



コニカミノルタのビジネス向け “MarketPlace” グローバル展開を支える AWS サービス徹底活用

コニカミノルタ株式会社

デジタルワークプレイス事業部 副事業部長

清水照久

Solution Engineering Center Chief Architect

Matthew Metnetsky

03年8月

経営統合

【コニカ】1873年創業 写真・石版材料事業
【ミノルタ】1928年創業 カメラ事業

13年4月

経営体制再編

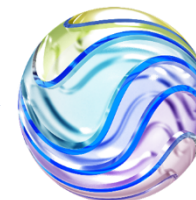
傘下7社を吸収合併
「コニカミノルタ株式会社」へ

前中期経営計画

Transform2016 (14-16年度)

17年度

新中期経営計画



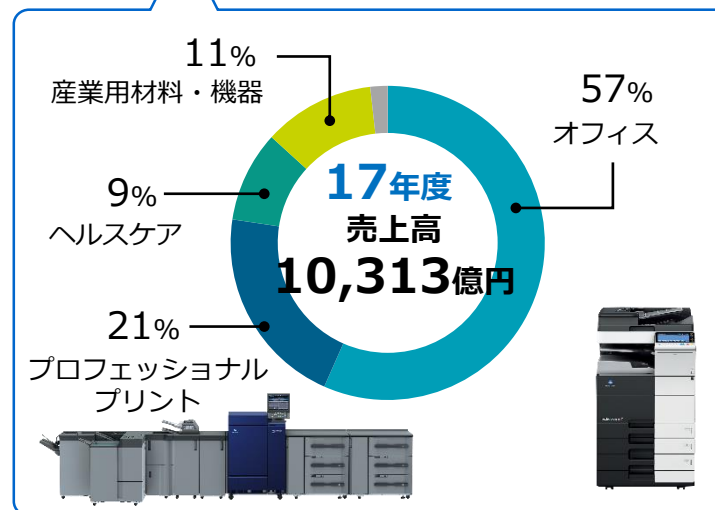
SHINKA 2019

課題提起型デジタルカンパニーへ向けて

06年8月

事業撤退

創業事業
写真フィルム・カメラ事業から撤退



コア技術を活かして、5つの分野で多彩な事業を展開

オフィスサービス分野

お客様のワークフロー改善を
支援するソリューションを



プロフェッショナルプリント分野

デジタル印刷ニーズに応える
最適な出力ソリューションを



ヘルスケア分野

医療のデジタル化を支え
診断サービスの向上へ



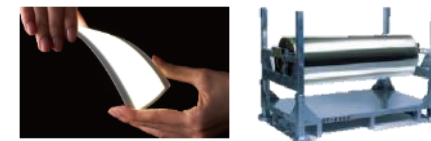
産業用光学システム分野

光学技術を駆使して
モノづくりに革新を



材料・コンポーネント分野

材料技術を結集し、
産業を支える新たな“機能”を



※2018年3月31日現在

連結子会社数

164社

セールス/サービス体制

約150カ国

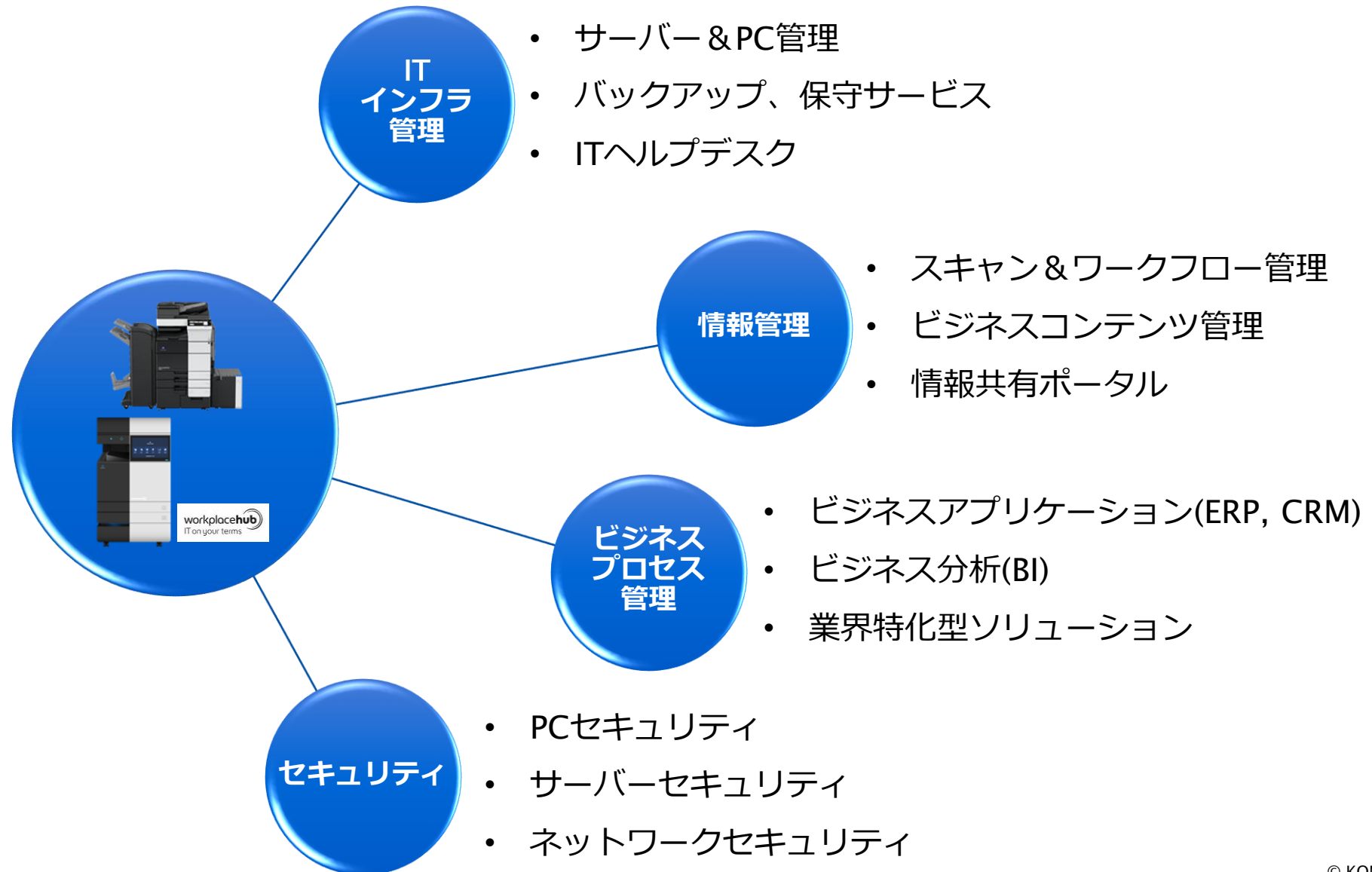
従業員数

43,299人

顧客企業数

約200万社





- 2013年11月

日本国内において「INFO-Palette Cloud」としてAWSを用いた複合機事業のためのクラウドサービス提供開始

- 主な実現機能：MFP機能を拡張するクラウドサービス
- 活用したAWSサービス：EC2、RDS、VPC間通信

- 2017年1月

米国でDC稼働していた「bizhub MarketPlace」をAWSに移行してグローバル対応し、複合機事業のためのソフトウェア/ツール販売チャネル開始
(スタート時：42カ国対応)

- 主な実現機能：各国のERPと連携したライセンス発行、安定したアプリダウンロードサイト（リリース以来、対顧客稼働率100%）
- 活用したAWSサービス：CloudFront/Route 53、ECS、Auto Scale

