PREPARED BY

DARRYL MARTIN

CAREER PORTFOLIO 2020

Software Engineering Leader

A proven leader in software engineering, with a passion for solving tough problems, improving processes, expanding technology options, and coordinating people.

Contents

About Me

I am a Software Engineering Leader and have led software engineers since 2005. My background spans several roles, including programmer, project manager, DBA, manager, and director. During my career I have led development on large data SaaS systems, online commerce websites, ERP systems, and other types of products.

I have three primary passions as a manager. I excel at coordinating tasks and projects between various groups and people. I love improving technology and engineering processes. And I enjoy helping groups of engineers bond into trusting, solid, performing teams.

Over the last few years I have led multiple teams as the Director of Software Engineering and IT. I have coordinated projects with teams halfway around the globe, led customer technical support operations, led and helped design new network infrastructures, migrated legacy systems into AWS, created new platforms in Google Cloud Platform and AliCloud, introduced agile and best coding practices to a new team, worked with vendors, executives, consultants, and customers.

I am looking for new challenges and open to opportunities. Reach out to darryl.martin@gmail.com to connect!

A. Darryl Martin

19170 Leland Rd., Oregon City, OR, 97045 • 503.451.0451 • darryl.martin@gmail.com •
https://www.linkedin.com/in/darryl-martin

CORE COMPETENCIES

- Software Engineering
- Project Management
- Strategic Planning
- Problem Resolution
- Agile Processes
- SDLC Process
- Resource Management
- Hiring
- Communication
- Architecture and Design
- Cloud Services
- Transition management
- Big data management
- Remote/Distributed Team Management
- SQL & NoSQL
- Database Design
- SaaS
- Python, Perl, C, Java
- Jira
- APIs
- Full Stack

PROFESSIONAL EXPERIENCE

Vobile Portland, Oregon
Executive Director of Engineering and IT *November 2015 – March 2020*

Responsibilities
- Recruited to bolster efficiency, grow the engineering group, and lead system and cloud migrations.
- Responsible for everything tech related in the Portland office, including software engineering, technical support, and help desk.

Achievements
- Migrated large legacy system, databases, and SaaS products from a third party hosted environment to a self-managed AWS environment, cutting infrastructure costs by 25% and greatly increasing flexibility.
- Transitioned IT and Engineering from a legacy maintenance role to an agile new product development role, enabling us to create new business in foreign markets.
- Streamlined legacy operations and tech support processes, decreasing needed support time by 80%.
- Aligned technical and business strategies for all levels of management and other American and Chinese offices, accelerating the release of product solutions.
- Designed and built an internal content management system, working with U.S. and Chinese stakeholders to greatly increase efficiency, doubling production for half the cost.
- Moved the company from a third party hosted network and MSAD service to a self-hosted one, with no unexpected down time or complications, cutting infrastructure costs by 15% and allowing greater mobility.
- Developed processes and software to manage digital video distribution, delivering enhanced products with minimal human oversight.

Rentrak Portland, Oregon
Senior Manager Software Engineering – On Demand Entertainment *October 2012 – October 2015*

Responsibilities
- Volunteered for transfer to lead Strategic Projects/New Technology group with three programming teams, some remote.
- Maintained, enhanced, and optimized multiple SaaS sites and data warehouses, including ETL of a billion transactions per month.
- Collaborated closely with data analysts to create new insights for clients, leading to more new customers and renewals.
- Matched new products to appropriate technology, such as the cloud, increasing reliability and speed to market.
- Directed technology coordination over all Rentrak departments, reducing redundancy and increasing company efficiency.

A. Darryl Martin

19170 Leland Rd., Oregon City, OR, 97045 • 503.451.0451 • darryl.martin@gmail.com •
https://www.linkedin.com/in/darryl-martin

Achievements

- Rightsized and optimized teams to create high performing units to help the company move forward quickly and nimbly.
- Created Rentrak's first multi-national data ETL and reporting services, opening new markets for business growth.
- Transitioned Rentrak from static formatted customer reports to a company-wide adoption of a dynamic business intelligence reporting system, decreasing report development time by a factor of 10 and greatly enhancing users' reporting abilities.
- Served as the primary liaison between engineering and other departments and sub-departments, removing barriers, creating cross-functional collaboration and amplifying business performance.

Director of Information Services – Home Entertainment *October 2011 – October 2012*

Responsibilities

- Promoted to Director role, taking over two software engineering teams and a software engineering manager.

Achievements

- Successfully converted/incorporated two large software acquisitions from Microsoft software stacks into modified forms of our software stack, cementing a relationship with Sony Pictures.
- Molded group of independent engineers into a closely bonded, high performance team, and delivered a highly visible new system successfully.

Software Development Manager – Home Entertainment *January 2005 – September 2011*

Responsibilities

- Promoted to Manager after years of coding and project management.

Achievements

- Moved legacy ERP software from a single server environment to a multi-server, multi-tier environment, providing flexibility and expandability for years to come.
- Converted several legacy systems into web interfacing systems, allowing more flexibility, security, and efficiency, freeing up Operations staff for other tasks.
- Successfully implemented an agile Scrum process and introduced it to the rest of the company, creating a culture of fast, incremental product improvement.

EDUCATION

Oregon State University: B.S., Computer Science

- Presidential Scholar

Dale Carnegie: Effective Communications

ASPE: Developing Effective Business Requirements

Grant Thompson: Leadership Training

Ameriben: Advanced Essentials of Management Training

PPT Migration: Project overview

Goal

- Move from third party managed network to our own network, including MSAD / Windows Server implementation.
- Move thousands of legacy programs from third party managed instances to AWS.
- Move multiple Oracle and PostgreSQL databases from third party management to AWS.
- Replace third party owned data source and management system.
- Move systems shared with third party to AWS, maintaining connections to third party database.

Additional restrictions

- No additional latency with legacy terminal-based programs.
- Maintain connection to third party network while enabling quick move to different offices if necessary.
- Loss of major customers shortly after project start rolled back plans for additional hiring and limited the budget.

Results

- Worked closely with third party infrastructure team to separate networks successfully.
- Established new MS network with SSO.
- Moved databases and programs with limited, planned downtime and no major complications.

Project artifact samples

- Sub-project proposal
    - We needed CEO approval of each major step. In some cases, we also needed third party approval. I worked with the engineers and primary stakeholders to determine options and recommendations. Then I put together proposals. These slides are pulled from one such proposal.
- Cost savings proposal
    - Due to budget constraints, we weighed the cost benefit of every decision. I worked hard to come up with other avenues of cost saving, as well, such as this proposal to move some instances to AWS Reserved Instances. I argued my case for several months before convincing the necessary approver.
- System diagram
    - Some of the programs were nearly thirty years old and couldn't be rewritten. This is a rough diagram of final system structure.
- Project Gantt chart
    - The move had a large number of dependencies. Gantt charts were critical to maintain proper order.

