

Key Performance Indicators



"IMO aims to develop, manage, and license medical terminology and healthcare IT software applications that allow clinicians to capture their clinical intent at the point-of-care"

Agenda

- Team Introduction
- Objective
- Research
- Process Flow
- JIRA, TFS, Octopus
- Deliverables
- Future Deliverables & Conclusion
- Questions



ELC Team

TEAM MEMBERS

Alec English

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COACHES

Dhana Lakshmi Chinta (Asst. Coach)

Neil Doughty

Project Topic:

Key Performance Indicators

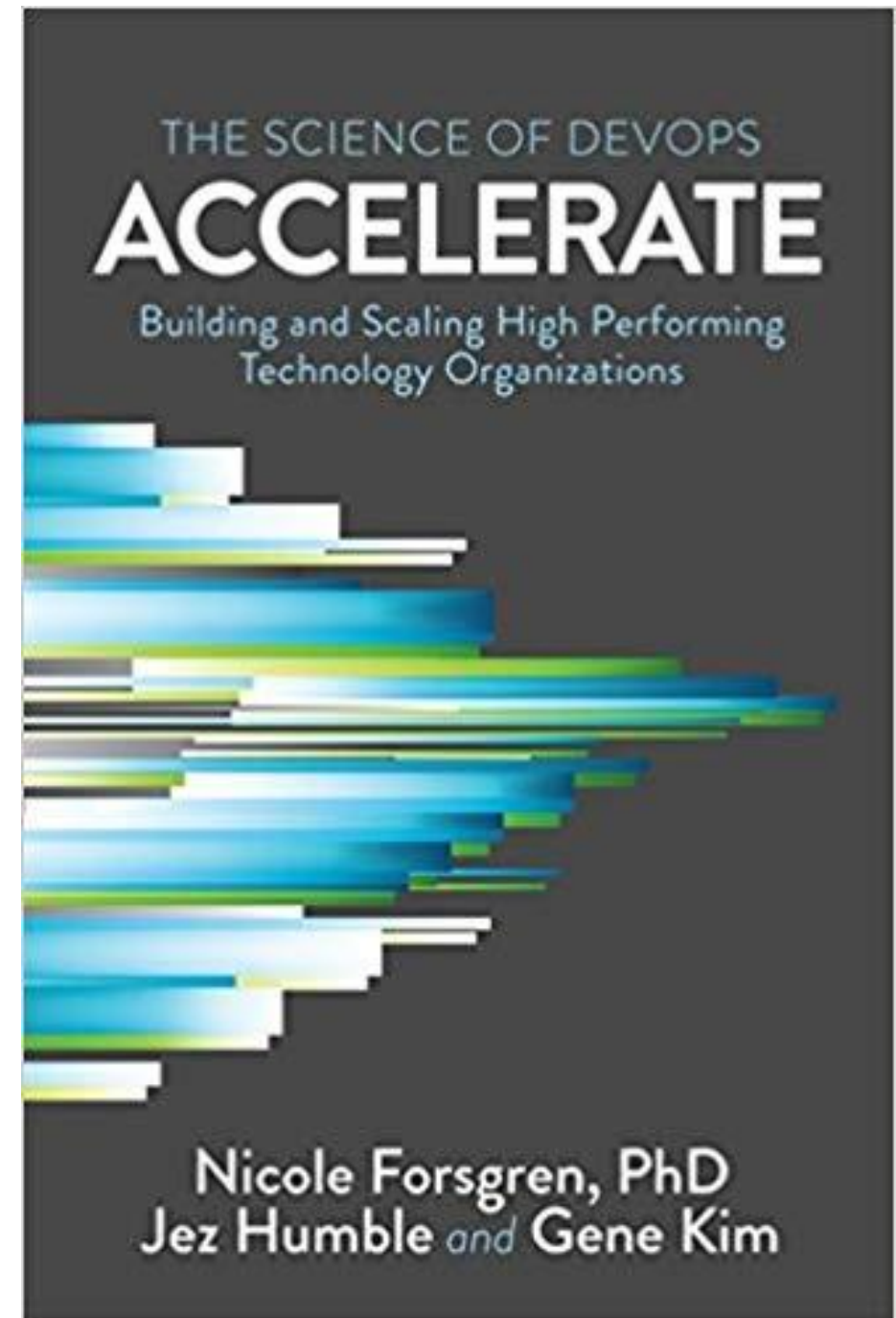


Objective

- Develop Key performance indicators to determine if business changes have a positive impact.
- Research and discuss KPIs with IMO team to receive data and implement proposed KPIs using sourced data.
- Make recommendations on data to use to model and report on these KPIs.
- Implement proposed KPIs to finalize functionality and measurability of DevOps practices.
- Report Findings to IMO team and help improve delivery.