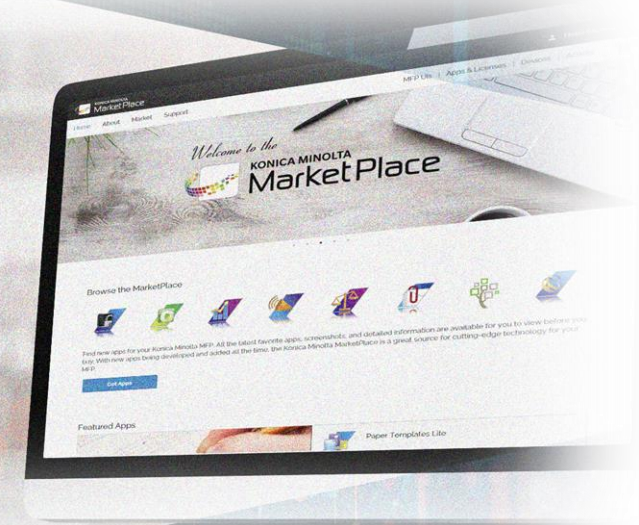
- 2017年12月

「Konica Minolta MarketPlace」と名称変更し、全事業のためのネット販売チャネルとしてリリース。（2018年6月現在：62カ国対応）

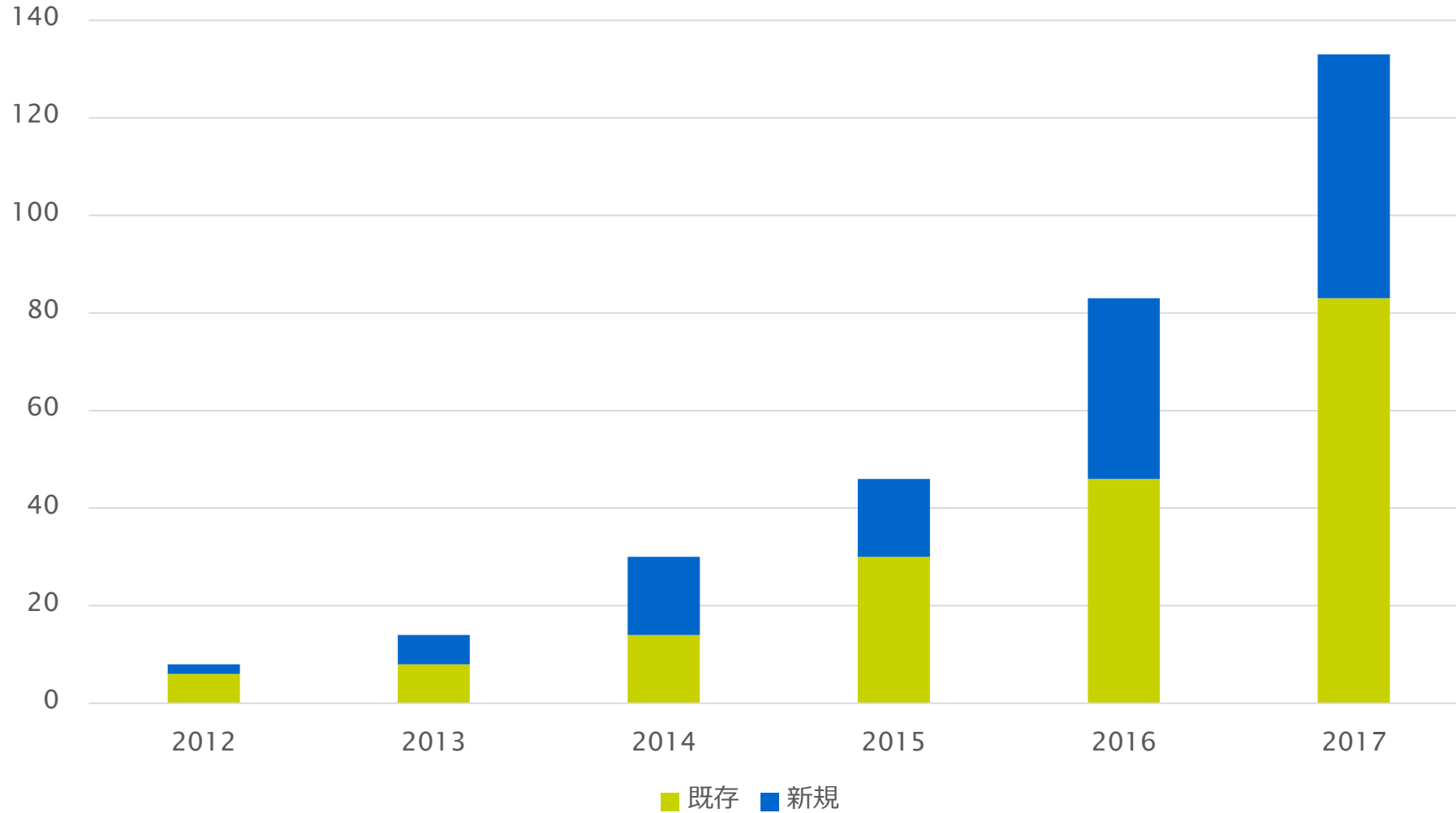
- 主な実現機能：サービス月額課金、レスポンスUI対応
- 活用したAWSサービス：Lambda、Dynamo DB、SQS w/FIFO

- 今後の計画

- 主な機能：デバイス非前提のクラウドサービス、従量課金、他社開発サービス販売
- 活用するAWSサービス：API Gateway、Aurora、Fargate



AWSを使ったプロジェクト数の変化



Konica Minolta MarketPlace's History

One Team, One Location



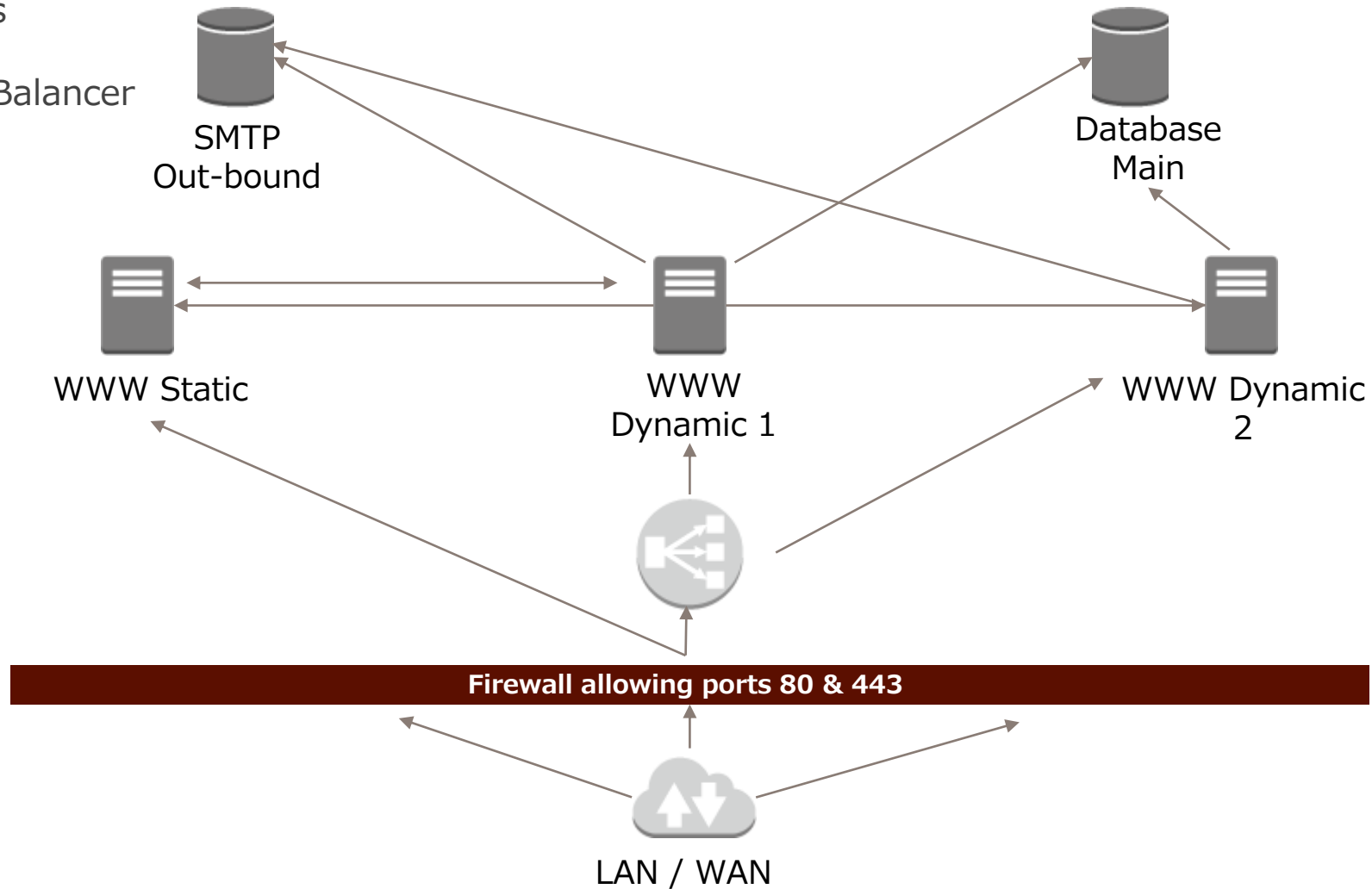
Windsor, CT U.S.A.