Sample slides from a sub-project proposal

Vobile

Separating from comScore

Unraveling the combined IT and Engineering systems

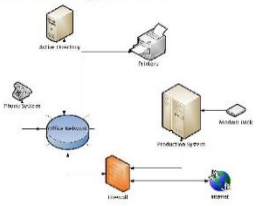
March 2016

Where are we today?

Vobile

Current IT Configuration

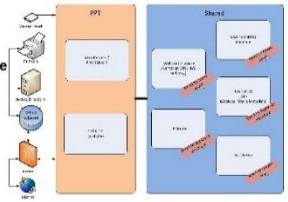
- PPT and comScore share a flat network
- All PPT systems are in the Portland office
- *ComScore manages all of the hardware and infrastructure*



Vobile

Current Production Configuration

- PPT and comScore share five major tech systems
- All shared systems are critical to PPT production
- Most shared systems must be *collocated* with other PPT systems



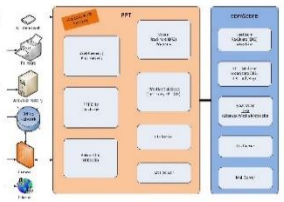
Vobile

What do we need to do to become independent of comScore?

Vobile

Proposed Production Configuration

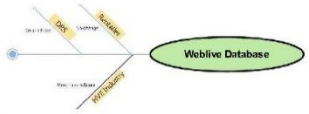
- Shared systems must be split apart or recreated
- System splits require programming by both Vobile and comScore
- Full split makes an office move considerably easier



Vobile

Shared Site Database

- Both companies share the "Weblive" database
- We need to split the database and create a data file feed system to copy data from Vobile to comScore



Vobile

Work Requirements

TASK	REQUIREMENTS (very rough estimates)
RevShare split	A week or two of programming from each company
Weblive split	Two or three weeks of programming from each company ISG database creation and setup
Replace metadata	Three to four weeks of Vobile programming Vobile database creation and setup
New FTP service	Vobile server setup Good customer coordination
New Mail server	Vobile server setup Vobile system integration

Vobile

Separation Work Summary

- Several shared system must be separated before we can move our production system into Amazon
- We need at least three focused months to work through the Vobile requirements
- ComScore will need at least a month and a half to work through things on their side
- Some work will require Vobile and comScore working together