Research

- State of DevOps - Report
- Accelerate
- Visit to IMO
- Key Points of Research:
 - Version Control
 - Deployment Automation
 - Loosely coupled Architecture
 - Empowered teams

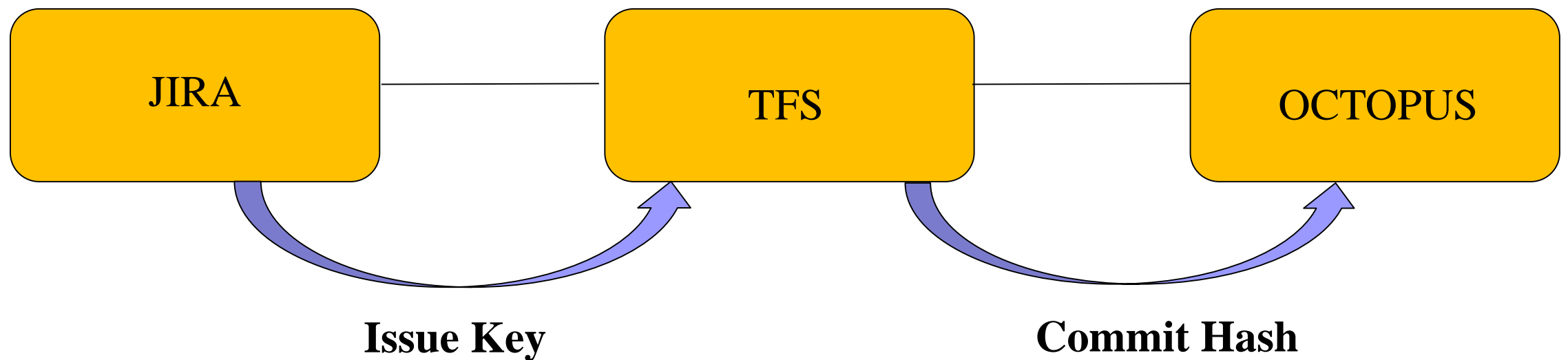


Process Flow

- JIRA
 - Ticketing system
- TFS
 - Code and build (Version control system)
- Octopus
 - Deployment Environment

Process Flow

- Establishment of connection between data sources
- Calculate Lead time to analyze and find ways to increase the delivery speed of the product.



JIRA

- Data Provided

projects: IPL, CLS, PERSE

- Current State

- Present state of the issue

- Status Change

- Changes in the status that the issue has underwent

- Subtasks

- Minor tasks related to the current state

JIRA - Current State

	A	B	C	D	E	F	G	H	I	J	K	
	issue_id	project_name	issue_key	issue_type	summary	created	resolutiondate	priority	issue_status	resolution_status	reporter	assignee
1	203208	Centralized Loggin	CLS-1576	Story	Remove SQS permissions from SNS Subscribe Policy	2019-02-13 19:20:52.151+00		None	Open		azimmerman	mdecar
2	66904	Centralized Loggin	CLS-1	Story	TIMEBOX 2 Days - Early Warning Notification System	2015-07-29 14:28:11+00	2015-09-03 09:31:02+00	None	Closed	Done	ssolimini	aburck
3	68227	Centralized Loggin	CLS-42	Task	Build a scalable (master-slave) Jmeter environment	2015-08-17 14:32:37+00	2016-04-27 17:06:30+00	None	Closed	Not Necessary	aziz	aziz
4	68378	Centralized Loggin	CLS-39	Story	Change Fact Extractor logging to send timezone info	2015-08-19 13:00:17+00	2016-05-04 13:05:39+00	None	Closed	Fixed	ssolimini	ssolimi
5	68788	Centralized Loggin	CLS-43	Task	Data pipeline Portal logs	2015-08-26 11:34:21+00	2016-04-27 17:09:38+00	None	Closed	Duplicate	aziz	sgahlot
6	69755	Centralized Loggin	CLS-40	Story	Resolve issue with variable number of tabs	2015-09-11 12:00:55+00	2016-04-27 17:10:38+00	None	Closed	Won't Fix	aziz	sgahlot
7	72654	Centralized Loggin	CLS-41	Story	Determine/Document process for updating streams	2015-10-16 16:21:49+00	2016-04-27 17:11:59+00	Medium	Closed	Duplicate	ssolimini	ssolimi
8	84187	Centralized Loggin	CLS-68	Story	Log Node Manager - Add ability to filter active/inacti	2016-02-02 12:59:06+00		Medium	Open		ssolimini	ssolimi
9	84190	Centralized Loggin	CLS-67	Story	Log Node Manager - Add site name	2016-02-02 13:05:37+00		Medium	Open		kjacobs	ssolimi
10	84192	Centralized Loggin	CLS-70	Story	Log Node Manager - Improve Pagination	2016-02-02 13:08:02+00		Medium	Open		kjacobs	ssolimi
11	84915	Centralized Loggin	CLS-25	Story	IFE: Send the Log data to an analyzable database	2016-02-10 16:08:31+00	2018-03-09 13:46:02+00	None	Closed	Not Necessary	cmccorkle	ssolimi
12	84920	Centralized Loggin	CLS-27	Story	IFE: Implement data archiving for S3 and Redshift	2016-02-10 16:15:09+00		None	Open		cmccorkle	ssolimi
13	89281	Centralized Loggin	CLS-7	Story	Load portal SEARCH data into Redshift from S3	2016-03-21 09:52:32+00	2016-05-09 15:30:00+00	High	Closed	Fixed	ssolimini	ssolimi
14	202650	Centralized Loggin	CLS-1552	Story	Create terraform module for a standard ETL Alarms a	2019-02-11 17:32:51.956+00		None	Open		earnold	mdecar
15	93403	Centralized Loggin	CLS-32	Story	Load portal COUNT data into Redshift	2016-04-04 15:35:12+00	2017-02-08 13:02:25+00	None	Closed	Duplicate	aburck	aburck
16	93404	Centralized Loggin	CLS-33	Story	Load portal ITEM data into Redshift	2016-04-04 15:35:27+00	2017-02-08 13:02:24+00	None	Closed	Duplicate	aburck	aburck
17	93407	Centralized Loggin	CLS-34	Story	Load portal DETAIL data into Redshift	2016-04-04 15:35:38+00	2017-02-08 13:02:25+00	None	Closed	Duplicate	aburck	aburck