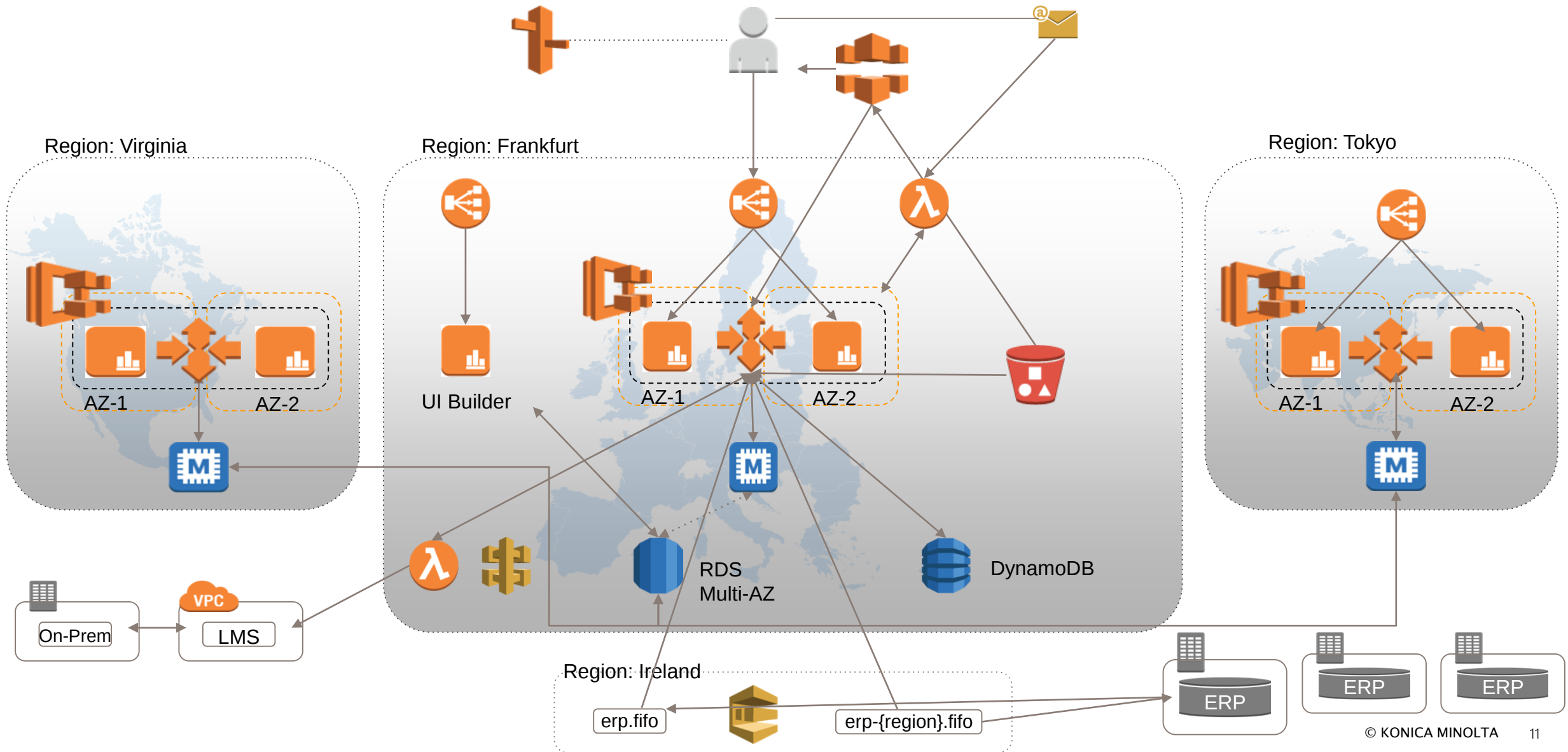
MarketPlace's History



Before AWS (Staging, Production)

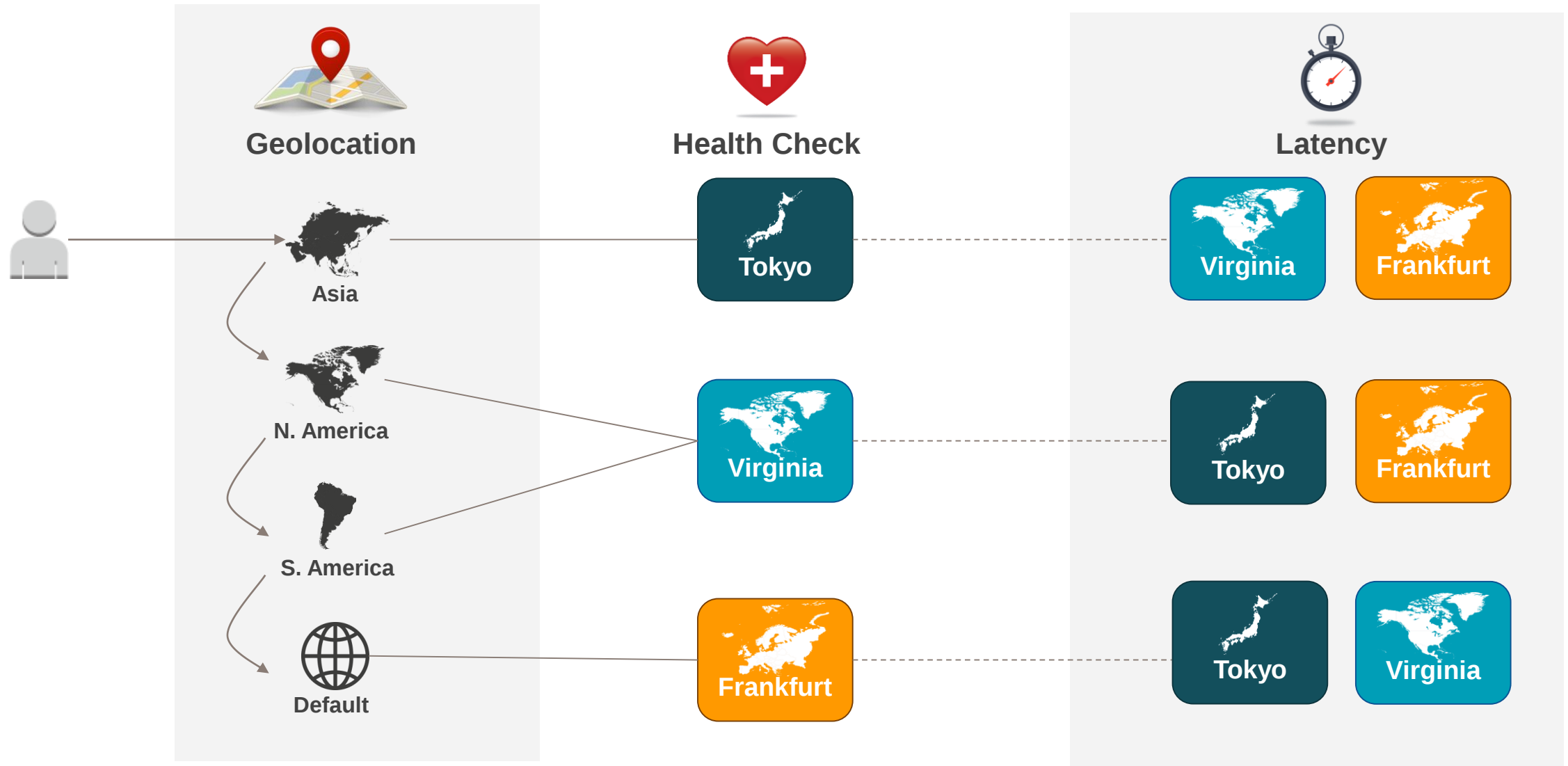
- 1 Database Server
- 1 Static Web Server
- 2 Dynamic Servers
- 1 SMTP Server
- 1 Hardware Load Balancer





