the search box
 - c. <u>Hit Enter</u>

Programs (1) © cmd.exe See more results		
See more results cmd x Shut down	Programs (1)	
See more results cmd × Shut down →	cmd.exe	
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
See more results cmd × Shut down →		
♀ See more results cmd × Shut down →		
cmd × Shut down >	♀ See more results	
		Churt dawa
	cmal ×	Shut down

- 2. Move into the frenchXML directory cd \frenchXML
- 3. Download scaiano.com/download/<u>french.indri.config.xml file and place it</u> <u>frenchXML directory.</u>
- 4. <u>Open french.indri.config.xml in notepad</u>
- 5. Change the corpus and index paths to match those required for your system

<corpus>

<path>/Users/martinscaiano/dev/data/french_corpus/corpus/Trec format/frenchXML</path>

<class>trectext</class>

</corpus>

<memory>1g</memory>

<index>/Users/martinscaiano/dev/data/french_corpus/Corpus/Trec format/indri_index</index>

6. Type: **IndriBuildIndex** <u>french.indri.config.xml</u> This will build the index

Searching with Indri

- 1. Start the *Retrieval UI*
 - From the start menu Programs > Indri > Retrieval UI
- 2. <u>Select Add Index from the File menu</u>

😿 Ir	idri Retrieval	
File		
	Add Index	
	Add Server	
	Remove Selected Index	
	Exit	
		Search
		0
Docu	ment	Title

- 3. Select where you created the Indri index.
- 4. Type search terms into the *Enter your query* field: Either hit *enter* or click *Search*

5. The results are displayed in the table below

😺 Indri Retrieval	
File	Help
Enter your query:	viande
Number of documents:	10
	C:\indri_index
Database(s):	
	Search Clear Show Scores
Document	Title
	Etats-Unis: levée des limitations d'importation de viande suisse Commercefacilité pour
	Le marché de la viande est en pleine crise Offre excédentaire, baisse de laconsomma
	Le WWF dénonce un trafic international de viande de baleine éclairage.
	Effondrement du marché de la viande La production doit s'aligner sur lademande, esti
	Paysans inquiets des importations illégales de viande Les contröles doiventêtre renfor
	La commission des cartels examine le marche du porc Pression sur lesprix due a la libe
	Alimentation pauvre en viande - One etude en analyse les errets pertes derevenus p
	Prix de la viande de porc: il v a trop de porcs en Suisse Les prosdistributeurs plaident

6. Click on a result to see the full document

A dialog with the original document will pop up. The document will highlight where the search terms appeared. Note this does not work in French because of accent characters.



Running OpenEphyra

Then

- 1. Open an explorer window (🕮 + E) to Downloads
- 2. Double click launchOE.bat
- 3. Type: c:\runOE.bat
- 4. Wait for: **Question**:
- Type your Question: Who is Colin Powel?
 Note the start of the question must be in English "Who is" because OpenEphyra was only designed for use in English.

Allowing OpenEphyra to support French questions

The main reason that OpenEphyra cannot process French questions is that it cannot identify the expected answer type. To correct this we must provide patterns for French answer types.

The answer type already exist in OpenEphyra we simple need to make patterns using regular expression (described elsewhere)

In a text editor, open C:\openephyra-0.1.2\res\answertypes\patterns\answertypepatterns

The "C:\openephyra-0.1.2" part of the path will depend on where you install OpenEphyra.

The file is organized by type. If we scroll about half way thorough the file we will see the following line.

NEperson

who(m|se)?

The first section indicates the type, the second is a pattern in the question which would suggest this type.

A French equivalent might be

NEperson

qui

Running MEAD

Mead must be run from the Cygwin command line.

1. Launch Cygwin



- Type: cp /cygdrive/c/meadrc /cygdrive/q/Mead-3.12/mead/data/mlp2011/meadrc
- 3. Move to the mead directory. Type: cd /cygdrive/q/Mead-3.12/mead
- 4. Run Mead.Type bin/mead.pl -rc data/mlp2011/meadrc -o test.txt data/mlp2011/mlp000

bin/mead.pl - call the mead summarizer

-rc data/mlp2011/meadrc – indicates to use the meadrc configuration file. You can edit this file to change the output of mead

-o test.txt - stores the summary - you can view the summary by typing: more test.txt

data/mlp2011/mlp000 – indicates to use the mlp2011 data set (or cluster). There are clusters ranging from **mlp000** to **mlp009**

5. The summary can be view by typing: more test.txt