TFS

- Where the projects and software are built
- Grepwin tool used to search through the text files for the specific issue key.
- Searched through gitlog files for issue keys IPL, CLS or PERSE.
- Attributes in the given source file
 - Commit Hash
 - Author
 - Date and Time
 - Issue Key *
 - Comments

TFS(Log file)

4a206a7 - Howard Luo, Thu Dec 6 13:10:56 2018 -0600 : Merged PR 6732: Merge develop to master
afef2cd - Howard Luo, Fri Nov 30 12:21:15 2018 -0600 : Pushing different product ID
b39050c - Mina Khalil, Wed Nov 21 12:01:08 2018 -0600 : IPL-1650: Updated Roles' ARN for FHIR Authorizer
bf0e7a2 - Mina Khalil, Wed Nov 21 11:23:40 2018 -0600 : IPL-1650: Fixed roles' ARN
368900d - Mina Khalil, Wed Nov 21 10:37:08 2018 -0600 : IPL-1650: Fixed `staging` name invar maps
f9e0a16 - Daniel Hsu, Tue Nov 13 15:25:37 2018 -0600 : Merged PR 6351: Add Custom Authorizer lambda for FhirAdapter
f5e2882 - IMO\dahsu, Tue Nov 13 15:12:22 2018 -0600 : IPL-1528: Use dummy value for MethodArn
502744b - IMO\dahsu, Mon Nov 12 18:46:10 2018 -0600 : IPL-1528: Refactor tests to use json input, use fluent assertions
e7a5395 - IMO\dahsu, Mon Nov 12 13:38:47 2018 -0600 : IPL-1528: Remove autogenerated files
15b6e6b - IMO\dahsu, Mon Nov 12 13:38:28 2018 -0600 : IPL-1528: Rename test files to follow team conventions
d5cca1d - IMO\dahsu, Wed Nov 7 15:02:25 2018 -0600 : IPL-1528: Fix staging reference
133e1a6 - IMO\dahsu, Tue Nov 6 15:48:02 2018 -0600 : IPL-1528: Remove non-existent package
5cac355 - IMO\dahsu, Tue Nov 6 15:30:31 2018 -0600 : IPL-1528: Added FhirAdapterAuthorizer packages to build management
c0718c6 - IMO\dahsu, Tue Nov 6 14:50:58 2018 -0600 : Merge remote-tracking branch 'origin/develop' into feature/IPL-1528
6ed9dd8 - IMO\dahsu, Tue Nov 6 14:43:51 2018 -0600 : IPL-1528: correct file name in FAA nuspec
42621bc - IMO\dahsu, Tue Nov 6 14:26:52 2018 -0600 : IPL-1528: Change folder naming to match build convention?
3e1fb7d - IMO\dahsu, Mon Nov 5 14:07:17 2018 -0600 : IPL-1528: Change target framework to .NET Core 2.0
aacb7f8 - IMO\dahsu, Thu Nov 1 18:39:59 2018 -0500 : IPL-1528: pointed to the right DynamoDB tables
31b9bd6 - IMO\dahsu, Thu Nov 1 15:58:42 2018 -0500 : IPL-1528: Fix directory
6bb0d00 - IMO\dahsu, Thu Nov 1 15:54:44 2018 -0500 : IPL-1528: Include dotnet aws lambda tools to csproj
5e185e0 - IMO\dahsu, Thu Nov 1 15:54:24 2018 -0500 : IPL-1528: Add terraform scripts for lambda
aacc873 - IMO\dahsu, Wed Oct 31 15:17:44 2018 -0500 : IPL-1528: Add terraform scripts
8f831f2 - Howard Luo, Wed Oct 31 13:48:38 2018 -0500 : Merged PR 6342: Merge feature/IPL-1485 to develop
4929328 - Howard Luo, Wed Oct 31 12:19:12 2018 -0500 : IPL-1485: Pushing new value and fixing tf bug
7c69682 - Howard Luo, Wed Oct 31 11:31:56 2018 -0500 : IPL-1485: Renaming variable
fd09312 - Howard Luo, Wed Oct 31 11:25:13 2018 -0500 : IPL-1485: Pushing new integration tests
2ad660a - Howard Luo, Tue Oct 30 16:35:10 2018 -0500 : IPL-1485: Moment of truth part 2