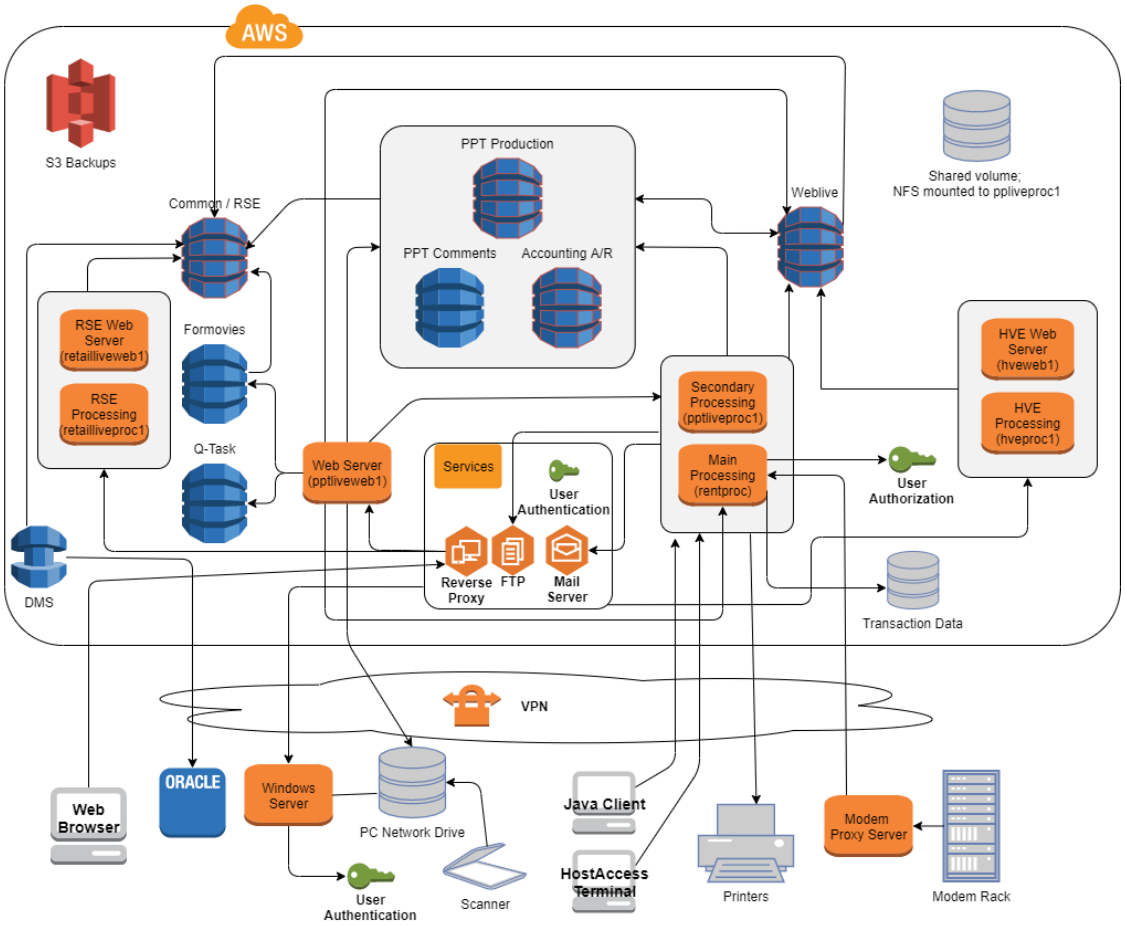
Vobile

Cost Savings Proposal

AWS Reserved Instance Cost Savings

Region	Type	CPU	Mem (GiB)	Storage	In Use	Proposal #	Unit Original Price / Yr	Unit Reserve Price (All Upfront)	Unit Reserve Price(Partial Upfront) Total	Upfront	Monthly	Unit Reserve Price (No Upfront)	Total Original Price	Total Reserve Price (All Upfront)	Total Reserve Price (Partial Upfront) Upfront	Monthly	Total Reserve Price (No Upfront)	
us-west-2	t2.medium	2	4	EBS Only	3	3	406.46	235.00	240.00	120.00	10.00	251.40	1219.39	705.00	360.00	30.00	754.20	
us-west-2	t2.large	2	8	EBS Only	6	6	812.93	470.00	480.00	240.00	20.00	503.76	4877.57	2820.00	1440.00	120.00	3022.56	
us-west-2	m4.large	2	8	EBS Only	1	1	876.00	507.00	516.36	258.00	21.53	543.12	876.00	507.00	258.00	21.53	543.12	
us-west-2	m4.xlarge	4	16	EBS Only	3	3	1,752.00	1013.00	1033.84	517.00	43.07	1085.40	5256.00	3039.00	1551.00	129.21	3256.20	
us-west-2	c4.xlarge	4	7.5	EBS Only	2	2	1,743.24	1039.00	1055.60	530.00	43.80	1103.76	3486.48	2078.00	1060.00	87.60	2207.52	
us-west-2	db.m4.large (Oracle)	2	8	gp2	1	1	3,600.36	2118.00	2159.88	951.00	100.74	2531.64	3600.36	2118.00	951.00	100.74	2531.64	
us-west-2	db.m4.xlarge (Oracle)	4	16	gp2	2	2	7,209.48	4237.00	4319.76	1902.00	201.48	5054.52	14418.96	8474.00	3804.00	402.96	10109.04	
us-west-2	db.m4.2xlarge (Oracle)	8	32	gp2	1	1	14,410.20	8473.00	8648.28	3804.00	403.69	10117.80	14410.20	8473.00	3804.00	403.69	10117.80	
us-west-2	db.m4.large (Postgres)	2	8	gp2	6	6	1,594.32	921.00	937.20	324.00	51.10	1103.76	9565.92	5526.00	1944.00	306.60	6622.56	
						25							57710.88	33740.00	15172.00	1602.33	39164.64	Total
														23970.88	**23310.92**		**18546.24**	Yearly Saving ($)
														42%	40%		32%	Yearly Saving %
																34399.96		
												Avg. Monthly Price Comparison	4,809.24	2,811.67	2,866.66		3,263.72	

System Diagram



LEGEND

Postgres Database

Oracle Database

Virtual Machine

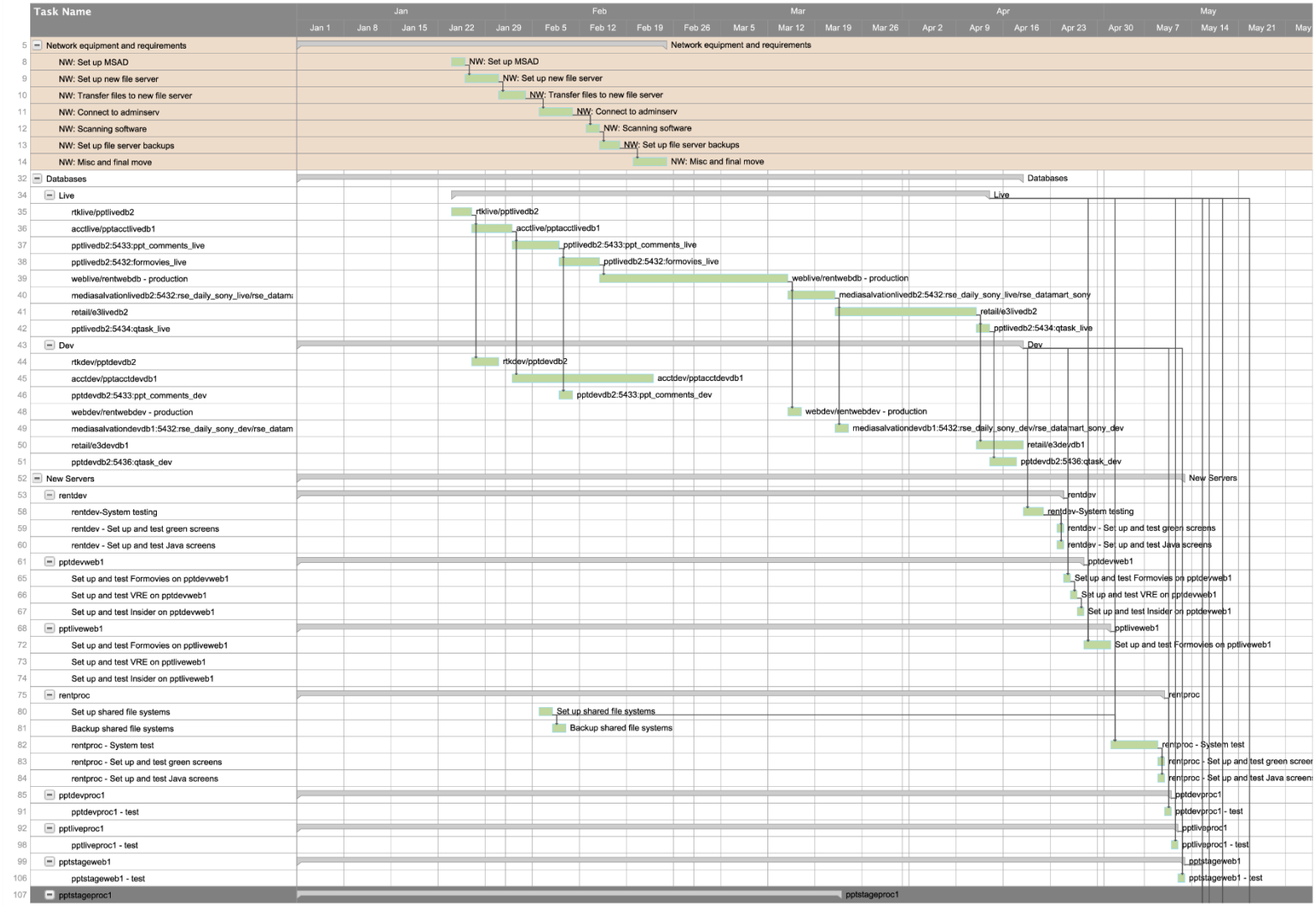
Two VMs handling different responsibilities

* The mail server uses Simple Notification Service to send email to a DC in Hillsboro for processing.
* The Windows Server provides authentication for internal websites via LDAP.
* "Services" also handles monitoring, internal only reverse proxies, secondary private DNS, and LDAP for all AWS servers. This LDAP is different from the Windows Server LDAP.
* User authorization is handled within web sites or through a proprietary service.
* All databases use Amazon RDS.
* All RDS databases are automatically backed up.
* Other servers are backed up using ebs AMIs and manual file backups to S3.
* The DMS service loads about 1TB/month
* We use CloudWatch Alerts for database monitoring. We use Zabbix for other monitoring.
* Servers use EC2 w/EBS (8TB SSD, 6TB local snapshots, 700GB remote snapshots)
* We do not create any servers dynamically.

* There is one VPC with an internet gateway allowing access to the two Services instances. Other instances access the internet through a NAT gateway.
* There are four subnets.
* There two elastic IPs.
* There are three security groups.
* Nearly all systems are closely interlinked. All Oracle databases, in particular, are tied together and cannot be separated.

Project Gantt Chart

AWS Rundown



Exported on January 23, 2017 3:35:48 PM PST

Page 1 of 2

Video Content Management System: Project overview

Goal

- Streamline process from video file reception to delivery to distributor. Create web-based screens to manage video title metadata, video file storage, and video transcoding.

Additional restrictions

- Required to use Google Cloud for primary system.
- China office to share metadata for their own system.

