

# isme.interverse (April 2021)

Monday, April 5, 2021 3:04 PM

Making ISME work again, in a development environment, and then transferring its functionality over to Laravel. KEEP DATABASE SEPARATE FROM PRODUCTION. Copy Hess Iron Database over to a new schema called "Interverse"

Domain Name System (DNS)  
Coordinate Name System (CNS)

Software Address (IP) → Hardware Address (MAC) → Physical Location (GPS) → Postal Address

www(HOST) .co.york.pa.us.

Existing View (Page)	New View
Index (Main Page)	Search Results
Project Page	Detailed View (Inspector)
	Manual Association Creator

- Cache output from PHP/MySQL into NoSQL database (JSON objects). Create the big data from access record of sorts.
- "Callable" window that searches database (or cached search results) in the format "Name (Classification.up.the.heirarchy)". No constraints on what can be linked to what.
- **Heirarchies** and **heirarchical contexts**, for organization. Heirarchies are not 1-to-1.

## Inspector

### Fields and Forms

This page's permalink

This page's ID

Title

Description

Target

Checkbox - inherit properties

Export JSON document

Coalesce → make something concrete from just dynamic associations

### Potential functions

Garbage cleanup (false or polluted data) ex: kittens associated with violence (but associated with funny?)  
WILL NEED LOTS OF RECURSION.)

Graph visualizer

Computer vision tagging, general information compared against known contextual information (consult established APIs and join their output to the network)

## Databases

Apache CouchDB for NoSQL

MySQL for RDBMS

## isdev-redlion-lamp0 (isdevlamprl0)

— Edit ens160 IPv4 configuration —

IPv4 Method: [ Manual ▼ ]

Subnet: 10.0.0.0/24

Address: 10.0.0.111

Gateway: 10.0.0.1

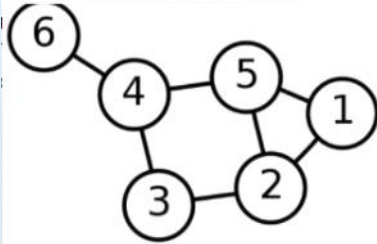
Name servers: 10.1.0.200,8.8.8.8  
IP addresses, comma separated

Search domains: interserval.systems  
Domains, comma separated

[ Save ]  
[ Cancel ]

Render view → coalesce, distill, filter down to relative information without spiraling outward infinitely, that's the trick. There has to be falloff of some kind.

Intuitive triggers for associated links, calls a process which also has a link.



In mathematics, **graph theory** is the study of *graphs*, which are mathematical structures used to model pairwise relations between objects. A graph in this context is made up of *vertices* which are connected by *edges*. A distinction is made between **undirected graphs**, where edges link two vertices

York County IT  
Object ☆

○ Payload ▼ Destination ▼ Source ▼ + Add Column ▼

+

First, invent the universe.

Multiple domains can resolve to the single instance of a person or object, they are equivalent, but in different contexts. Let's work backwards from my own personal file structure. Let's center the entire operation on the human.

A single person is at the center of their universe, so we work outwards from the period at the end of the FQDN. A domain being a context.

Domains involved in my personal filesystem on OneDrive -

Pictures	Pictures and videos of myself and others, sometimes screenshots. Captured light and sound
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from a moment in time.

Legal Legal documents regarding interactions with the State and

### [Domain theory - Wikipedia](#)

Binary relations are used in many branches of mathematics to model a wide variety of concepts. These include, among others:

- the "is greater than", "is equal to", and "divides" relations in [arithmetic](#);
- the "is congruent to" relation in [geometry](#);
- the "is adjacent to" relation in [graph theory](#);
- the "is orthogonal to" relation in [linear algebra](#).

From <[https://en.wikipedia.org/wiki/Binary\\_relation](https://en.wikipedia.org/wiki/Binary_relation)>

<https://redislabs.com/modules/redis-graph/>

### [Neo4j Download Center - Neo4j Graph Database Platform](#)

**4/14/2021 3:58 PM**

Current version is 0.3.4. Was last working on AWS. Create a db user on my development database. Put in a private repository on GitHub?

New user for mysql on k8s0  
isme/rm6CCB4vFP53

neo4j-test on microk8s on isrv-k8s0 on isrv-redlion-hypervisor1  
neo4j/viking-latin-shelf-arctic-nevada-3727

Can't really work on this from fs0, the graphical demands are simply too much.

