Intelligent Deployment of Sensor Networks

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11/24/14
The Traditional Way
A New Way
Demo
Enabling Better Sensor Management

The app can read any sensor’s tag and return:

- when the sensor was last deployed
- if the sensor is currently deployed
- the other sensors associated with the deployment
- what platform the sensor is deployed at
- what entities and characteristics are being detected
Enabling Better Data Management

The app will read any two sensor’s tags enter the deployment metadata

- faster
- automatic data entry error-checking
- automatic consistency checks between knowledge base and the practicing scientist
Feedback?
Intelligent Deployment of Sensor Networks

Scan QR Code  URI Type  Details

http://jefferson.tw.rpi.edu/kb/runoff-kb#Lachat8000QuickChem-SN000000

Scan QR Code  URI Type  Details

http://jefferson.tw.rpi.edu/kb/jp-kb#vaisalaWMT52

Query URI Types

Parent URI
Child URI
Location
Time

Build Deployment Information

Submit Deployment Information

Instrument URI  Platform URI  Detector URI

Clear Results
Intelligent Deployment of Sensor Networks

Scan QR Code  Instrument  Details

http://jefferson.tw.rpi.edu/kb/runoff-kb#Lachat8000QuickChem-SN000000

Scan QR Code  Detector  Details

http://jefferson.tw.rpi.edu/kb/jp-kb#vaisalaWMT52

Query URI Types

Parent URI  http://jefferson.tw.rpi.edu/kb/runoff-kb#
Child URI  http://jefferson.tw.rpi.edu/kb/jp-kb#vais
Location  42.73385, -73.67758
Time  Nov 23, 2014 12:16:30 PM

Build Deployment Information

Submit Deployment Information

Instrument URI  Platform URI  Detector URI

Clear Results

URI is a detector
Intelligent Deployment of Sensor Networks

Scan QR Code  Instrument  Details

http://jefferson.tw.rpi.edu/kb/runoff-kb#Lachat8000QuickChem-SN000000

Scan QR Code  Detector  Details

http://jefferson.tw.rpi.edu/kb/jp-kb#vaisalaWMT52

Query URI Types

Parent URI  http://jefferson.tw.rpi.edu/kb/runoff-kb#
Child URI   http://jefferson.tw.rpi.edu/kb/jp-kb#vais
Location    42.73385, -73.67758
Time        Nov 23, 2014 12:16:30 PM

Build Deployment Information

Submit Deployment Information

Instrument URI  Platform URI  Detector URI

Clear Results

URI is a detector
DetailsScreen

Return to Main Screen

URI
http://jefferson.tw.rpi.edu/kb/runoff-kb#Lachat8000QuickChem-SN000000

Type Instrument

Is Deployed

Last Deployed 2008-01-01T12:40:00Z

Platform Information

URI

Instrument Information

URI

Detector Information

URI

detects characteristic of entity

reExecute Queries

prefix hasneto: <http://jefferson.tw.rpi.edu/ontology/hasneto.owl#>

select (max(?startTime) as ?time) where {
?deployment hasneto:startedAtTime ?startTime. }

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Scan QR Code | Platform | Details
http://jefferson.tw.rpi.edu/kb/verticaldata-kb#boa

Scan QR Code | Detector | Details
http://jefferson.tw.rpi.edu/kb/jp-kb#vaisalaWMT52

Query URI Types

Parent URI | INVALID URI PAIR
Child URI
Location | 42.73385, -73.67758
Time | Nov 23, 2014 12:17:18 PM

Build Deployment Information

Submit Deployment Information

Instrument URI | Platform URI | Detector URI

Clear Results

URI is a detector

Executed exists query. Retrieving exist? results.