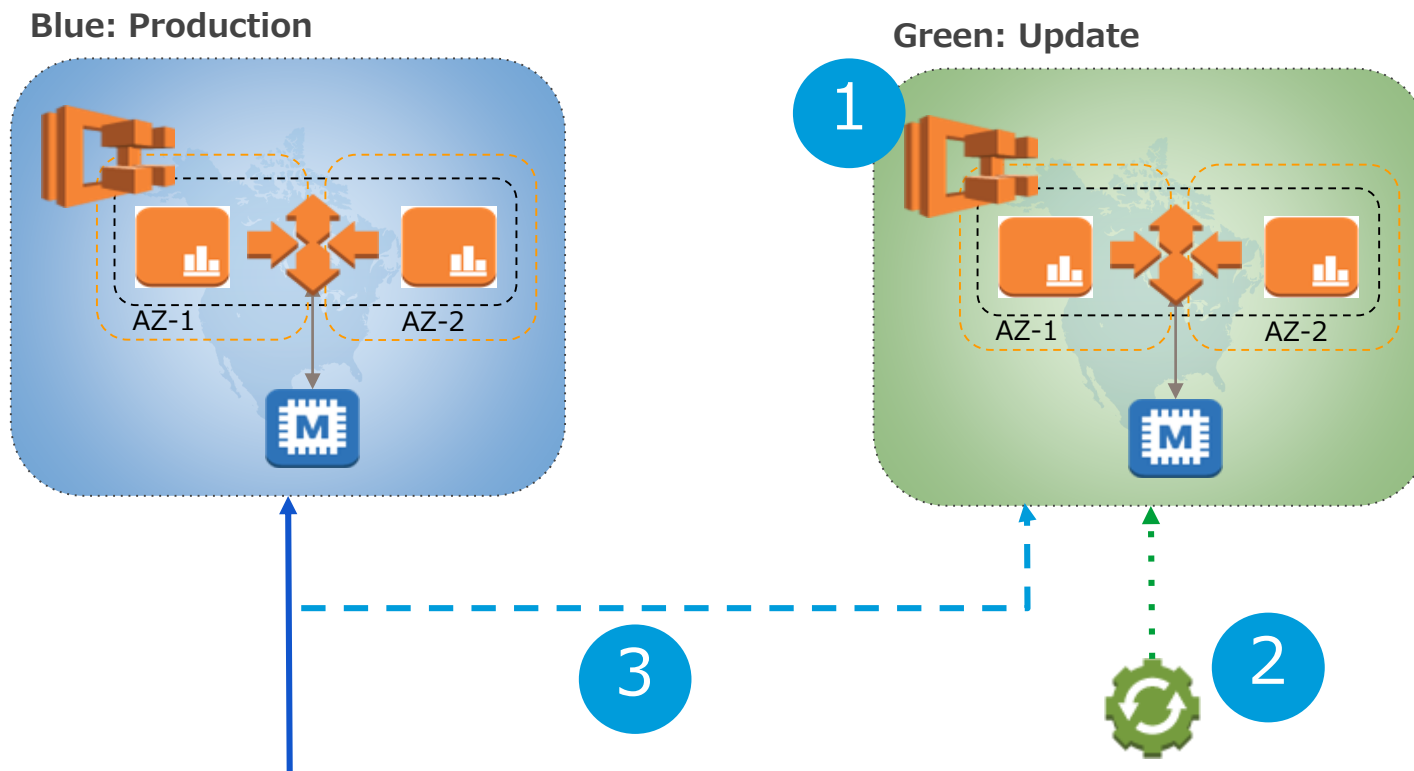
AWS Key Configurations

Route 53: Geolocation Routing with Latency Fallback

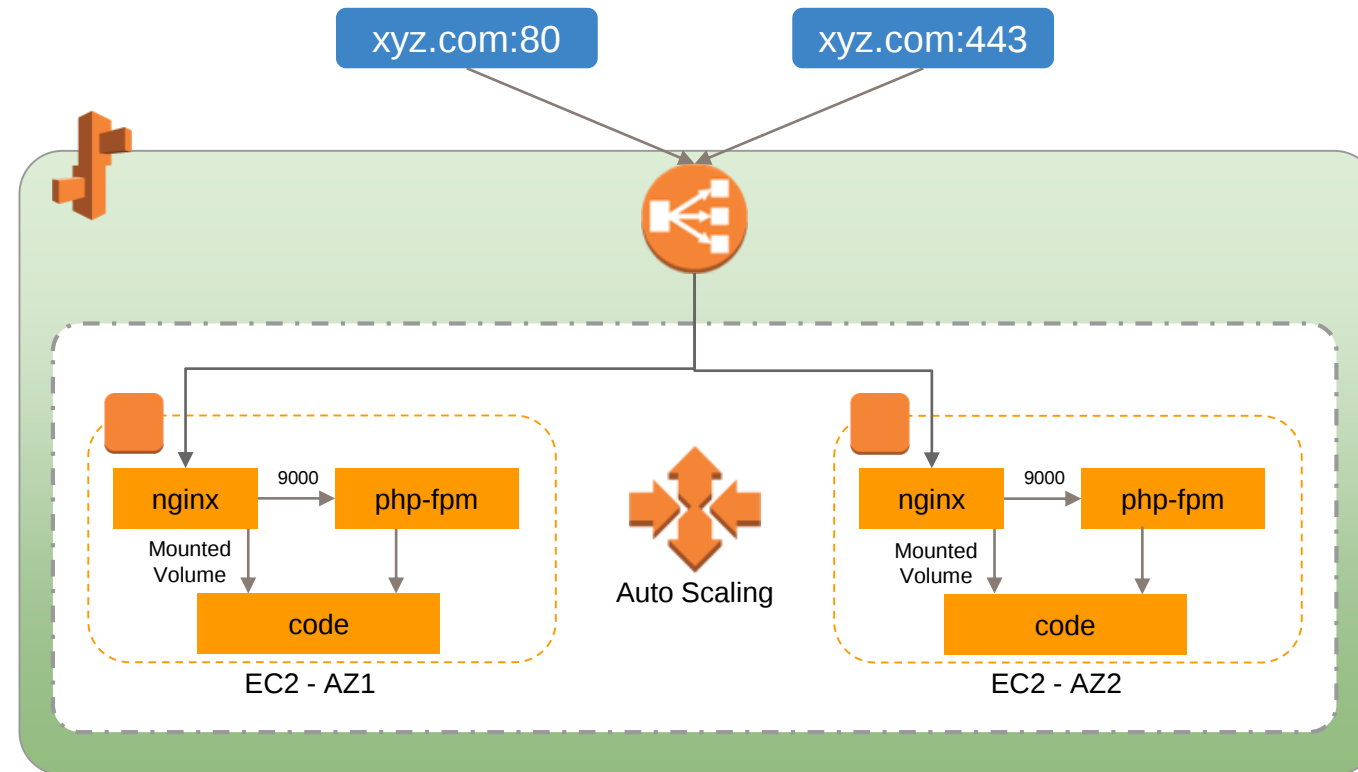


Immutable Deployments with Elastic Beanstalk

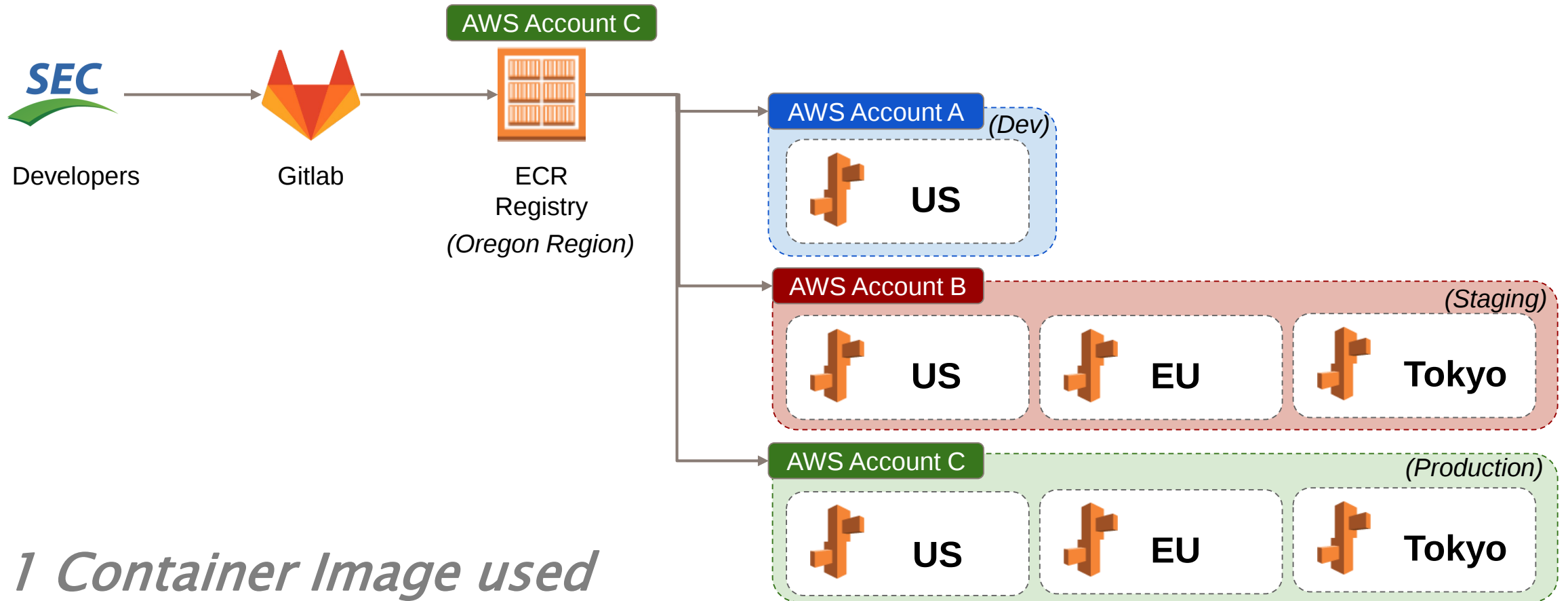
- Deployment Policy: Immutable
- Rolling Updates: Immutable
- Managed Platform Updates: Minor