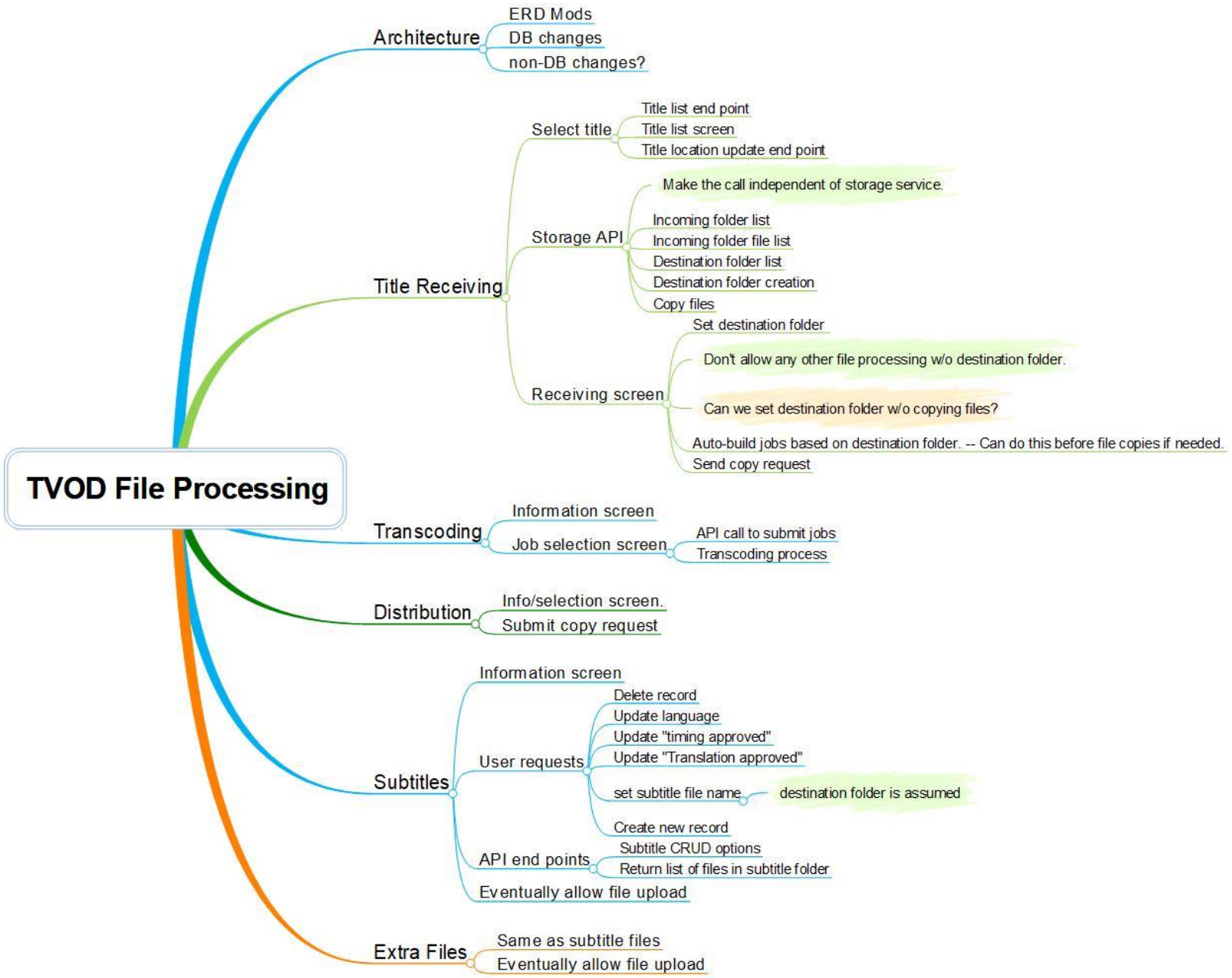
Results

- Created web interface to enter metadata and govern file movement.
- Created programs to handle files based on various triggers.
- Created APIs for easy data sharing.