TFS – Customized Data

	A ^B _C Original Data	A ^B _C Commit Hash	A ^B _C Issue_Key	A ^B _C Name	Date_Time
1	a4cff0f - Mina Khalil, Thu Oct 11 15:47:46 2018 -0500 : IPL-1381: Clean...	A4CFF0F	IPL-1381	Mina Khalil	10/11/2018 3:47:46 PM
2	0958476 - Mina Khalil, Thu Oct 11 15:37:23 2018 -0500 : IPL-1381: Up...	0958476	IPL-1381	Mina Khalil	10/11/2018 3:37:23 PM
3	1ca30ee - Mina Khalil, Thu Oct 11 15:35:10 2018 -0500 : IPL-1381: Upd...	1CA30EE	IPL-1381	Mina Khalil	10/11/2018 3:35:10 PM
4	f317252 - Mina Khalil, Thu Oct 11 13:58:20 2018 -0500 : IPL-1381: Ren...	F317252	IPL-1381	Mina Khalil	10/11/2018 1:58:20 PM
5	26bc2c6 - Mina Khalil, Thu Oct 11 13:55:08 2018 -0500 : IPL-1381: Clea...	26BC2C6	IPL-1381	Mina Khalil	10/11/2018 1:55:08 PM
6	5ddaca7 - Mina Khalil, Thu Oct 11 13:50:08 2018 -0500 : IPL-1381: Fixe...	5DDACA7	IPL-1381	Mina Khalil	10/11/2018 1:50:08 PM
7	4a57368 - Mina Khalil, Thu Oct 11 12:07:49 2018 -0500 : IPL-1381: Fixe...	4A57368	IPL-1381	Mina Khalil	10/11/2018 12:07:49 PM
8	f9c8279 - Mina Khalil, Thu Oct 11 11:55:02 2018 -0500 : IPL-1381: Ren...	F9C8279	IPL-1381	Mina Khalil	10/11/2018 11:55:02 AM
9	c678909 - Mina Khalil, Thu Oct 11 11:53:54 2018 -0500 : IPL-1381: Fixe...	C678909	IPL-1381	Mina Khalil	10/11/2018 11:53:54 AM
10	6ed2e7c - Mina Khalil, Thu Oct 11 11:38:01 2018 -0500 : IPL-1381: Ren...	6ED2E7C	IPL-1381	Mina Khalil	10/11/2018 11:38:01 AM
11	e932402 - Mina Khalil, Thu Oct 11 11:36:28 2018 -0500 : IPL-1381: Up...	E932402	IPL-1381	Mina Khalil	10/11/2018 11:36:28 AM
12	94fa211 - Mina Khalil, Thu Oct 11 11:19:10 2018 -0500 : IPL-1381: Upd...	94FA211	IPL-1381	Mina Khalil	10/11/2018 11:19:10 AM
13	dbdea83 - Mina Khalil, Thu Oct 11 11:15:54 2018 -0500 : IPL-1381: Incl...	DBDEA83	IPL-1381	Mina Khalil	10/11/2018 11:15:54 AM
14	936de7d - Mina Khalil, Thu Oct 11 11:07:38 2018 -0500 : IPL-1381: Ren...	936DE7D	IPL-1381	Mina Khalil	10/11/2018 11:07:38 AM
15	4b2e1a5 - Mina Khalil, Thu Oct 11 11:05:29 2018 -0500 : IPL-1381: Ren...	4B2E1A5	IPL-1381	Mina Khalil	10/11/2018 11:05:29 AM
16	22807a6 - Mina Khalil, Thu Oct 11 11:04:13 2018 -0500 : IPL-1381: Ren...	22807A6	IPL-1381	Mina Khalil	10/11/2018 11:04:13 AM