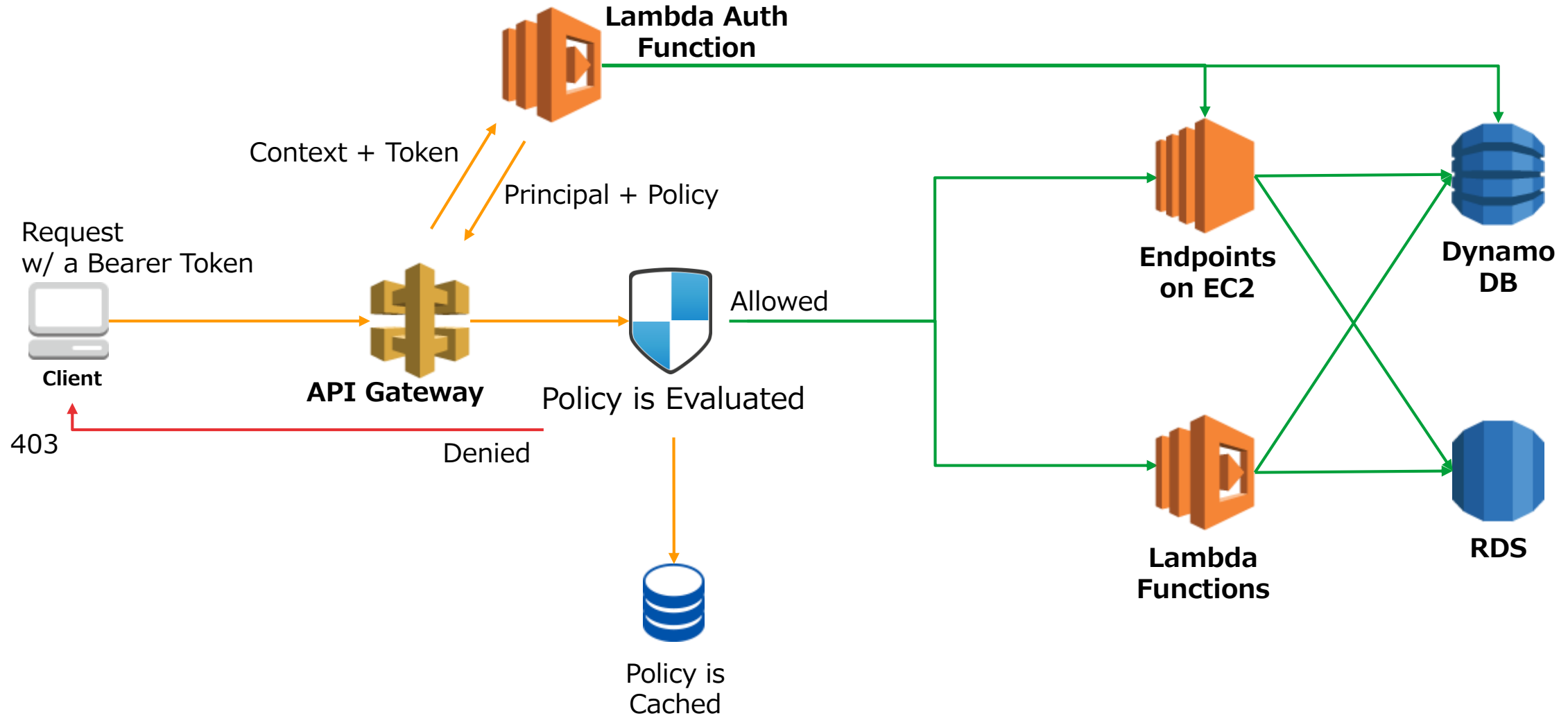
- 1** Full copy of instance, with update, is created alongside production.
- 2** Update instance is fully tested and deemed as passing (if failed, issues are fixed and process starts over).
- 3** Once testing is completed satisfactorily, production is switched from the original instance to the update.

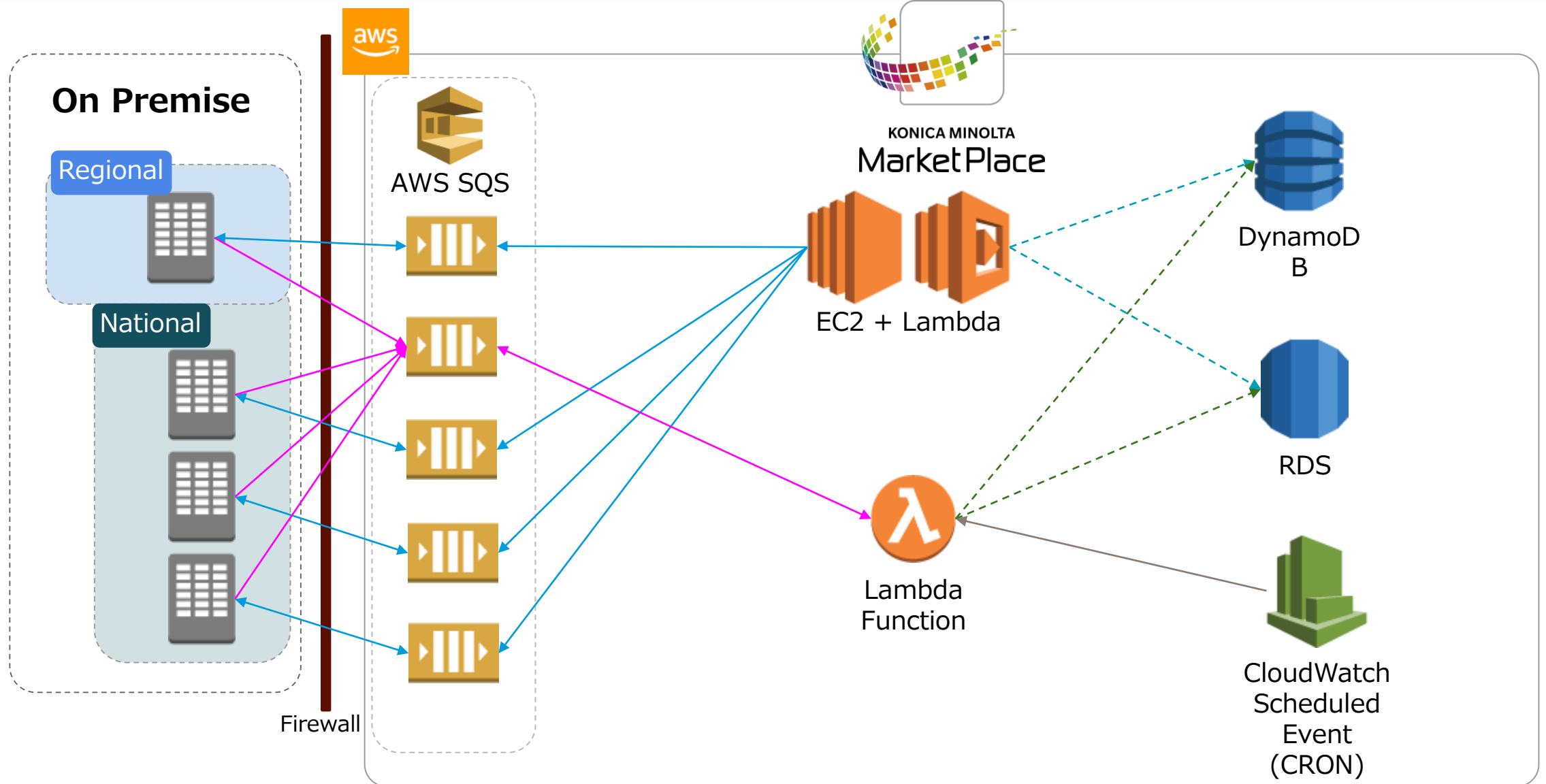


- Three (3) Containers
- **nginx** + **php-fpm** only change when packages do (limited!)
- **code** container changes for each release, but is very small!
- **code** container is not essential
- **Infrastructure** managed by **Terraform** and **CloudFormation**



1 Container Image used everywhere!





Development Lifecycle: Review Apps

What are Review Apps?

