**작업계획(결과)서**

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| v**구분** | **내용** | | |
| 고객사 | CJ E&M | 작업구분 | Infra 구축 |
| 요청일시 | 2018년 07월 26일 | | |
| 요청작업 | Catch-on AWS 개발 인프라 구축 – Catchon-webwas 추가 | | |
| 완료일정 | 2018년 07월 26일 | | |

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| **단계** | **내용** |
| 0. To-Be Architecture |  |
| 1. 계정생성 | **1) VAT정보입력** : O  **2)** **Console Login URL**: https://enmcatchon.signin.aws.amazon.com/console  **3) 보안Check List**   |  |  | | --- | --- | | 구분 | 확인 | | Root 어카운트 access key 제거 | o | | MFA활성화 (고객 관리시 고객에게 안내) | - | | IAM 암호 정책 설정 (최소8자리, 대/소문자, 숫자 및 특수문자 포함) | o | |
| 2. Consolidated Billing | **Payer Account**: awsbilling\_nsg@nongshim.co.kr |
| 3. Cloud Trail 활성화 | **S3 Bucket Name**: enmcatchon-security, **Prefix**: CloudTrail |
| 4. IAM설정 | **1) 고객용 관리 IAM계정 생성**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 값 | 구분 | 값 | | User Name | jungmin.hyeun@cj.net | Access Key ID | - | | Password | \*\*\*\* | Secret Access Key | - |   \* Administrator policy 부여  \* 최초 로그인시 비밀번호 변경  2) Group 내용 추가 필요   |  |  |  |  | | --- | --- | --- | --- | | Group Name | Policy | User Count | Users | | Admin | AdministratorAccess | 1 | [jungmin.hyeun@cj.net](mailto:jungmin.hyeun@cj.net) | | Security\_Admin | AWSWAFFullAccess  CloudFrontFullAccess  CloudWatchFullAccess  ReadOnlyAccess |  | - | | Security\_User | ReadOnlyAccess |  | - | | enm\_Admin | AWSCodeCommitFullAccess  IAMSelfManageServiceSpecificCredentials  AmazonS3FullAccess  CloudWatchFullAccess  ReadOnlyAccess  AWSCodeDeployFullAccess  IAMReadOnlyAccess  AWSCodePipelineFullAccess  AWSCodeBuildAdminAccess  IAMUserChangePassword | 4 | wonseob.kim@cj.net  jaehyun.kim2@cj.net  yonghee.oh1@cj.net  junki.kim1@cj.net | | Developer | AWSCodeCommitPowerUser | 13 | opman76@gmail.com  kjyaa82@gmail.com  onnyang79@gmail.com  ferrnando2207@gmail.com  mclover22@gmail.com  yijeongwoo@outlook.com  dekasia76@gmail.com  josung1004@gmail.com  phj@wowfactory.co.kr  csp@wowfactory.co.kr  denodo1@gmail.com  euna.yoo@cj.net  ssm8845@hanmail.net | |
| 5. VPC/subnet생성 | **1) Region: Seoul**  **2) VPC (catchon-vpc)**  -. **CIDR**: 10.75.26.0/23  **3) Subnet**   |  |  |  |  | | --- | --- | --- | --- | | Subnet # | Name | CIDR | AZ | | 1 | public-a | 10.75.27.0/28 | ap-northeast-2a | | 2 | public-c | 10.75.27.16/28 | ap-northeast-2c | | 3 | elb-a | 10.75.27.64/27 | ap-northeast-2a | | 4 | elb-c | 10.75.27.96/27 | ap-northeast-2c | | 5 | webwas-a | 10.75.26.0/25 | ap-northeast-2a | | 6 | webwas-c | 10.75.26.128/25 | ap-northeast-2c | | 7 | data-a | 10.75.27.32/28 | ap-northeast-2a | | 8 | data-c | 10.75.27.48/28 | ap-northeast-2c |   **[그림]**    **4) VPC Flow로그 활성화:**  비활성  **5) NAT서버 구성:**  **catchon-nat : 13.125.102.163 (amazon provided, t2.micro)**  **6) IGW: catchon-igw** |
| 5.1 N/W설정 | **1) Route Table 수정**  **-** **private-route**      - **public-route** |
| 6. 서버생성 | **1) nat 서버 – catchon-nat**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-0199506f (amzn-ami-vpc-nat-hvm-2016.03.0.x86\_64-ebs) | | | | Name | catchon-nat | | | | Instance Type | t2.micro (1vcpu/1GB RAM) | | | | OS | Amazon Linux(HVM) | | | | Subnet | public-a / 10.75.27.0/28 | | | | IP Address | Private IP: 10.75.27.10  Public IP: 13.125.102.163 (EIP 할당여부: O) | | | | Storage | Type | Device | Size(GB) | | Root | Default | 8Gib | | Data | - | - | | SWAP | - | - | | OS USer / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | | | | Auto Scaling | X | | | | Source/Destionation Disable | Disable | | | | Failover | 5분 기준 Failover | | |   **2) 개발** **webwas서버 - dev-webwas**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730 (amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | dev-webwas | | | | Instance Type | m5.large (2vcpu/8GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-a / 10.75.26.0/25 | | | | IP Address | Private IP: 10.75.26.60 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **3) 운영 서버 - englishgem-webwas-a**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730(amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | englishgem-webwas-a | | | | Instance Type | c4.