Octopus raw data

Here's the sample of raw source data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Subject	Body															
2	Build success	Open Build															
3	Naming : This case it as 'Metadata' or strip the first token entirely if it represents any sort of Hungarian notation.																
4	Controllers\Chart\ChartController.cs (1542): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortSearch(string)' to catch a more specific exception than 'Exception' or rethrow the exception.																
5	Controllers\Chart\ChartController.cs (1542): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortSearch(string)' to catch a more specific exception than 'Exception' or rethrow the exception.																
6	Controllers\Chart\ChartController.cs (1584): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortPatient(string)' to catch a more specific exception than 'Exception' or rethrow the exception.																
7	Controllers\Chart\ChartController.cs (1584): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortPatient(string)' to catch a more specific exception than 'Exception' or rethrow the exception.																
8	Controllers\Chart\ChartController.cs (1584): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortPatient(string)' to catch a more specific exception than 'Exception' or rethrow the exception.																
9	Controllers\Chart\ChartController.cs (1501): CA1024: Microsoft.Design : Change 'ChartController.GetGrouperCohortGrouper()' to a property if appropriate.																
10	Controllers\Chart\ChartController.cs (1506): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortGrouper()' to catch a more specific exception than 'Exception' or rethrow the exception.																
11	Controllers\Chart\ChartController.cs (1506): CA1031: Microsoft.Design : Modify 'ChartController.GetGrouperCohortGrouper()' to catch a more specific exception than 'Exception' or rethrow the exception.																
12	Controllers\Chart\ChartController.cs (622): CA1031: Microsoft.Design : Modify 'ChartController.EditPatient(FormCollection)' to catch a more specific exception than 'Exception' or rethrow the exception.																
13	Controllers\Chart\ChartController.cs (79): CA2213: Microsoft.Usage : 'ChartController' contains field 'ChartController.m_Foundation' that is of IDisposable type: 'TcFoundation'. Change the Dispose method on 'ChartController' to catch a more specific exception than 'Exception' or rethrow the exception.																
14	Controllers\Chart\ChartController.cs (79): CA2213: Microsoft.Usage : 'ChartController' contains field 'ChartController.m_Foundation' that is of IDisposable type: 'TcFoundation'. Change the Dispose method on 'ChartController' to catch a more specific exception than 'Exception' or rethrow the exception.																
15	Controllers\Chart\ChartController.cs (560): CA1031: Microsoft.Design : Modify 'ChartController.CreatePatient(FormCollection)' to catch a more specific exception than 'Exception' or rethrow the exception.																
16	Controllers\Chart\ChartController.cs (560): CA1031: Microsoft.Design : Modify 'ChartController.CreatePatient(FormCollection)' to catch a more specific exception than 'Exception' or rethrow the exception.																
17	StaticAnalysis\Global.asax.cs or consider a class coupling and a class coupling below 80 indicates good maintainability.																
18	Global.asax.cs if appropriate.																
19	Utilities\File string) correct the spelling of 'filepath' in parameter name 'filepath' or remove it entirely if it represents any sort of Hungarian notation.																
20	Controllers\Chart\ChartController.cs (1183): CA1707: Microsoft.Naming : Remove the underscores from member name 'ChartController.MoveAssessmentToProblem_ConfirmAddingProblem(string)'.																
21	Controllers\Chart\ChartController.cs (1183): CA1707: Microsoft.Naming : Remove the underscores from member name 'ChartController.MoveAssessmentToProblem_ConfirmAddingProblem(string)'.																
22	StaticAnalysis\string string) by changing it to 'Rcm'.																
23	StaticAnalysis\string string) correct the spelling of 'poa' in parameter name 'poa' or remove it entirely if it represents any sort of Hungarian notation.																
24	Controllers\Chart\ChartController.cs (506): CA1709: Microsoft.Naming : Correct the casing of 'RVU' in member name 'ChartController.LoadRVURegionList()' by changing it to 'Rvu'.																

- Some of the final outcomes include Build label, Branch, Commit hash, Repository etc.

Octopus

- Second column's information was hidden
- It's a multi-line column
- Map between Build #, Branch, Commit hash

- Build number
- Commit hash
- Branch
- Repository

Build Label	Branch	Commit hash
ApiAccessManagemement_1.0.0.84	master (from refs/heads/master)	989eeda
BI Lambda Util – Terraform_1.0.2.157	CLS-1330-EA	3e46ff6

Octopus

■ Branch, Commit Hash, Repository

- Extracting Branch, Commit Hash, Repository from body column which consists of large chunks of data.

Sample data of one of the body column cells

Open Build Report in Web Browser <http://prd-tfsfpv01:8080/tfs/Collection01/BusinessIntelligence/_build/detail?buildUri=vstfs%3A%2F%2F%2FBuild%2FBuild%2F28720>

BatchedCI Build of DatabaseDeployment.BI (BusinessIntelligence)

Ran for 0.38 minutes (prd-tfsfpv02 - Controller), completed at Monday 03/06/17 12:08:52 PM.