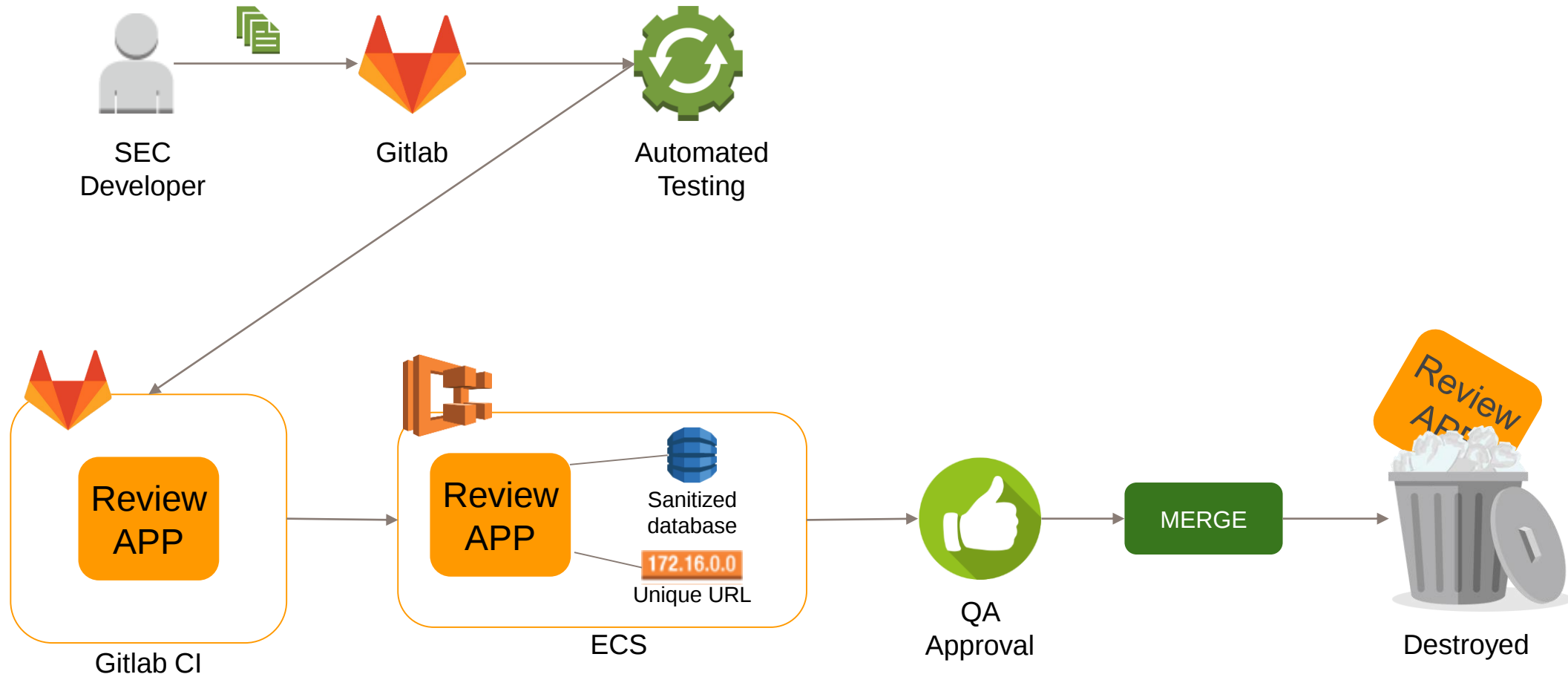
- Temporary, automatic deployment of an application as it exists at a particular point in time for the purpose of testing and review.
- Multiple review apps can co-exist, enabling parallel testing of an application at different stages of development.
- Increasingly common feature in a CI/CD pipeline.

Why Review Apps?

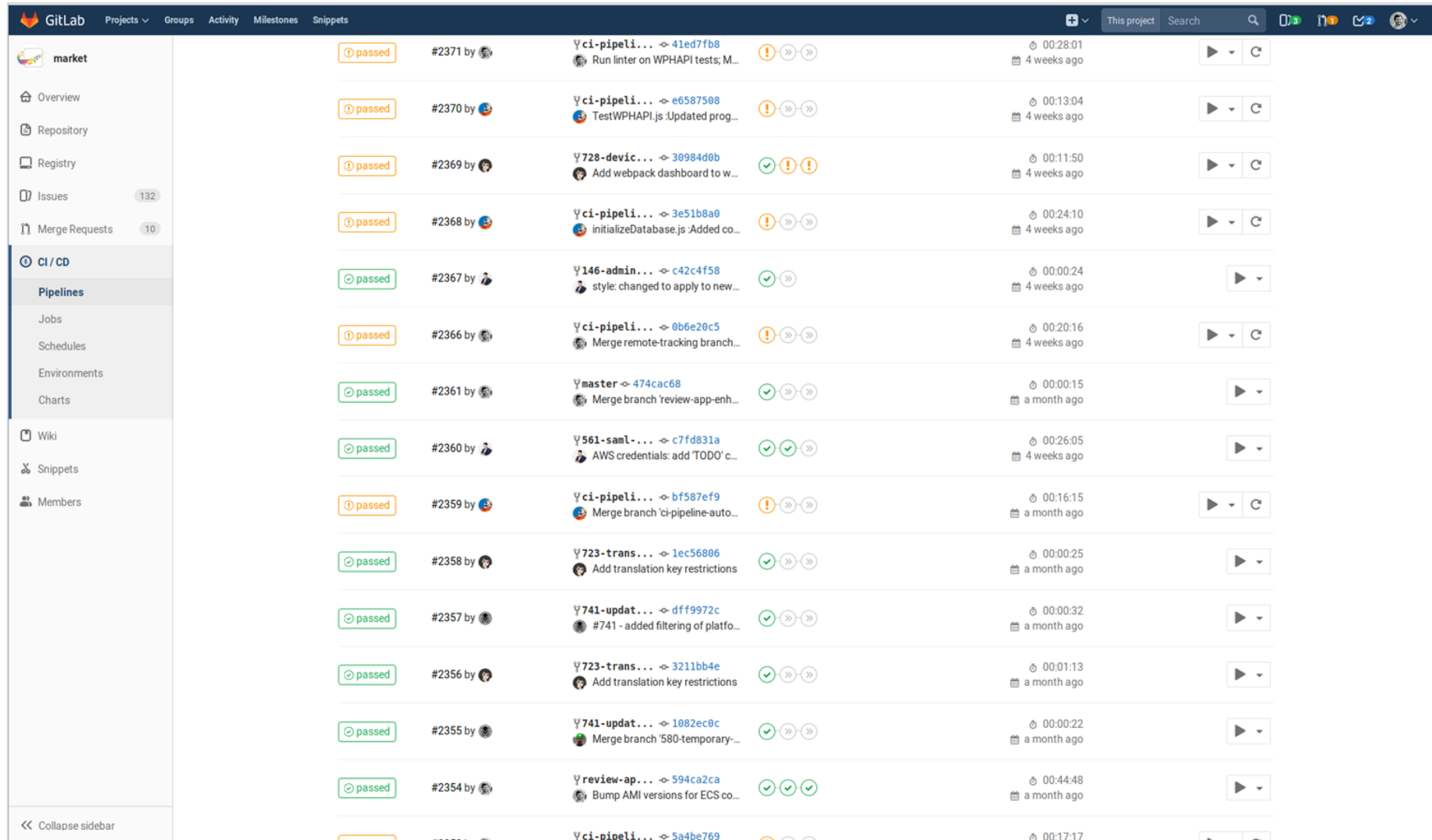
- Eliminate the manual process of building test applications for QA.
- Confine a test to the changes introduced by a single feature in an isolated environment.
- More closely mirror the behavior of a production environment.
- Tighter integration between version control, testing, and application deployment.

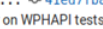
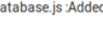
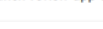
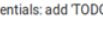
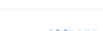
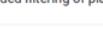
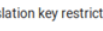


