



# The Complete Works

An Intern Progress Summary

By Brandon Danielski



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# First Days of Learning

Getting Started at Multnomah County

# Where to Start with Multnomah County

- ▶ Already Written Documentation from Multco. Google Drive
- ▶ Pluralsight Paths
- ▶ Lots of Questions

# A Focus on Pluralsight

- ▶ An effective resource to get started, especially for learning new skills quickly.
- ▶ When I began I took 8 pluralsight courses in the first two weeks.
- ▶ DSC, powershell, QA, Selenium, C#

# Google Drive Documents

- ▶ The best way to get acquainted with current projects that are in the works.
- ▶ A bit overwhelming due to the sheer number of documents.
- ▶ Accessible to add my own documents to help the next intern get settled faster.
- ▶ Added step-by-step guide for DSC process.

# Asking Questions and Participating

- ▶ Going to meetings helped me understand more about what is expected of me, and is a great time to ask questions.
- ▶ Setting up meeting with co-workers to ask questions is the fastest way to get meaningful results.
- ▶ Asking for various resources helped me gain autonomy when I needed to work alone.

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## Selenium & Quality Assurance

A Look at Selenium Through Visual Studio and its applications to the QA field

# Visual Studio and C#

- ▶ I came into this job with experience in visual studio and C# using winforms.
- ▶ Despite prior experience, I still learned a lot, especially around test explorer and NUnit.
- ▶ Pluralsight also taught me some visual studio testing skills that I use for current unit testing projects.



# Selenium and Testing

- ▶ I had no prior experience with either Selenium or test building in general, so pluralsight and other documentation was paramount to learning these skills.
- ▶ Meeting with Rikki and Matthew were very important to the successes in testing I have had so far.

# VELMA

- ▶ VELMA testing required some database usage, luckily I had some SQL experience from school and prior internships. Still, there was a lot to learn here.
- ▶ Learned about altering stored procedures and creating complex queries in visual studio to tie in with testing VELMA procedures and data.
- ▶ Currently completed five test suites with over 100 tests.

# Challenges Along the Way

- ▶ Redo of several living situation test due to updates in the LUCI database.
- ▶ Additions of new dates and renames of previous dates. (ONA assessor, LOC removal, ISP Star Date)
- ▶ Upgrade to .net core 3.1.9 broke every test for a few weeks.

# Hearing Loss Calculator

- ▶ I was tasked with creating some unit tests for a hearing loss calculator for DCHS.
- ▶ The tests example had been provided and I was to create tests that validate the calculated answers and make sure the output was identical to the calculations.
- ▶ There were 14 total tests of various expected outputs to create.

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## Desired State Configuration

DSC, its process, and the learning curve involved

# A Steep Learning Curve

- ▶ Learning DSC and the process to create and update modules, resources, configurations, and nodes is complex and difficult.
- ▶ Lots of steps involved, lots of questions and meetings with Steve.
- ▶ I ended up creating a first-time user's guide to help the next intern with this process.

# The First Script

- ▶ The process of completing my first script took a lot of work and a lot of questions.
- ▶ The first script was revolving around adding a resource to set the max memory of a node.
- ▶ Documenting all of these steps will hopefully help the next intern finish their first script more quickly than I did.

# Wide Deploy Script

- ▶ I then created a script that would take the max memory setting and add the parameters, module, and configuration update of the max memory module and add it to several VM configurations at once.
- ▶ This took a long time to do but I was able to get it finished and move on to the next script.



# Incomplete Projects

- ▶ For a few weeks, I attempted a project in which backup folders could be created in DSC.
- ▶ This will help when dealing with several node updates that need to be done at one time.
- ▶ The project was scrapped due to DSC not supporting file creation on network drives.



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# Azure DevOps

A Focusing Shift from DSC to Devops

# Project Validation using Worker API

- ▶ Collaborated with Bhaskar and Drew to create a powershell script for user authentication regarding project creation.
- ▶ Parameters include: Project name, manager, dev team, stakeholder team, QA team, etc.
- ▶ Leverages role and worker API to determine which users can be a part of specific teams associated with a project.

# DSC Repo Migration from SVN

- Currently working on an azure pipeline to perform operations on DSC repo.
- Originally meant to pull data from DSC SVN repo until migration can happen, but upon further research, I have been informed that this is not possible.
- Created a test repo to prepare pipeline for full migration in the future.

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## References and Documentation

The places I went to get started, learn, and advance

# Selenium Reference and Resources

## DSC Google Drive

- Walkthrough of Unit Test with Selenium by Erik Hanson
- Selenium Testing Framework Setup by Matthew Rau
- Velma Testing Framework Documentation by Erik Hanson

## PluralSight Paths

- Automated Testing: End to End: <https://app.pluralsight.com/library/courses/automated-testing-end-to-end/table-of-contents>
- Automated Testing: The Big Picture: <https://app.pluralsight.com/library/courses/testing-automation-big-picture/table-of-contents>
- Automated Testing for Fraidy Cats Like Me: <https://app.pluralsight.com/library/courses/automated-testing-fraidy-cats/table-of-contents>

# DSC Resources and References

## DSC Google Drive

- Powershell DSC Documentation by Erik Hanson
- Brandon's DSC First Time User's Guide by Brandon Danielski
- DSC Technical Reference by Steve Funk-Tracey
- Synopsis of my experience/thoughts with DSC by Steve Erik Hanson
- DSC For SQL VMs by Steve Funk-Tracey

## PluralSight Paths

- Getting Started with Azure Automation:  
<https://app.pluralsight.com/library/courses/azure-automation-getting-started/table-of-contents>
- Play by Play: Elastic Scale and Consistency with Azure Automation DSC:  
<https://app.pluralsight.com/library/courses/play-by-play-azure-automation-dsc-elastic-scale-consistency/table-of-contents>
- Managing Configurations with Azure Automation DSC:  
<https://app.pluralsight.com/library/courses/azure-automation-dsc-managing-configurations/table-of-contents>

# Azure DevOps Resources and Refs.

## PluralSight Paths:

[Continuous Delivery and DevOps with Azure DevOps: The Big Picture](#)

[Continuous Delivery and DevOps with Azure DevOps: Source Control with Git](#)

[Continuous Delivery and DevOps with Azure DevOps: Managing Builds](#)

[Continuous Delivery and DevOps with Azure DevOps: Release Pipelines](#)

## PluralSight Paths(cont.):

[Application Testing with Azure DevOps and Visual Studio 2019](#)

[Feature Toggles, Package Management and Versioning with Azure DevOps](#)

[Microsoft Azure DevOps Engineer: Implement and Manage Azure Pipelines Infrastructure](#)





# Thanks!

**Any questions?**