Request Summary

Status: Succeeded

Requested By: Sneha Agarwal

Commit: refs/heads/master : 1e5a3e5 <http://prd-tfsfpv01:8080/tfs/Collection01/BusinessIntelligence/_git/BusinessIntelligence/ETL/commit/1e5a3e50b54f4f6cba5efe12817403b9c8d5d2d0>

Associated Commits

Hash	Message	Submitter	Date
1e5a3e5	< http://prd-tfsfpv01:8080/tfs/Collection01/BusinessIntelligence/_git/BusinessIntelligence/ETL/commit/1e5a3e50b54f4f6cba5efe12817403b9c8d5d2d0 >	BI-4122: changes to include <u>num_requests</u> column	Sneha Agarwal03/06/2017 12:08:15

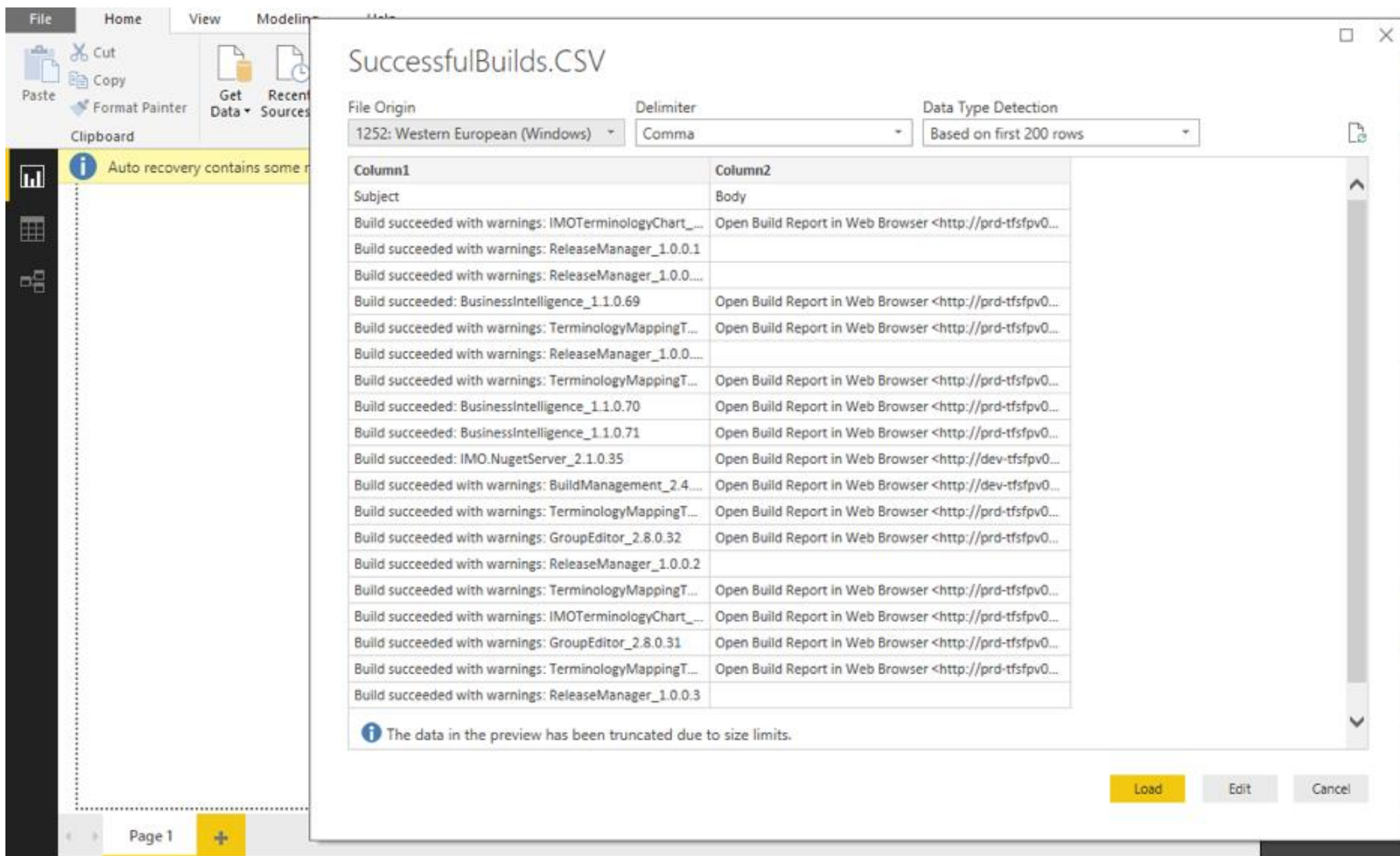
Build Summary

Any CPU\Release: 0 error(s), 0 warning(s).