Review App Process



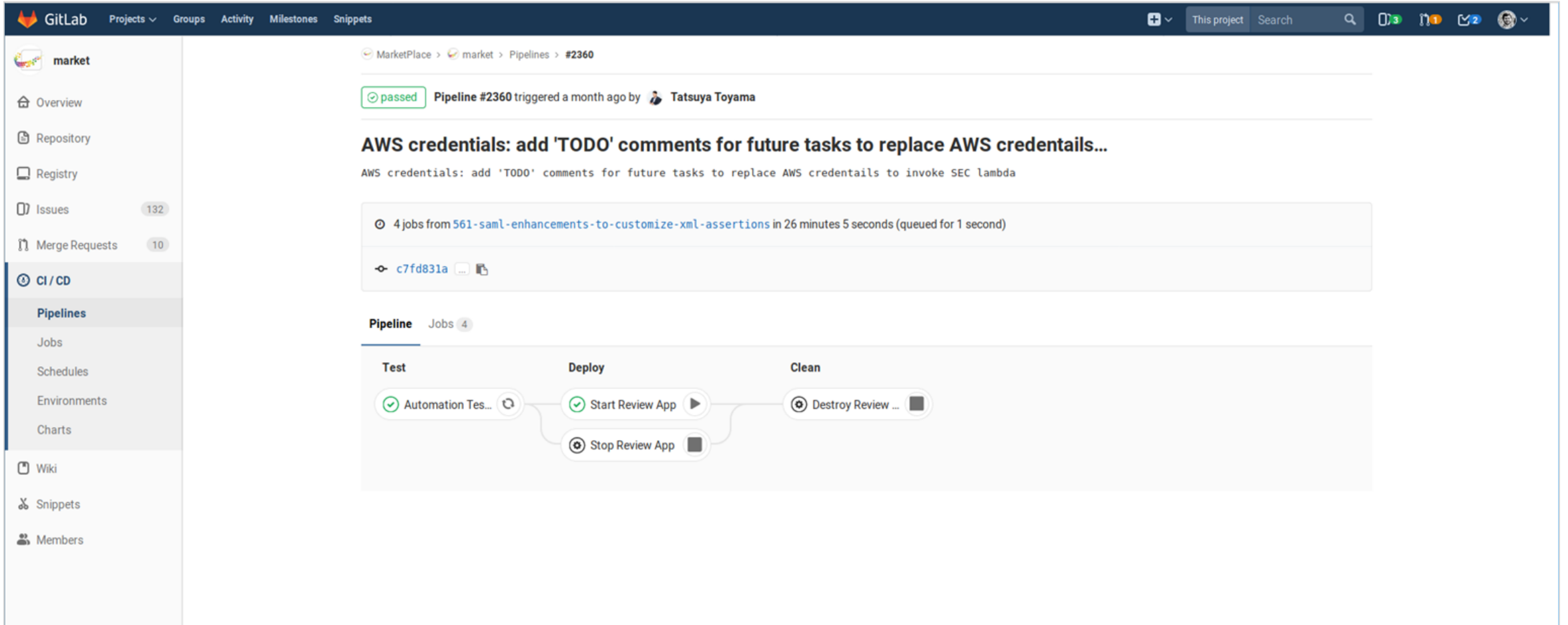
Review App Process



		#2371 by 	 ci-pipeli...  41ed7fb8 Run linter on WPHAPI tests; M...		00:28:01 4 weeks ago	 
		#2370 by 	 ci-pipeli...  e6587508 TestWPHAPI.js :Updated prog...		00:13:04 4 weeks ago	 
		#2369 by 	 728-devic...  30984d0b Add webpack dashboard to w...		00:11:50 4 weeks ago	 
		#2368 by 	 ci-pipeli...  3e51b8a0 initializeDatabase.js :Added co...		00:24:10 4 weeks ago	 
		#2367 by 	 146-admin...  c42c4f58 style: changed to apply to new...		00:00:24 4 weeks ago	
		#2366 by 	 ci-pipeli...  0b6e20c5 Merge remote-tracking branch...		00:20:16 4 weeks ago	 
		#2361 by 	 master  474cac68 Merge branch 'review-app-enh...		00:00:15 a month ago	
		#2360 by 	 561-saml...  c7fd831a AWS credentials: add 'TODO' c...		00:26:05 4 weeks ago	
		#2359 by 	 ci-pipeli...  bf587ef9 Merge branch 'ci-pipeline-auto...		00:16:15 a month ago	 
		#2358 by 	 723-trans...  1ec56806 Add translation key restrictions		00:00:25 a month ago	
		#2357 by 	 741-updat...  dff9972c #741 - added filtering of platfo...		00:00:32 a month ago	
		#2356 by 	 723-trans...  3211bb4e Add translation key restrictions		00:01:13 a month ago	
		#2355 by 	 741-updat...  1082ec0c Merge branch '580-temporary-...		00:00:22 a month ago	
		#2354 by 	 review-ap...  594ca2ca Bump AMI versions for ECS co...		00:44:48 a month ago	
		#2353 by 	 ci-pipeli...  5a4be769		00:17:17	 

Pipeline list

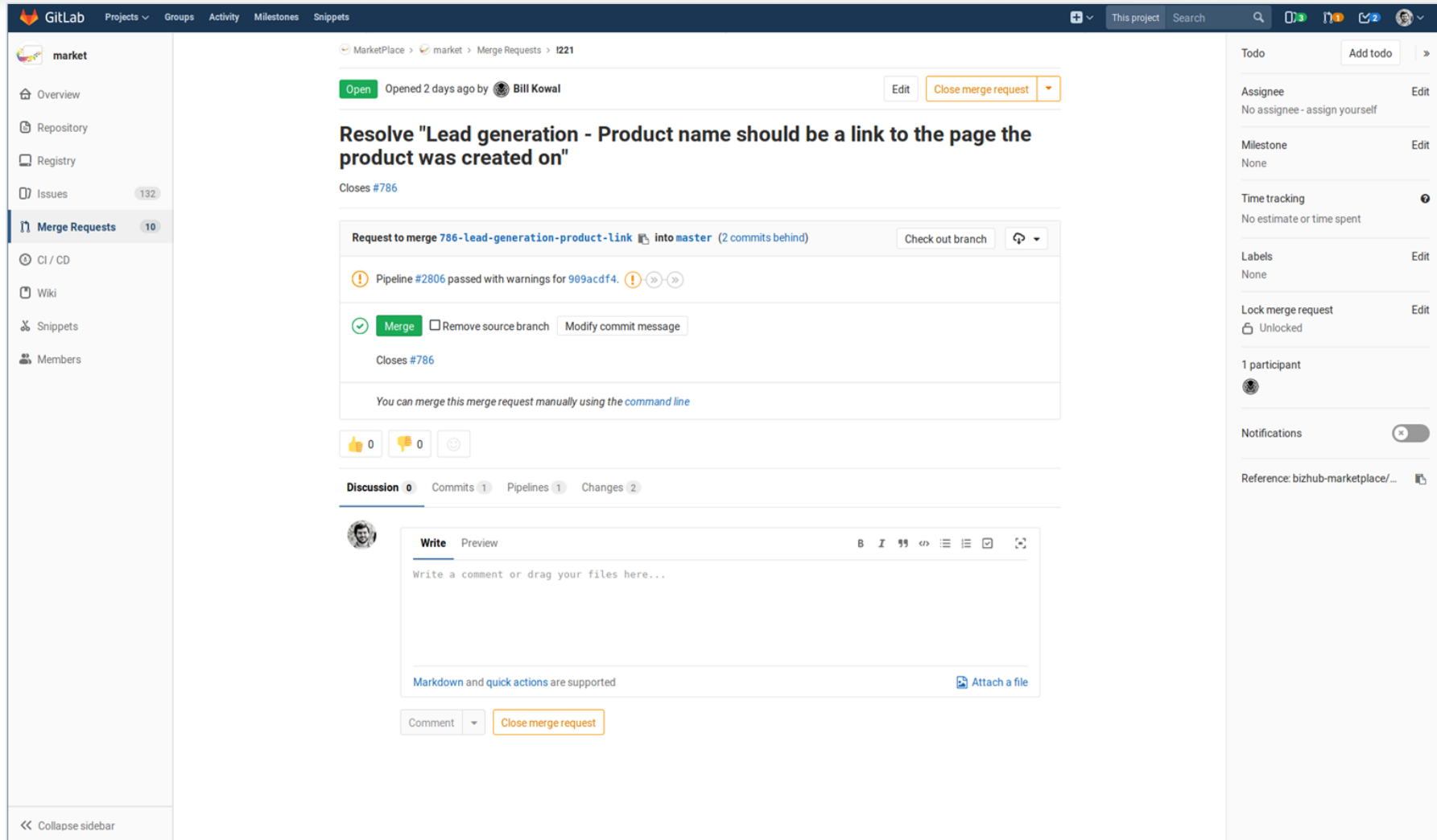
Review App Process



The screenshot displays the GitLab web interface for a project named 'market'. The left sidebar shows navigation options: Overview, Repository, Registry, Issues (132), Merge Requests (10), CI / CD, Pipelines, Jobs, Schedules, Environments, Charts, Wiki, Snippets, and Members. The main content area shows the 'Pipelines' view for Pipeline #2360, which was triggered a month ago by Tatsuya Toyama. The pipeline title is 'AWS credentials: add 'TODO' comments for future tasks to replace AWS credentials...'. Below the title, it states 'AWS credentials: add 'TODO' comments for future tasks to replace AWS credentials to invoke SEC lambda'. A summary box indicates '4 jobs from 561-saml-enhancements-to-customize-xml-assertions in 26 minutes 5 seconds (queued for 1 second)'. The pipeline ID is c7fd831a. The pipeline stages are Test, Deploy, and Clean. The Test stage has a job 'Automation Tes...'. The Deploy stage has two jobs: 'Start Review App' and 'Stop Review App'. The Clean stage has a job 'Destroy Review ...'. The pipeline status is 'passed'.