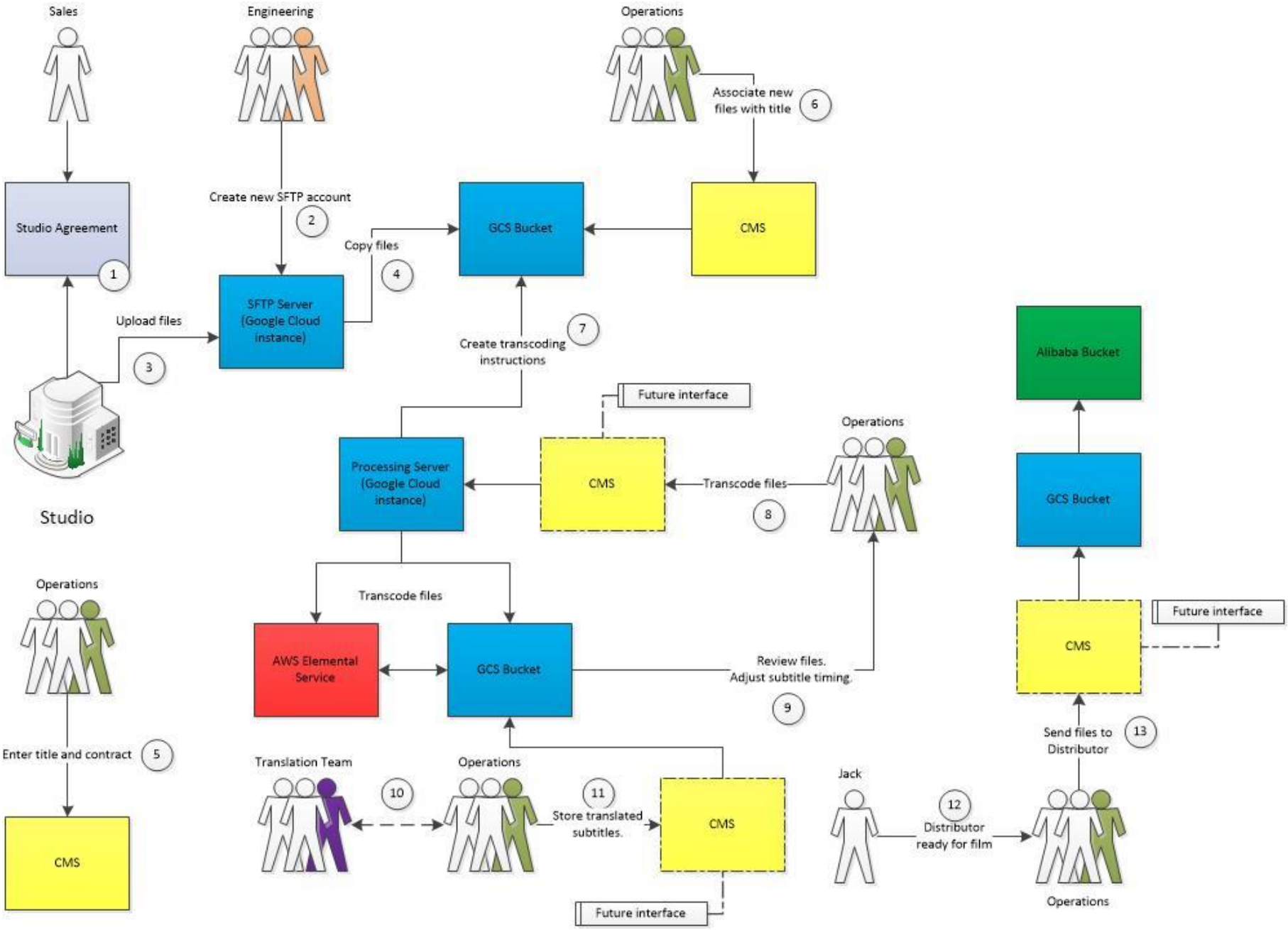
Project artifacts samples

- File processing mind map
    - We started the file processing sub-project with a brain dump of everything related. Once we got everything down, we were able to parse and prioritize, determining what would be automated, what would be manual, what was a “must have”, and what was a “nice to have”.
- File processing workflow diagram
    - We had stakeholders throughout the company, in different departments and different locations. It was critical to make sure everyone understood the expected process flow. I created a workflow diagram for everyone to reference.
- Training manual for editing subtitles
    - Some jobs couldn’t be automated. I researched subtitle editing, wrote a training manual, and trained the staff that would handle it.
- Comparison of file flow options
    - Different people had different ideas for file flow architecture and process. I diagramed the different approaches and showed cost comparisons. Other comparisons, such as performance, were discussed separately.

Mind Map


TVOD File Processing
Architecture
ERD Mods
DB changes
non-DB changes?
Title Receiving
Select title
Title list end point
Title list screen
Title location update end point
Storage API
Make the call independent of storage service.
Incoming folder list
Incoming folder file list
Destination folder list
Destination folder creation
Copy files
Receiving screen
Set destination folder
Don't allow any other file processing w/o destination folder.
Can we set destination folder w/o copying files?
Auto-build jobs based on destination folder. -- Can do this before file copies if needed.
Send copy request
Transcoding
Information screen
Job selection screen
API call to submit jobs
Transcoding process
Distribution
Info/selection screen.
Submit copy request
Subtitles
Information screen
User requests
Delete record
Update language
Update "timing approved"
Update "Translation approved"
set subtitle file name
destination folder is assumed
Create new record
API end points
Subtitle CRUD options
Return list of files in subtitle folder
Eventually allow file upload
Extra Files
Same as subtitle files
Eventually allow file upload

Workflow Diagram



Training Manual Pages

2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com

Purpose

We often get video subtitle files that are close to what we need but need some adjustments before we can use them. We've found that the Windows program "Subtitle Edit" works well to make these adjustments.

The goal of this document is to introduce you to the "Subtitle Edit" program and give tips on how to best use it.

Introduction to Subtitle Edit

Installing the Program

1. Install the Subtitle Edit software

   Go to https://github.com/SubtitleEdit/subtitleedit/releases.

   Under the most recent release look go to the Downloads section and look for ***SubtitleEdit-3.5.4-Setup.zip*** (or whatever the current version number is).

   Download and run the program. This will install Subtitle Edit onto your computer.

2. Install LAVfilters codecs

   Go to https://github.com/Nevcairiel/LAVFilters/releases.

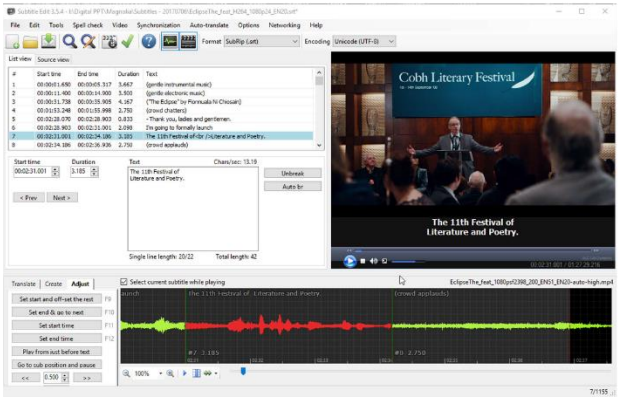
   Download and install LAVFilters-0.70.2-Installer.exe (or whatever the current version is). Use the default install settings.

3. Download and install the VLC media player.
   https://www.videolan.org/vlc/download-windows.html

Setting Things Up

Adjusting the Settings

2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com



If at any point you make a mistake, don't worry. You can undo your changes through the Edit menu or with Ctrl-Z.

When you're finished with your edits make sure to Save them.

Expert Tips

- Always make sure that the consumer can read the subtitles. This can be difficult during scenes of rapid dialog or people talking over one another. Sometimes you can't make the words line up well with the dialog. That's okay.
- Subtitle Edit gives you several ways to adjust time in small increments. You can move the video backward and forward by microseconds. You can manually set the start time of a subtitle

2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com

Once the subtitle and video files are loaded you can double click any subtitle line and it will advance the video to the matching location, as designated by the subtitle's "Start time" and "End time" fields.

Updating Subtitle Times

Open a subtitle file and its matching video file.

You can double click on a subtitle line to jump the video to its position. Or you can play the video using standard video player controls.

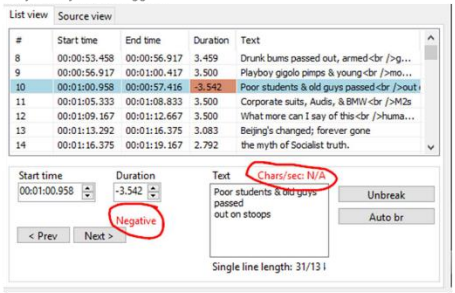
When you the reach the moment when the video dialog starts:

1. Make sure you have selected the proper subtitle line.
2. Click the "Set start time" button (F11).
3. Play the video until the dialog is over, giving a little extra time to read the subtitle if necessary and the speed of the dialog allows it.
4. Click the "Set end time" button (F12).
   Alternatively, you can click the "Set end & go to next" button (F10), which will jump to the next subtitle line.
5. Repeat as necessary.

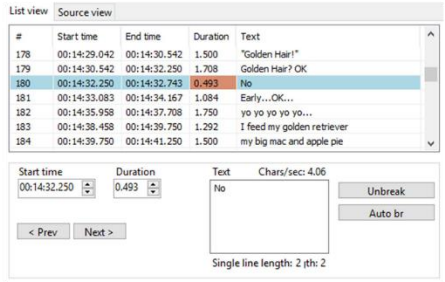
Alternatively, you can use the wave forms to make your edits. If you have installed the VLC media player, click in the box near the bottom of the screen where it says, "Click to add waveform". You can move the wave

2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com

- Review all the subtitles the program flags. When you select the subtitle Subtitle Edit will usually tell you why it was flagged.