ISME is the interface for INTERVERSE, which is the repository of data and connections I can draw from to form conclusions about things. INTERVERSE will have a relational database, and a small, recallable search function to link things together. Graph DB will be Neo4j.

INTERVERSE - on mysql and neo4j  
Laravel - INTERVERSE project

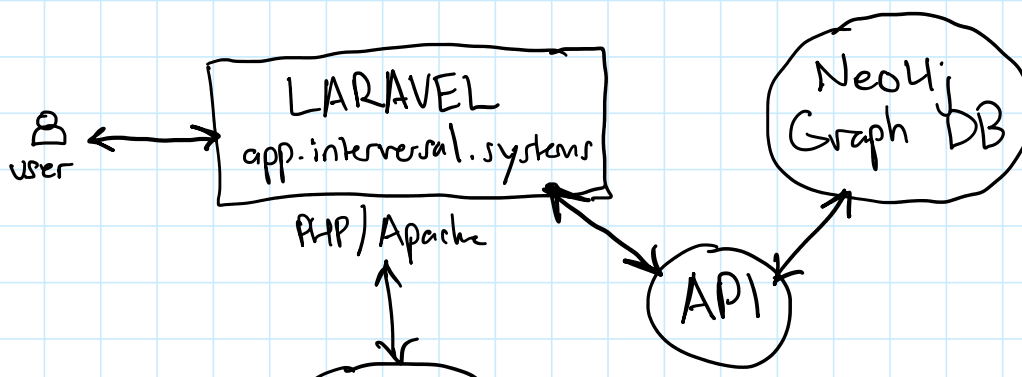
Got a scuffed Laravel install here, me putting a local mysql instance is messing with it, but I don't know the proper credentials for the one laravel sail pulls down.

[You Don't Need Laravel Sail \(rootdaemon.com\)](#)

## Graph Database (ISME) (Interverse)

Friday, April 16, 2021  
12:04 PM

[Neo4j - Import Data from a CSV File using Cypher \(quackit.com\)](#)



MySQL

CouchDB on Kubernetes

## API interconnectivity

Evidence informs the model, which has predictive qualities. I'm glad I discovered these before essentially building a graph database from scratch.

[Neo4j Cypher Refcard 4.2](#)

Seems like people are dedicated to building the tools, but not the actual product.

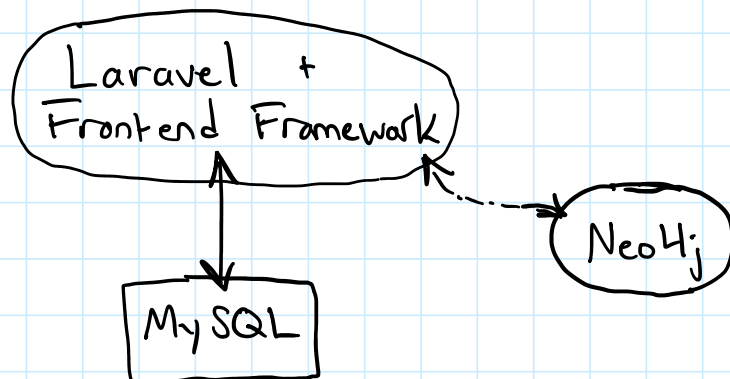
Scan a directory recursively to form a hierarchical structure.

Neo4j won't start on Darling  
~~won't finish installing on work~~  
laptop

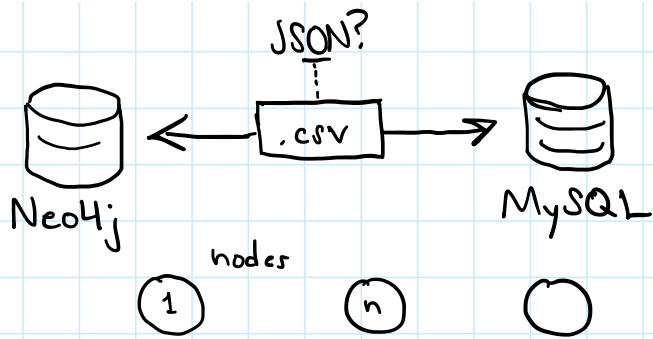
Will start on work laptop.