Test Summary None Generated by IMO TFS Event Subscriber 3.3.0.78

Octopus

- Step 1:
 - Import data from Excel to Power BI.



Octopus

■ Step 2:

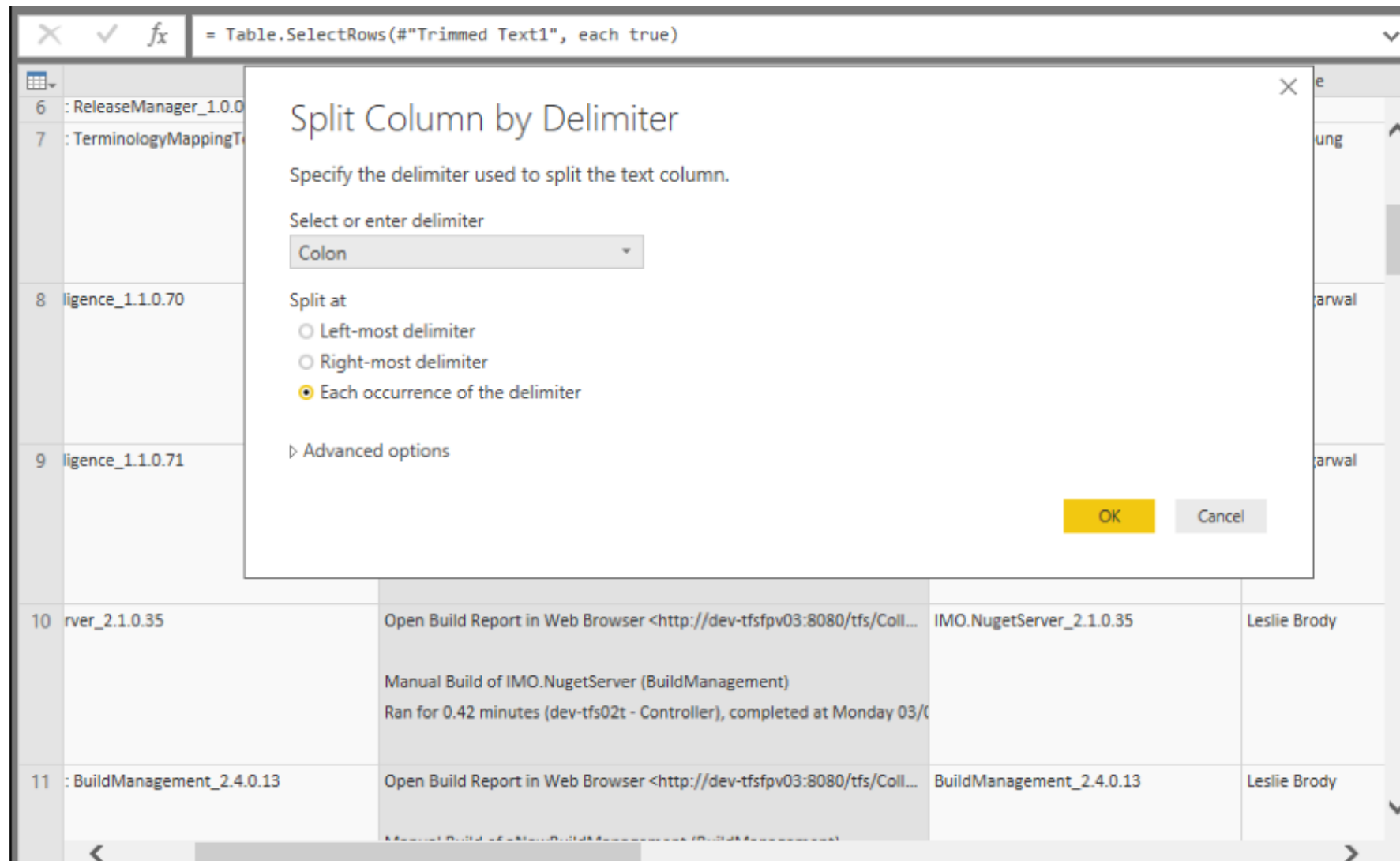
- Extract the build label from the subject column using the extract delimiter colon function.

The screenshot displays the Octopus tool interface. The top ribbon includes various functions such as 'Column From Examples', 'Custom Column', 'Invoke Custom Function', 'Conditional Column', 'Index Column', 'Duplicate Column', 'Format', 'Merge Columns', 'Extract', 'Parse', 'Statistics', 'Standard Scientific', 'Trigonometry', 'Rounding', 'Information', 'Date', 'Time', and 'Duration'. The main area shows a table with columns 'Subject', 'Body', and 'Build Label'. The 'Subject' column is highlighted, and a dialog box titled 'Text After Delimiter' is open, prompting the user to enter a delimiter. The dialog box contains a text input field with a colon ':' entered, and buttons for 'OK' and 'Cancel'.