- Sometimes Subtitle Edit will flag a line that isn't a problem. Use your best judgment.
  In the example below, the word "No" is given less than a half a second on the screen. If this is in the middle of a scene with rapid dialog, it doesn't take long for a reader to recognize such a short, common word.



Comparison of Options

Vobile®
2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com

TVOD File Flow

The first diagram shows the paths a typical video file travels during the TVOD process. We are charged every time a file leaves cloud storage and goes outside the cloud platform. This is true for Google Cloud, AWS, and Alibaba Cloud.

In the current setup we are charged for downloading a file to the Portland office for review, sending the file to AWS Elemental for transcoding, transferring the file from Google to Alibaba, and every time a distribution platform downloads the file.

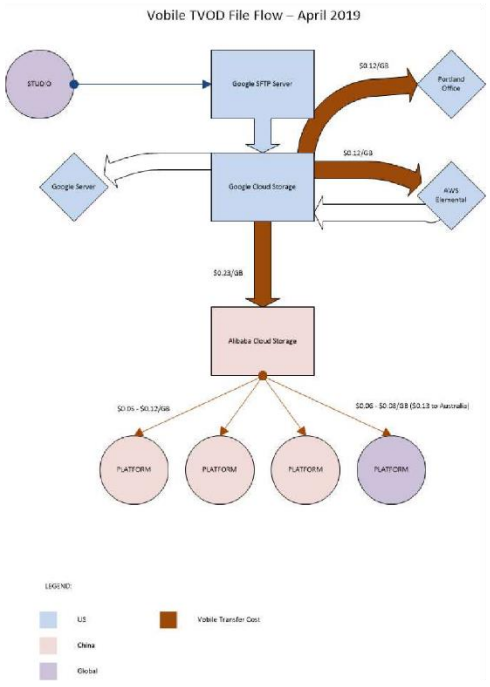
We are discussing the possibility of using only Google Cloud, no longer using Alibaba. The second diagram shows a video file path in that scenario. We are assuming that all files will be stored in the Hong Kong region of Google Cloud, although the cost is the same from the Oregon region. The important thing is that all the files need to be in the same region.

The transfer costs are the same as the current setup with two exceptions. First, there is no transfer from Google to Alibaba. Second, platforms download from Google instead of Alibaba.

The table at the end of this document shows the total cost breakdowns.

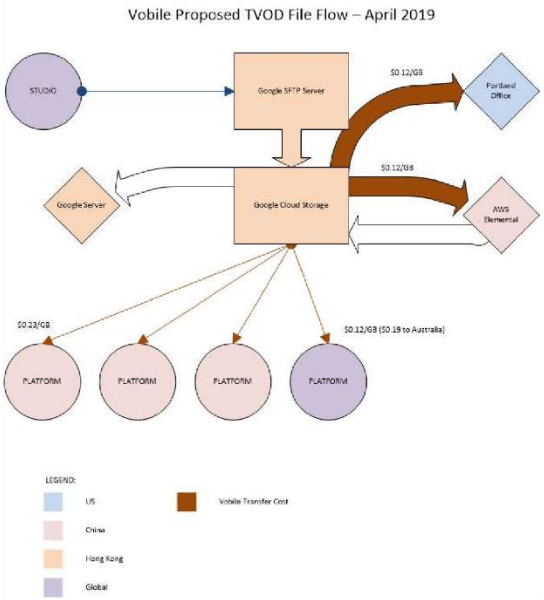
1

Vobile®
2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com



2

Vobile®
2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com



3

Vobile®
2880 Lakeside Drive, Suite 360
Santa Clara, CA 95054
Phone: 408.217.5000
Fax: 408.212.8300
www.vobileinc.com

	A	B	C	D	E	F	G	H
1	Architecture	Origin Size	Transcoded Size	Transfer to Portland	Transfer to Elemental	Transfer to Alibaba	Transfer to CN Platform	Transfer to non-CN Platform
2	Current	100	14	$ -	$ 12.00	$ 3.22	$ 1.26	$ 0.38
3	Current	20	14	$ 2.40	$ 2.40	$ 3.22	$ 1.26	$ 0.38
4	Hong Kong Only	100	14	$ -	$ 12.00	$ -	$ 3.22	$ 1.68
5	Hong Kong Only	20	14	$ 2.40	$ 2.40	$ -	$ 3.22	$ 1.68
6								
7								
8			TOTAL: 5 CN Platforms	TOTAL: 5 non-CN platforms	TOTAL: 20 CN Platforms	TOTAL: 20 non-CN platforms	Google Storage / month	Alibaba Storage / month
9			$ 21.52	$ 20.12	$ 40.42	$ 34.82	$ 2.96	$ 0.02
10			$ 14.32	$ 12.92	$ 33.22	$ 27.62	$ 0.88	$ 0.02
11			$ 28.10	$ 20.40	$ 76.40	$ 45.60	$ 2.96	$ -
12			$ 20.90	$ 13.20	$ 69.20	$ 38.40	$ 0.88	$ -
13								
14								
15	Transfer costs:		1000 20 GB Films on 5 CN Platforms and 5 non-CN Platforms					
16			Current		$ 5,448.00			
17			Hong Kong Only		$ 6,820.00			
18								
19								
20			1000 100 GB Films on 5 CN Platforms and 5 non-CN Platforms					
21			Current		$ 8,328.00			
22			Hong Kong Only		$ 9,700.00			