Installed Canary Dev Version and it's  
working on Kubernetes. I NEED MORE  
POWER.

app. interversal. systems



Will need a PHP extension for Neo4j.  
Map/model data in the Desktop app.



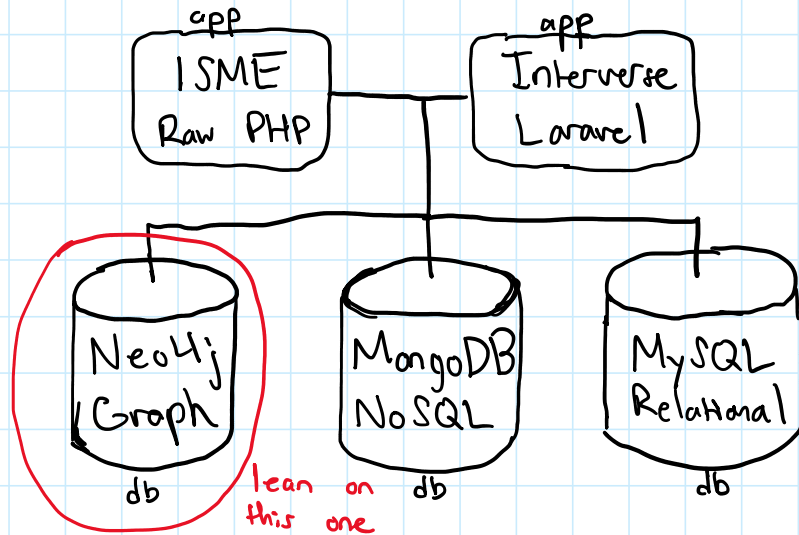
The new Laravel app will serve as an accessible front end to Neo4j. I will prototype and investigate new data collected from all of my jobs.

Ingest data, asset tags. Create a self-similar interface for traversing nodes and data.

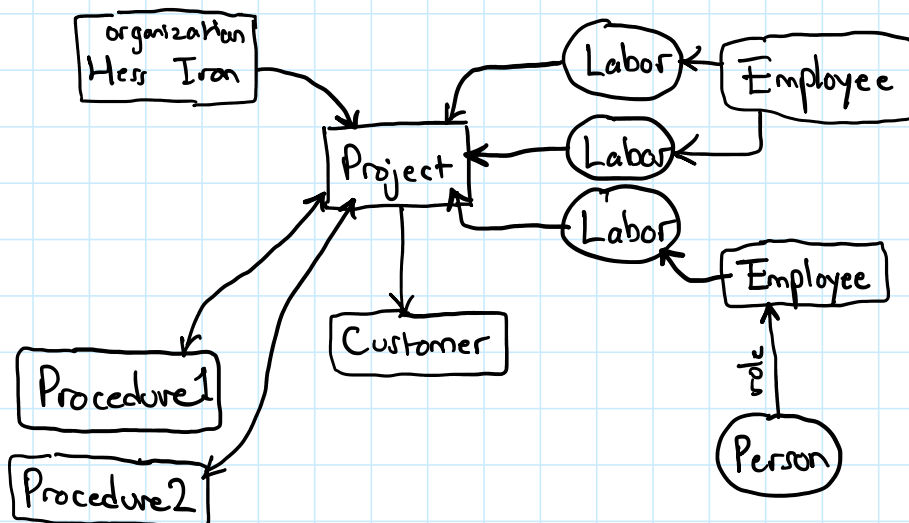
Relationship - congruent (work order and tickets)

4/19/2021 3:22 PM

Taking neo4j off of Kubernetes on isrv-k8s0 because I can't figure out how to do storage on it. Spun up a new container on a local docker snap.



Goal: insights into relationships between things.



## Business Service — IoT Mapping

- Figure out hourly rate
- provide locally or cloud hosted interverses
- Interserval Systems as a nonprofit or business?
- all nodes have a web page that links to other nodes. All nodes are presented on the same "plane"

BLM standards, international standards, create new standards

## Relationships

- instance\_of →

class label

- instance →

- next →

Intersverse Roles: ERP, CRM (if all related)

COMPOSER — pulls from GitHub to current project — that's why everyone uses it.