	Subject	Body	Build Label
1	Build succeeded with warnings: IMOTerminologyChart_2.0.0.186	Open Build Report in Web Browser <http://prd-tfsfpv01:8080/tfs/Coll... BatchedCI Build of IMOTerminologyChart (TerminologyChart)	IMOTerminologyChart_2.0.0.
2	Build succeeded with warnings		
3	Build succeeded with warnings		
4	Build succeeded: BusinessIntell		
5	Build succeeded with warnings		

Octopus

- Step 3:
 - Using split column by delimiter on each occurrence function.
 - Split the body column and extracted Commit Hash, Branch and Repository.



Octopus

■ Step 4:

- Exporting data from Power BI to Excel.
- We inserted the data into tables (rows & columns) using the report functionality in Power BI and exported the data into an excel worksheet.

Build Label	Name	Branch	Full Commit Hash
!0.0+1	David Parks	master	fdbf30bd718011b503
!0.0+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha-0.1	7e633406e6f4dcd872
!0.3+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha-0.1	eb8965f5507cc7b60a
!0.4+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha-0.1	e20bd4a6bf261c49a7
!0.42	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha-0.1	2a579dcfe6836a364b
!0.43	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	e695272b5a817c1344
!0.44	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	903eb8f4816202d7aa
!0.45	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	53d18756df1424c2a6
!0.46	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	3df7a204eacae655cf9
!0.48	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	321d54b2083d7dd9cf
!0.49	Parameswara Chennupati	ngEzAuth-Rewrite-Alpha-0.1	47a7396f126890f8f18
!0.511	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha-0.1	be8cf56b5a5224d0b5
!0.512	Tanmaya Kumar	5761/merge	e9abfdc1a7b48b4114

- Export data
- Show data
- Remove
- Automatically find clusters
- Spotlight
- Sort descending
- Sort ascending
- Sort by

Successful Builds Deliverable

Build Label	Name	Branch	Full Commit Hash	CommitHash	Repository	Complete Repository URL
1.0.0+1	David Parks	master	fdbf30bd718011b5035dca0e5c465715	fdbf30b	DevUtilities	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.0+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha	7e633486e6f4dcd872d0f37ff377c653b807e63348	7e63348	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.3+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha	eb8965f5507cc7b60ae9b15b5bf22228146eb8965f	eb8965f	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.4+1	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha	e20bd4a6bf261c49a712eceed3b2003d53e20bd4a	e20bd4a	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.42	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha	2a579dcfe6836a364b30e68bca5e8e16132a579dc	2a579dc	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.43	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	e695272b5a817c13445387c7fb40821c5ade695272	e695272	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.44	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	903eb8f4816202d7aaac3893290c1d47d87903eb8f	903eb8f	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.45	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	53d18756df1424c2a611c9d57489d16cf0053d1875	53d1875	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.46	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	3df7a204eacad655cf909069cde8b845cbc3df7a20	3df7a20	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.48	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	321d54b2083d7dd9c96d29a264285cf764321d54b	321d54b	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.49	Parameswara Chennup	ngEzAuth-Rewrite-Alpha	47a7396f126890f8f1899d1dfce2d54638147a7396	47a7396	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.511	Tanmaya Kumar	ngEzAuth-Rewrite-Alpha	be8cf56b5a5224d0b58a72665f4172a2695be8cf56	be8cf56	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.512	Tanmaya Kumar	5761/merge	e9abfdc1a7b48b4114a3a19ed4c392152f5e9abfdc	e9abfdc	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.513	Tanmaya Kumar	5761/merge	bc049ea7a06caebb8c9c33f429e6fc54007bc049ea	bc049ea	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.514	Tanmaya Kumar	5761/merge	ef27241016912ee4c93f792489c0afc738bef27241	ef27241	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.515	Tanmaya Kumar	master	a3e17612bbe10d0d9807fe011695a0b0dka3e1761	a3e1761	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.516	Tanmaya Kumar	ngEzAuth-updates-beta	ce6a549e2c4eb0a1f7172942e7b7c99fc6cce6a549	ce6a549	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/
2.0.517	Tanmaya Kumar	ngEzAuth-updates-beta	ce6a549e2c4eb0a1f7172942e7b7c99fc6cce6a549	ce6a549	7c325813-e39d-4779-80c7	http://prd-tfsfpv01:8080/tfs/Collection01/DevUtilities/_git/

Future Deliverables and Conclusion

- Link JIRA ticket numbers all the way through to Octopus.
 - Lead Time
 - Progressive tracking of builds & deployments
- Look at the commits and builds we have now; see how long it took a failed build to turn into a successful build (deployments as well).
- Planning on proposing an automated way to import the data from the source and calculate the time difference between the create and end time of the issue

Thank you