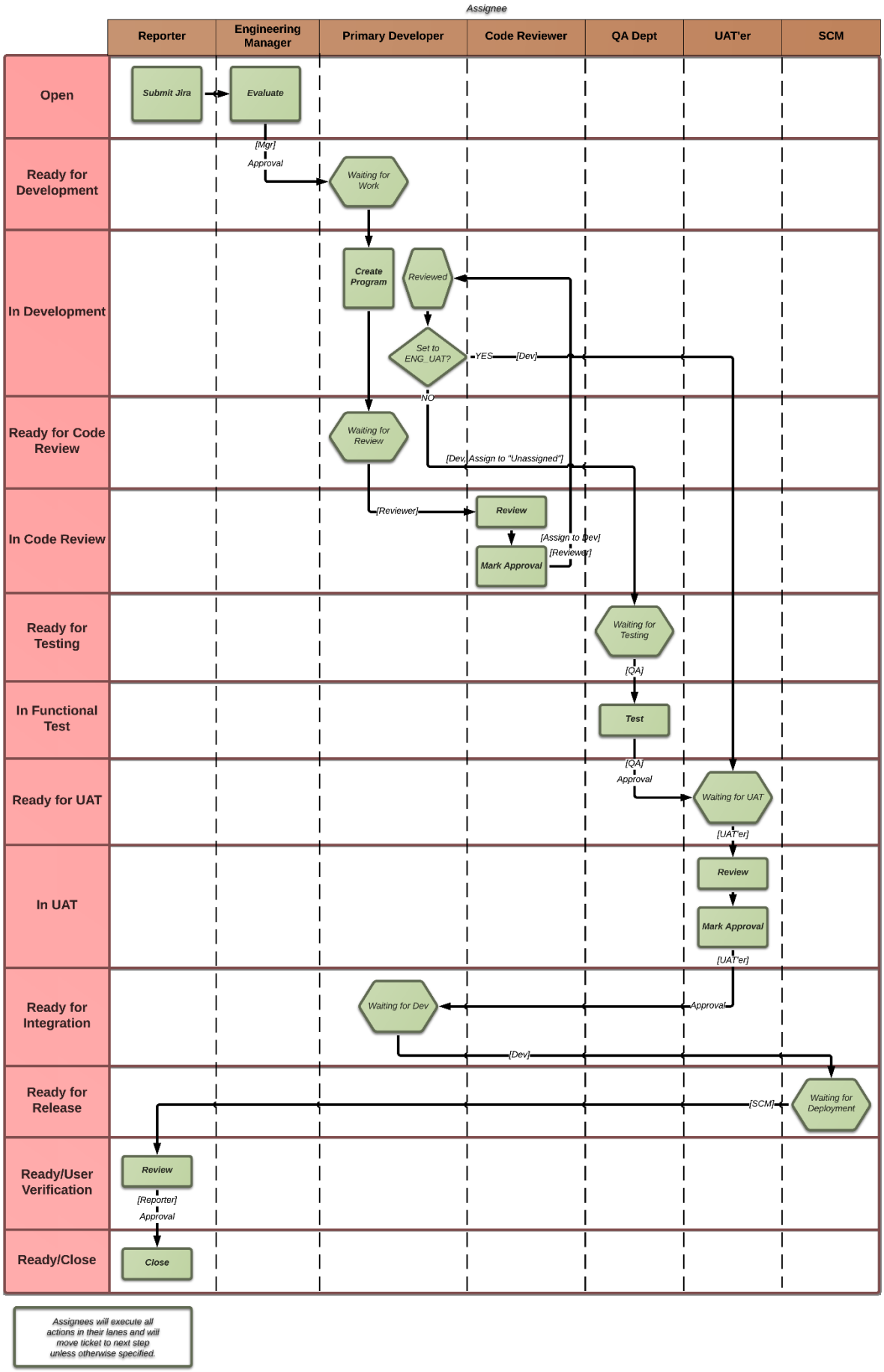
4

Non-project Documents

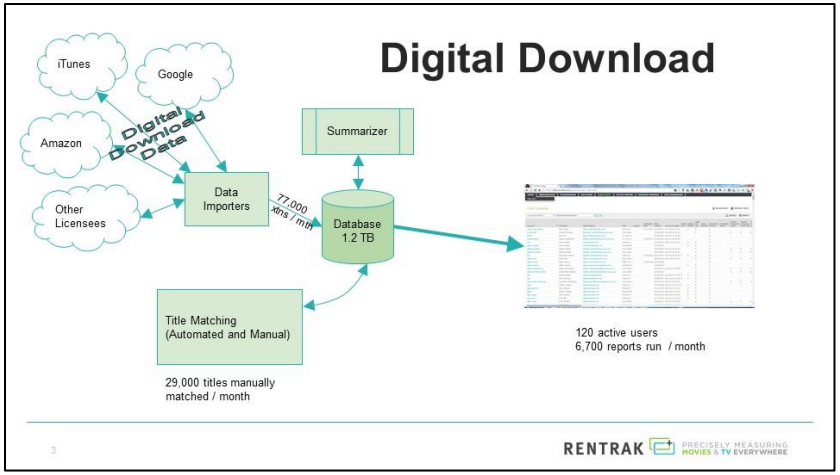
Not everything is related to projects. Below are some other samples of my work, including a formal SDLC workflow, a PowerPoint presentation, and a written recommendation I presented to promote one of my staff.

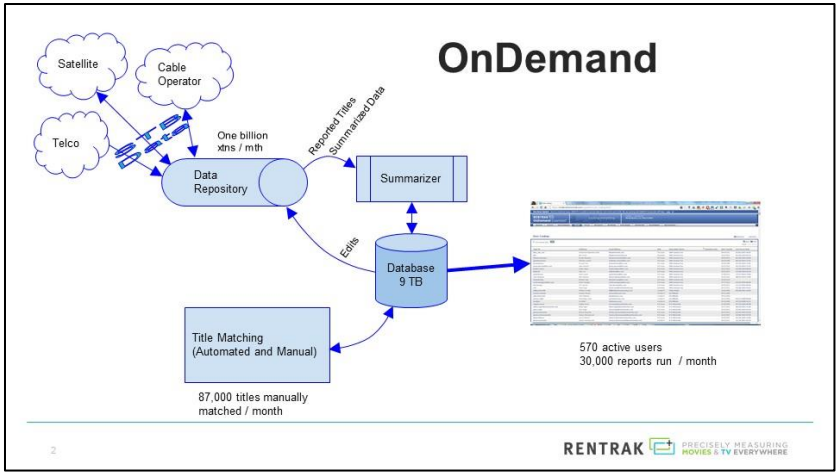
Privacy concerns prevent me from showing more staff related documents. I am very familiar with employee reviews, staff budgeting, working with HR, and the like.

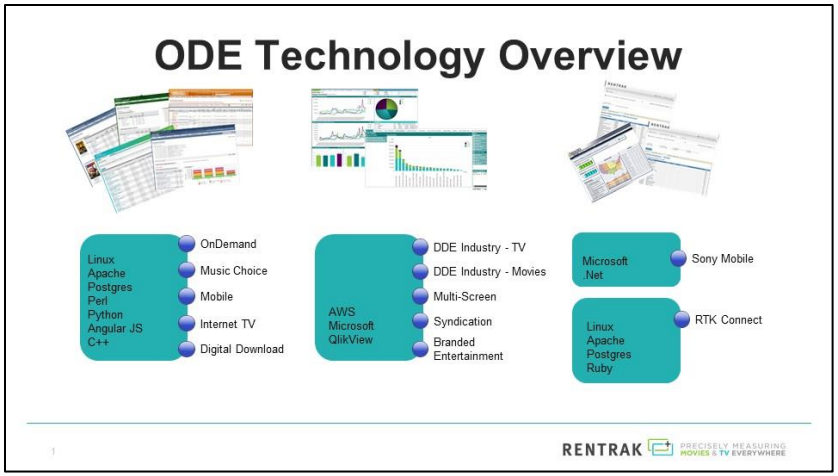
Jira Workflow (Developer's Perspective)



Technical Overview Presentation







Recommendation to Promote

(The recomendee's name has been changed to protect his privacy.)

