



**Poirot: TraceMaker**

Open Project Query Administrative Tools Resources Help

IDLG Sqlserver

Query:  
Trace requirement # 9014 " Data received from weather stations shall be updated regularly"

Enter Document ID :  Find Report

<<=> Class Diagram

CANDIDATE LINKS UNLIKELY LINKS

1 - 10 of 21 Next Last

Document ID	Document Description	Confidence Level	Accept
138	Receive shipment		<input type="checkbox"/>
83	FailedWeatherStationGUI (379)		<input type="checkbox"/>
12	Weather Station Manager		<input type="checkbox"/>
3	Weather Station Directory		<input type="checkbox"/>
6	Weather Station Input Proxy		<input type="checkbox"/>
53	Scheduler (306)		<input type="checkbox"/>
9	Weather Station GUI		<input type="checkbox"/>
5	Weather Station Maintenance		<input type="checkbox"/>
7	Weather Station Report		<input type="checkbox"/>
119	DatabaseManager (313)		<input type="checkbox"/>

ExportData Visualize

Class Diagram for 'Weather Station Manager' - Microsoft Visual Studio

```

WeatherStation Manager 375
get WeatherStation ID ( )
set WeatherStation ID ( WeatherStation ID )
check Station Transmissions ( )
issue Transmission Alert ( )
All stations functioning ( )
  
```

**Poirot: TraceMaker**

Project Query Artifacts Options Help

IBS > Query > Report

Query: Document ID # 12  
"Temperature, wind chill, and precipitation data will be received from external weather stations and roadside sensors"

Dominant Cluster Cross-cutting Cluster ID :  Find

Next Last

Document ID	Document Description	Confidence Level	Accept
Temperature readings			
Updates			
9404	Road maps shall be updated by importing data from an external source.		<input type="checkbox"/>
9016	Data received from the road sensors shall be updated regularly		<input checked="" type="checkbox"/>
9012	Weather forecasts shall be updated as received by the weather bureau.		<input type="checkbox"/>
9140	When new road sensors are added, the thermal map shall be updated to reflect the new weather data.		<input type="checkbox"/>
9007	Weather forecast update		<input type="checkbox"/>

Show Context Select All Clear All

Transmission

Weather data

Next Last

Export Data Save Report

**Tag Clouds**

Modify Query - Windows Internet Explorer

Query modification

Click on the underlined term to filter it out

Query:

Roads shall be closed and appropriate bodies notified in extreme weather conditions when roads become non-navigable

Filter All Clear All Re-run query

Show Document - Windows Internet Explorer

Show Document

Selected document:

Critical contacts shall be **notified** when a road is closed.

Help analyst to understand WHY a link was generated.

Help with filtering decisions.

**Visualized Hierarchy**

Legend:

- Candidate link
- Accepted link
- Current link
- ⊙ Rejected link

**Visualized Clusters**

**Which do you prefer?**

You are the users and you have to 'vote' for which method you think would best support analysis of traces.

Vote for your favorite.

Traditional Clustered-text Physical hierarchy Visual clusters

## More seriously

- ▶ Usability study planned that utilizes eye-tracker technology to try and understand which approach best supports analysts in their traceability tasks.
- ▶ These visualizations are as yet untested but may provide means to help analysts filter lists of candidate links, and interpret trace results.

## Visualization in Automated Traceability

International Requirements Engineering Conference  
New Delhi, India, October, 2002

Jane Cleland-Huang, Rafal Haidrat  
Center for Requirements Engineering  
DePaul University

Funded by NSF grant #: CCR-0306303