Stream Engine 1.0

Xmdv Group Computer Science WPI

Note

- Please install 7-zip before run stream engine
 - Make sure it is installed under
 - C:\Program Files\7-Zip
 - The traffic data source requires un-zip with 7-zip
- Please run the launcher as administrator all the time
 - The query plans generated are placed in a temporary location by windows if you run as normal user.

Interface for Query Configuration

- 1. Select Data Source
 - Simulated data (ORCL)
 - Traffic data
 - Earthquake data
- 2. Output evolution or not
- 3. Configure the window and clustering parameters
- 4. Enable or disable summarization and matching
- 5. Save query plan
- 6. Manage generated query plan

Mainwin				
Config Query Engine		2		
Select Data Source	•	Config Query Plan	C Evo	olution
- Query Plan Parameters				
Window Size: 1000		Range Threshold:	0.02	
Slide Size: 100		Count Threshold:	10	
With summarization and matching		1		,
	· · · · · · · · · · · · · · · · · · ·	4		
Save Quey Plan As: ORCL_no_Evo_no_S	ium.txt	5		Save
Save Quey Plan As: ORCL_no_Evo_no_S	ium.txt	5		Save
Save Quey Plan As: ORCL_no_Evo_no_S GroupBox ClusteringQuery1_no_evo.txt ORCL_Evo_no_Sum.txt	ium.txt 6	5		Save
Save Quey Plan As: ORCL_no_Evo_no_S GroupBox ClusteringQuery1_no_evo.txt ORCL_Evo_no_Sum.txt Earthquake_Evo_no_Sum.txt Earthquake_Evo_no_Sum222 txt	um.txt 6	5		Save
Save Quey Plan As: ORCL_no_Evo_no_S GroupBox ClusteringQuery1_no_evo.txt ORCL_Evo_no_Sum.txt Earthquake_Evo_no_Sum.txt Earthquake_Evo_no_Sum222.txt Earthquake_Evo_no_Sum100_50.txt	ium.txt	5		Save Refresh Remove

Query Engine Interface

 Select query plan and click "Add"

Ali candidate quenes	All running queries	
queryplan\ClusteringQuery1_no_evo.t	Refresh	
queryplan\ORCL_Evo_no_Sum.txt		
queryplan\Earthquake_Evo_no_Sum.b	>(Add)	
queryplan\Earthquake_Evo_no_Sum22		
queryplan\Earthquake_Evo_no_Sum10	<(Delete)	
	Show Query Plan	
4 III •		
Query plan details:		

Visual Engine Interface

• And watch the evolving pattern



Matching Request (1)



Matching Request (2)

- 1. Streaming Window:
 - Visualizes the extracted patterns in real time;
- 2. Streaming Capture Window:
 - Allow the user to take a snap shot of the Streaming Window and interact with it;
 - The user submit a matching request to the pattern archive to retrieve the historical matches;
- 3. Cluster Match Display:

- Visualize the retrieved historical patterns;

Parameter Settings

- Traffic Data
 - Win: 500 Slide: 50 Range: 0.05 Count: 15
 - Source: http://data.dot.state.mn.us/
- Earth Quake
 - Win: 100 slide: 10 Range: 0.02 Count: 10
 - Source: http://earthquake.usgs.gov/