Recommendation to Promote Greg Johnson to Senior Software Engineer

Greg had been moved to the Design team to work with the architects before I started managing him. I was initially under the impression that he was already a Senior Engineer due to his technical ability and consistent leadership. The other engineers frequently consult him on technical matters. He regularly takes a leadership role in both technical and non-technical projects. He also works well with our internal customers, communicating with them continuously throughout a product's development. He is more than able to work independently and he feels a strong responsibility for any system he works with.

Greg has been doing Senior level work for some time now and I would like to officially promote him to Senior Software Engineer based on the skills and talents he demonstrates on a daily basis.

I've listed the job requirements below with my comments on how Greg meets them.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Greg works with stakeholders to understand problem statements and suggest possible implementations.

- Greg is one of the strongest Engineers in ODE in terms of his ability to interface with our Product team. He's interested in the business's use of the data and tries to understand the client's needs. Examples: updating ABC's ad windows to fit their business model. Designing 4.5 collective view tables and understanding when it's safe to aggregate uniques and when it's not safe.
- He has consulted on many AdEssentials design objectives, working with the Product team to understand problems and suggest solutions (e.g. automating campaign matching and handling VOD title splits). This includes being the go-to guy for all AdEssentials related architecture and design questions.
- He recently participated early on in the design specification phase and provided implementation suggestions for VOD 4.5 Collective View STB Uniques, PrisaTV subscription level filtering, Targeted provider processing (for the 30-day lock-down project), DDE pre-paid processing, and the VOD transparency reports.

Greg demonstrates personal ownership and takes accountability for larger assigned tasks.

- He regularly juggles a number of unrelated tasks, yet he is more likely to remind me that a task needs his attention than vice-versa. He owns everything I give and more.
- He recently championed and spearheaded major changes to our dev system to prevent someone from accidentally affecting the live database after a dev sync. This would not have happened without him.
- He responded to complaints about the performance of our automated tests by initiating an in depth improvement project.
- He took full ownership of the VOD Network Transparency project and saw it through to completion.

Greg is *able to provide accurate estimates and impact of changes or enhancements.*

- to get to the need, rather than how it'll be implemented. He works closely with the Product team and stakeholders on a regular basis.
- He regularly presents solution options (without being asked) because he wants to make sure we're picking the right solution for the business problem.

Greg is able to work independently with very little direction. Brings personal insight into work.

- He gets assigned work from several sources and is very good at determining proper priorities.
- He frequently puts in process improvement tasks and works on them when he has extra time. He's good at putting down these projects and re-prioritizing my work as different tasks come in.
- I can give Greg a problem and feel confident that he'll discuss it with the stakeholders, discuss it with other developers that might have insight, and resolve the problem without needing any extra direction from me.

Greg is good at written communication. Communicates well to stakeholders and management in their language. Communicates well to other engineers.

- He is one of two or three engineers I will go to first when we need any sort of written documentation. In addition to maintaining and communicating the ODE engineer to-do list (from the retrospectives) he has worked on several larger pieces of documentation including several process diagrams and presentations for our wiki.
- On tasks where there are questions, he makes sure to ask early and often. I can trust that if there are any issues or red flags, Greg will raise them to the appropriate level.
- He regularly works with engineers from the various teams. I've received various comments from his peers that he works very well as part of a team.

SUPERVISORY RESPONSIBILITIES

The Senior Software Engineer may lead and direct the work of a Junior or Intermediate Software Engineer.

Greg often leads others, directing them to what is important, motivating them, and exuding a positive attitude.

- He hasn't had many formal leadership opportunities, yet he has often ended up in informal leadership positions. He has a natural inclination to guide and mentor others and he excels at it. He frequently fields questions from the other ODE teams (particularly CE) giving opinions and suggestions about approaches and places to look for solutions. He is the person most likely to guide engineer led projects, whether they're group retrospectives or code style decisions.
- He has organized a series of brown-bag talks and has presented several of them.

EDUCATION and/or EXPERIENCE

Greg has at least 5 years of experience in the field or in a related area. Has knowledge of commonly used concepts, practices, and procedures. Has working knowledge of either back end data processing or front-end reporting and UI frameworks. If currently employed by Rentrak, has experience with multiple areas of the business and multiple engineering teams.

- He has a B.S. and a Ph.D. in Mechanical Engineering. His degree work involved a lot of programming. He has four years as a professional developer.
- He has practical knowledge of both front-end frameworks and back-end processing, with emphasis on the latter. He has worked on the VOD front-end and back-end teams.
- During his career in Rentrak he has been on the following engineering teams: VOD, VOD front-end, VOD back-end, ODE Customer Engineering, ODE Design Engineering ("embedded" with Product Engineering).

Considerations include development approach to align with business target dates.

Greg consistently delivers tasks on time.

- He is very good at rooting out potential gotchas and corner cases that should be thought of ahead of time and can plan and communicate accordingly. He understands the importance of business target dates and makes estimates and designs accordingly.
- As a Design team member he is constantly assigned urgent tasks from Travis and myself. He consistently delivers these tasks on time or early.

Greg creates high quality, maintainable code, promotes good coding practices, and is usually expert in one or more languages.

- His code is consistently high quality and maintainable. He has recently taken over as the point person for Rentrak's company-wide style guide.
- He wrote a marathon viewing study for the analytics team that was specifically designed for reuse and extensibility with different dates and series as needed in the future. Another engineer later extended it by easily adding new modules. He also set it up to be easily updated to handle new groupings/segments.

Greg is able to analyze complex problems, develop solutions, and complete complex tasks.

Greg works on and occasionally designs complex software systems with performance, usability, maintainability, scalability, availability, extensibility, security, and portability in mind. Evaluates alternative options during design. Breaks systems down into their sub-components for easier understanding and easier handling.

- He was moved to the Design Team because he excels in understanding and designing complex systems. He will always look at a system from different angles to analyze the 'ilities' of a system.
- The VOD summary updaters have many moving pieces and he has successfully planned and executed nuanced and difficult tasks involving these processes.
- His ongoing part in the DDE pre-paid processing refactor demonstrates that, even though he had very little experience with DDE prior to that, he was able to help other engineers adjust the specs of their tasks after seeing the whole process and design.
- In the last year he had a large ad sync runner refactor for performance which brought it to roughly 25% of its former running time.

Greg demonstrates a desire to use new technology and to innovate. Brings a passion for technology and software engineering.

- He loves learning new technologies and loves taking them for test rides. He has quite a bit of experience in analytic tools.

Greg has experience and is comfortable with the full Software Development Lifecycle.

- He has worked on projects when they are still in the Charter phase (helping to describe reasonable goals, and provide engineering perspective), the task generation phase (breaking the work into manageable logical chunks), obviously development itself, and in addition he is always helpful with QA and UAT as required. His attention to detail in the data makes him one of our best engineers for Dev QA/UAT. He has worked in the past on helping improve the VOD test suite as well (before SCM made that less of an issue).

Greg is conscious of business needs. Creates systems that are fit for purpose. Considers project requirements and pushes back if they aren't best for the business.