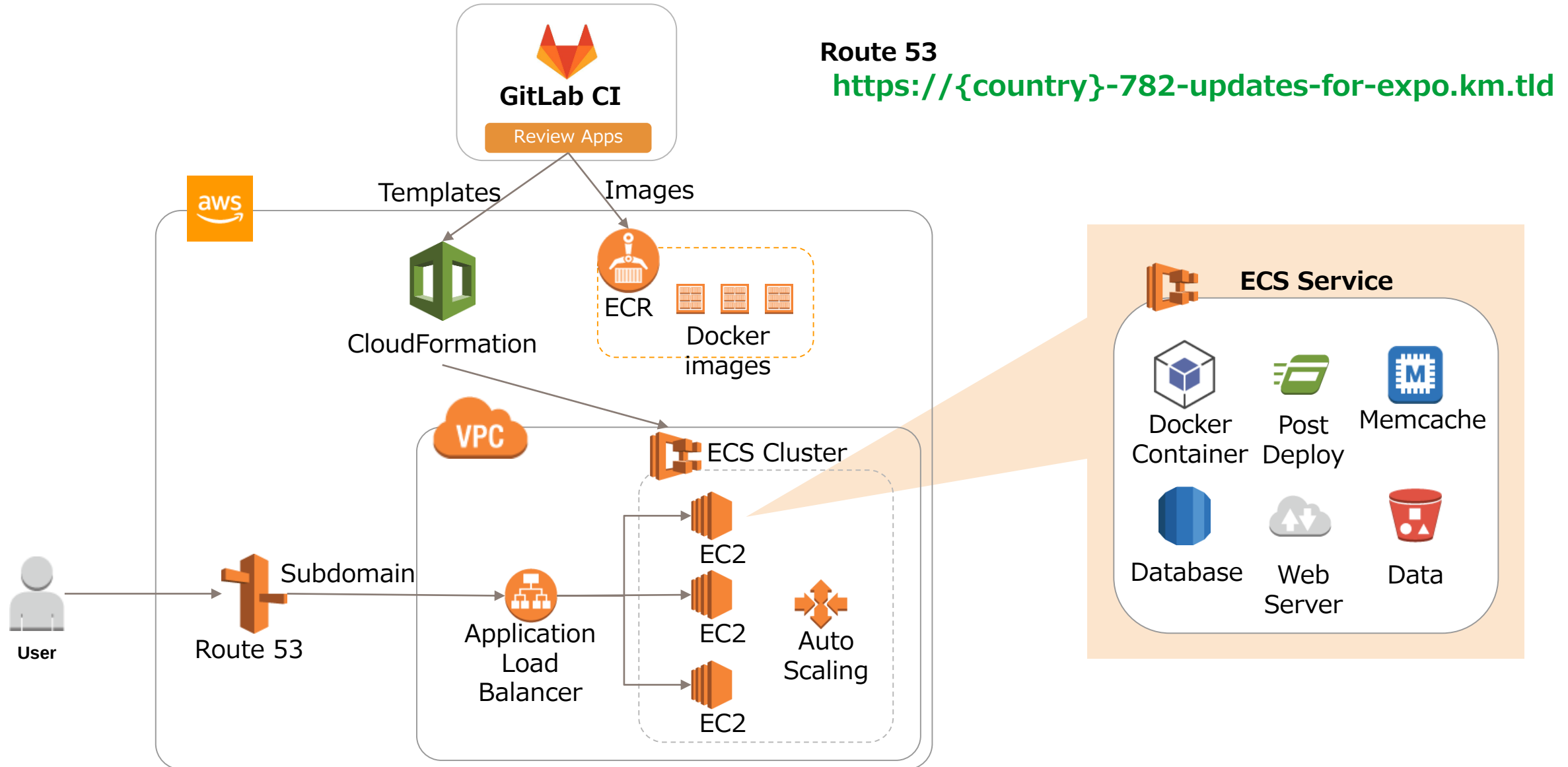
Pipeline

Review App Process

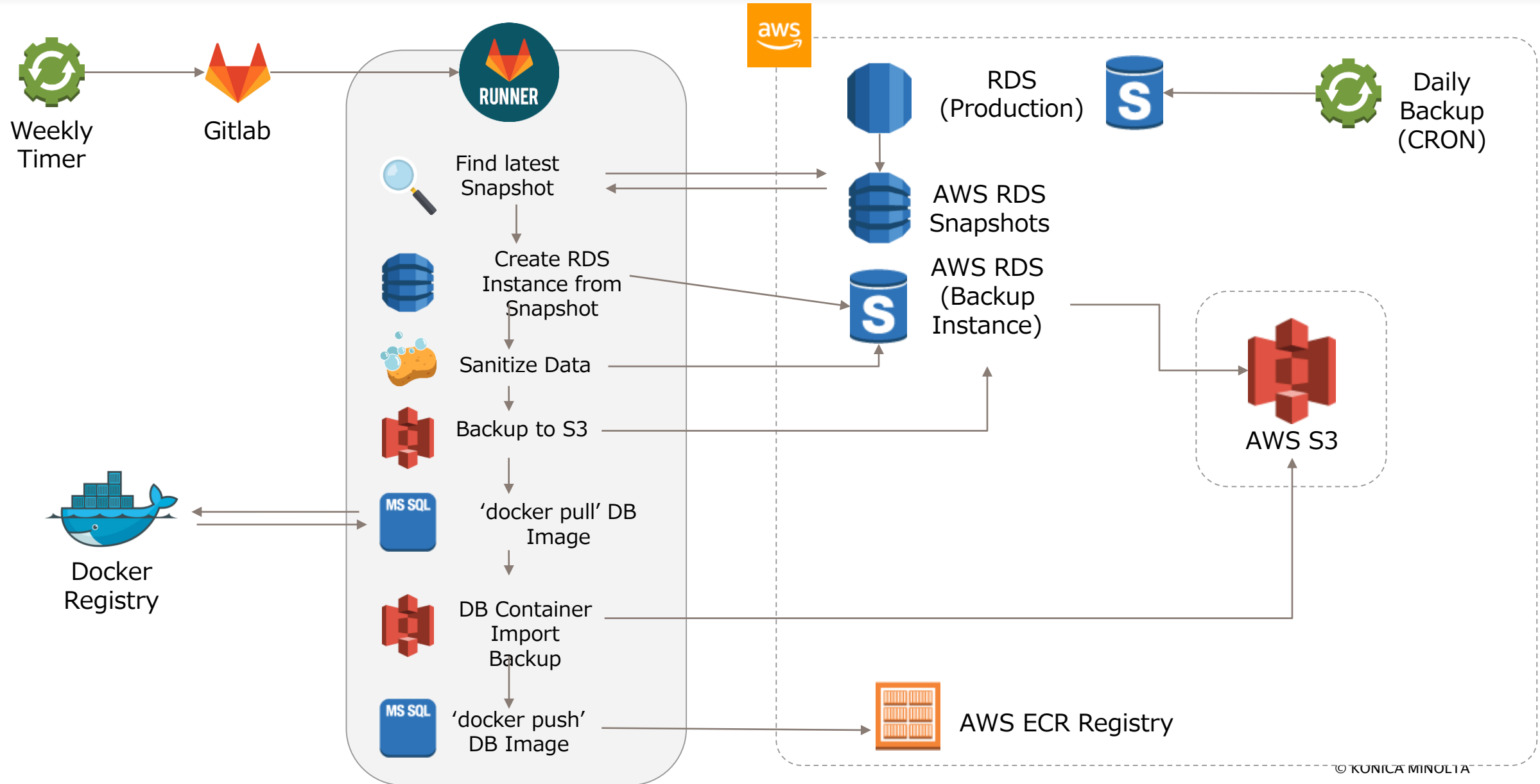


The screenshot displays the GitLab Merge Request interface for a project named 'market'. The left sidebar contains navigation links: Overview, Repository, Registry, Issues (132), Merge Requests (10), CI / CD, Wiki, Snippets, and Members. The main content area shows a merge request titled 'Resolve "Lead generation - Product name should be a link to the page the product was created on"' opened 2 days ago by Bill Kowal. It indicates the request is to merge branch '786-lead-generation-product-link' into 'master' (2 commits behind). A status bar shows 'Pipeline #2806 passed with warnings for 909acdf4'. Action buttons include 'Merge', 'Remove source branch', and 'Modify commit message'. Below these are tabs for Discussion (0), Commits (1), Pipelines (1), and Changes (2). A comment box is visible with a 'Write' tab and a 'Preview' tab. The right sidebar contains a 'Todo' section with fields for Assignee, Milestone, Time tracking, Labels, Lock merge request, and a list of participants. It also includes a 'Notifications' toggle and a reference link to 'bizhub-marketplace/...'.

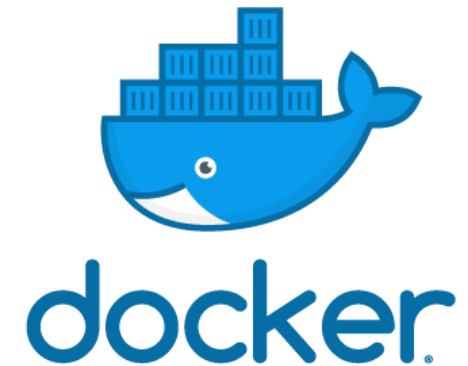
Merge Request



Review App Database Cloning & Sanitization



Core Components used to build MarketPlace's Infrastructure



本セッションをご覧の皆様に、今だけ！ Konica Minolta MarketPlaceにアクセス



- こちらのサイトはAWSを利用したMarketPlaceをご体感いただくことを目的としており、アカウント作成・ログイン・購買はできません
- 日本国内でのサービス公開時期は未定です
- サイトの内容、公開期間は予告なく変更されることがあります

ご清聴ありがとうございました