

# TIS; a Services Integration System

August 18<sup>th</sup>, 2017

## Persons of Interest

Timothy Elmer	Developer
Marc J Dupuis	Faculty Mentor
Thomas Metcalf,	Sponsor
Kent School District	
Ed McAlpine,	Supervisor
Kent School District	

## Project Aim

The Kent School District has 180 physical servers and 200 virtual servers providing hundreds of services, with the relationships between them recorded in spreadsheets and tribal knowledge.

This relational knowledge is extremely valuable for change control and incident recovery, but its haphazard storage makes quick recovery prohibitively difficult.

Therefore, this project aimed to provide a unified system to track interdependencies between these devices and services.

No satisfactory free or low-cost option could be found, leading us to produce our own software solution.

## Development

TIS was initially conceptualized as the bare minimum solution to our needs; a relational database. Once this was in place, I developed a web application around it to facilitate easier user interaction with the data.

## About TIS

TIO Inventory System (TIS) is written in:

- ASP.NET
- C#
- T-SQL

TIS stores inventory data concerning servers and services, and more importantly, dependency relationships between them.

TIS's primary function is to illustrate such dependencies in an approachable tree view.

## Outcome

TIS has been developed and deployed to the Kent School District's production environment.

However, the list of desired features has grown during the development process, and TIS Version 2.0 is already in planning to meet these desires, including a more comprehensive schema, more robust search implementation, and internalized access control.

## Model