LOAD CSV WITH HEADERS FROM

<https://neo4j.com/docs/cypher-refcard/4.2/csv/artists-with-headers.csv> AS line

CREATE (:Artist {name: line.Name, year: toInteger(line.Year)})

From <<https://neo4j.com/docs/cypher-refcard/current/>>

Id	Name	Year
1	ABBA	1992
2	Roxette	1986
3	Europe	1979
4	The Cardigans	1992

[PHP: fputcsv - Manual](#)

```
$list = array (  
    array('aaa', 'bbb', 'ccc', 'ddd'),
```

```

    array('123', '456', '789'),
    array('"aaa"', '"bbb"')
);

$fp = fopen('file.csv', 'w');

foreach ($list as $fields) {
    fputcsv($fp, $fields);
}

fclose($fp);

```

From <<https://www.php.net/manual/en/function.fputcsv.php>>

Neo4j only accepts CSV as a data ingest form. Need to pipeline that from MySQL, where my data is. Working currently in ISME.

application = tool = process = procedure

procedure(tools, materials)

[Sixth normal form - Wikipedia](#)

[Database normalization - Wikipedia](#)

[Euler's identity - Wikipedia](#)

We've been using spreadsheets to collect tax information since the 1700s, or even earlier. Time for a new way to organize data.

Project CHIP - IoT smart home collaborative standard -

<https://github.com/project-chip/connectedhomeip>

[IoT Leaders Join the Alliance's IP Working Group to Promote IP-Based Convergence for the Commercial Market - Zigbee Alliance](#)

Big companies and big players involved in this project, and nobody is present.

Need natural language recognition to ingest data and form new structures

**4/22/2021 9:11 AM**

Complete breakthrough. Interserval Systems has been about connecting disparate worlds and industry, and now I just discovered the graph database. I am so inspired right now. And with IoT, I have a standard to look to for collecting data. All things can be linked.

VENDOR, INSTANCE\_OF

Maybe even have a separate database just for connecting technologies... or not. LINK EVERYTHING. USE THE CPUs and GPUs.

Sales: A 3D graph visualizer. Compared to tax information/census data on microfilm.

<https://medium.com/neo4j/visualizing-graphs-in-3d-with-webgl-9adaaff6fe43>

[\(8\) Graph Visualization with 3D and React with Michael Hunger - Twitch Stream - YouTube](#)

[neo4j - Check whether a node exists, if not create - Stack Overflow](#)

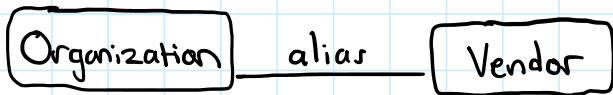
When using MERGE on full patterns, the behavior is that either the whole pattern matches, or the whole pattern is created. MERGE will not partially use existing patterns — it's all or nothing. If partial matches are needed, this can be accomplished by splitting a pattern up into multiple MERGE clauses. <http://docs.neo4j.org/chunked/stable/query-merge.html>

MERGE (n)-[:know {r:'123'}]->(test2 {name:'2'}) will try to match the entire pattern and since it does not exist, it creates it. What you can do is:

MERGE (n {name: '3'}) //Create if a node with name='3' does not exist else match it

MERGE (test2 {name:'2'}) //Create if a node with name='2' does not exist else match it

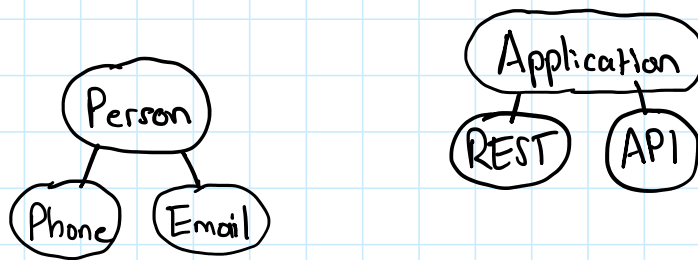
MERGE (n)-[:know {r:'123'}]->(test2) //Create the relation between these nodes if it doe



property: alias: "Vendor"?

Inverse UUID?

## Endpoints (Interfacer)



Router for labels in neo4j - is there a plugin for Laravel?

[AhsanAbrar/laravel-neo4j: Laravel Eloquent Wrapper for Neo4j \(github.com\)](https://github.com/AhsanAbrar/laravel-neo4j)