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-a / 10.75.26.0/25 | | | | IP Address | Private IP: 10.75.26.40 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **4) 운영 서버 - englishgem-webwas-c**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730(amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | englishgem-webwas-c | | | | Instance Type | c4.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-c / 10.75.26.128/25 | | | | IP Address | Private IP: 10.75.26.140 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **5) 운영 서버 - interface-webwas-a**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730(amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | interface-webwas-a | | | | Instance Type | c4.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-a / 10.75.26.0/25 | | | | IP Address | Private IP: 10.75.26.50 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **6) 운영 서버 - interface-webwas-c**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730(amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | interface-webwas-c | | | | Instance Type | c4.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-c / 10.75.26.128/25 | | | | IP Address | Private IP: 10.75.26.150 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **7) 운영 서버 – prd-admin**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | ami-5e1ab730(amzn-ami-hvm-2017.09.1.20180307-x86\_64-gp2) | | | | Name | prd-admin | | | | Instance Type | c4.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | public-a / 10.75.27.0/28 | | | | IP Address | Private IP: 10.75.27.9 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **8) 운영 서버 – catchon-webwas-a**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | amzn-ami-hvm-2018.03.0.20180622-x86\_64-gp2 (ami-ebc47185) | | | | Name | catchon-webwas-a | | | | Instance Type | c5.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-a / 10.75.26.0/25 | | | | IP Address | Private IP: 10.75.26.41 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **9) 운영 서버 – catchon-webwas-c**   |  |  |  |  | | --- | --- | --- | --- | | 구분 | 내용 | | | | AMI ID | amzn-ami-hvm-2018.03.0.20180622-x86\_64-gp2 (ami-ebc47185) | | | | Name | catchon-webwas-c | | | | Instance Type | c5.large (2vcpu/4GB RAM) | | | | OS | Amazon Linux | | | | Subnet | webwas-c / 10.75.26.128/25 | | | | IP Address | Private IP: 10.75.26.141 | | | | Storage | Type | Device | Size(GB) | | Root | Default | 50Gib | | Data | xvdb | 50Gib | | SWAP | - | - | | OS User / Key Pair | |  |  |  |  | | --- | --- | --- | --- | | User Name | Keypair | Sudo | Main | | ec2-user | catchon-keypair | O | O | | nds | catchon-nds-keypair | O |  | | enmadmin | catchon-enmadmin-keypair | O |  | | enmdev | catchon-enmdev-keypair |  |  | | | | | Auto Scaling | X | | |   **10) DB 개발 서버 - catchondb-dev**   |  |  | | --- | --- | | 구분 | 내용 | | Version | MySQL 5.7.19 | | Instance Type | db.t2.small (1vcpu/2GB RAM) | | Multi-AZ | X | | character-set | utf8mb4 | | Port | 3306 | | time-zone | Asia/Seoul | | Subnet | data-a (10.75.27.32/28), data-c (10.75.27.48/28) | | endpoint | catchondb-dev.cix4w6jxuuiy.ap-northeast-2.rds.amazonaws.com | | DB instance idenftifeier | catchondb-dev | | Database Name | catchondbdev | | master username | catchonadmin | | password | 1c-c3-1d-Ds |   **11) DB운영 서버 - catchondb-prd**   |  |  | | --- | --- | | 구분 | 내용 | | Version | MySQL 5.7.19 | | Instance Type | db.t2.small (1vcpu/2GB RAM) | | Multi-AZ | X | | character-set | utf8mb4 | | Port | 3306 | | time-zone | Asia/Seoul | | Subnet | data-a (10.75.27.32/28), data-c (10.75.27.48/28) | | endpoint | catchondb-prd.cix4w6jxuuiy.ap-northeast-2.rds.amazonaws.com | | DB instance idenftifeier | Catchondb-prd | | Database Name | catchondb | | master username | catchonadmin | | password | 1c-c3-1d-Ds | |
| 7. Security group 설정 | **1) 관리용 Security Group**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Group Name (tag) | 용도 | Protocol | Port Range | Source | | ssh-sg | SSH | TCP | 22 | catchon-nat-sg |   **2) 서비스용 Security Group**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Group Name (tag) | 용도 | Protocol | Port Range | Source | | admin-elb-sg | HTTP | TCP | 80 | 183.111.198.0/24 | | HTTP | TCP | 80 | 115.91.20.134/32 | | HTTP | TCP | 80 | 203.248.117.225/32 | | HTTP | TCP | 80 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 443 | 115.91.20.134/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.225/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.74/31 | | db-sg | Custom TCP Rule | TCP | 3306 | sg-b553d7de (catchon-nat-sg) | | dev-db-sg | Custom TCP Rule | TCP | 3306 | sg-ad6eeac6 (dev-catchon-was-sg) | | Custom TCP Rule | TCP | 3306 | sg-b553d7de (catchon-nat-sg) | | dev-elb-sg | HTTP | TCP | 80 | 183.111.198.0/24 | | HTTP | TCP | 80 | 115.91.20.134/32 | | HTTP | TCP | 80 | 203.248.117.225/32 | | HTTP | TCP | 80 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 443 | 115.91.20.134/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.225/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.74/31 | | dev-was-sg | Custom TCP Rule | TCP | 8090 - 8095 | sg-b553d7de (catchon-nat-sg) | | Custom TCP Rule | TCP | 8049 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8019 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8443 - 8448 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8039 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8009 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8059 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 8029 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 80 - 84 | sg-af6eeac4 (dev-catchon-web-sg) | | Custom TCP Rule | TCP | 6100 | sg-b553d7de (catchon-nat-sg) | | dev-web-sg | HTTP | TCP | 80 | 183.111.198.0/24 | | HTTP | TCP | 80 | 115.91.20.134/32 | | Custom TCP Rule | TCP | 80 - 84 | 13.124.165.15/32 | | Custom TCP Rule | TCP | 80 - 84 | sg-ad6eeac6 (dev-catchon-was-sg) | | Custom TCP Rule | TCP | 80 - 85 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 80 - 85 | 203.248.117.225/32 | | Custom TCP Rule | TCP | 81 - 83 | 125.209.222.140/31 | | Custom TCP Rule | TCP | 81 - 83 | 210.89.164.90/32 | | Custom TCP Rule | TCP | 81 - 83 | 210.89.160.88/32 | | Custom TCP Rule | TCP | 81 - 83 | 110.76.141.122/32 | | Custom TCP Rule | TCP | 81 - 83 | 117.52.81.52/32 | | Custom TCP Rule | TCP | 81 - 83 | 31.13.0.0/16 | | Custom TCP Rule | TCP | 81 - 83 | 157.240.0.0/16 | | dev-webwas-sg | HTTP | TCP | 80 | sg-5c938537 (dev-elb-sg) | | Custom TCP Rule | TCP | 8080 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 8080 | sg-c560e4ae (catchon-ssh-sg) | | Custom TCP Rule | TCP | 443 | sg-5c938537 (dev-elb-sg) | | englishgem-elb-sg | HTTP | TCP | 80 | 183.111.198.0/24 | | HTTP | TCP | 80 | 115.91.20.134/32 | | HTTP | TCP | 80 | 203.248.117.225/32 | | HTTP | TCP | 80 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 443 | 115.91.20.134/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.225/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.74/31 | | englishgem-webwas-sgt | HTTP | TCP | 80 | sg-5592843e (englishgem-elb-sg) | | Custom TCP Rule | TCP | 443 | sg-5592843e (englishgem-elb-sg) | | interface-elb-sg | HTTP | TCP | 80 | 183.111.198.0/24 | | HTTP | TCP | 80 | 115.91.20.134/32 | | HTTP | TCP | 80 | 203.248.117.225/32 | | HTTP | TCP | 80 | 203.248.117.74/31 | | Custom TCP Rule | TCP | 443 | 115.91.20.134/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.225/32 | | Custom TCP Rule | TCP | 443 | 203.248.117.74/31 | | interface-webwas-sg | HTTP | TCP | 80 | sg-989385f3 (interface-elb-sg) | | Custom TCP Rule | TCP | 443 | sg-989385f3 (interface-elb-sg) | | nat-sg | All traffic | All | All | 10.75.26.0/23 | | Custom UDP Rule | UDP | 1194 | 221.147.14.173/32 | | Custom UDP Rule | UDP | 1194 | 203.248.117.74/31 | | Custom UDP Rule | UDP | 1194 | 203.248.117.225/32 | | Custom UDP Rule | UDP | 1194 | 115.91.20.134/32 | | Custom UDP Rule | UDP | 1194 | 112.187.235.172/32 | | Custom UDP Rule | UDP | 1194 | 203.249.191.10/32 | | Custom UDP Rule | UDP | 123 | 10.75.26.0/23 | | prd-admin-sg | HTTP | TCP | 80 | sg-9a9385f1 (admin-elb-sg) | | Custom TCP Rule | TCP | 443 | sg-9a9385f1 (admin-elb-sg) | |
| 8. S3 Bucket 생성 | 1) S3 Bucket   |  |  |  | | --- | --- | --- | | Name | Type | 기타 | | enmcatchon-security | standard | CloudTrail, CloudFront, ELB Logs, CJ보안팀 사용 | |
| 9. ELB생성 | 1) Elastic LoadBalancer   |  |  | | --- | --- | | Name | NDS Name | | admin-elb | admin-elb-1838103215.ap-northeast-2.elb.amazonaws.com | | dev-elb | dev-elb-1906723356.ap-northeast-2.elb.amazonaws.com | | englishgem-elb | englishgem-elb-714647635.ap-northeast-2.elb.amazonaws.com | | interface-elb | interface-elb-1374259572.ap-northeast-2.elb.amazonaws.com | | **catchon-elb** | **catchon-elb-14581484.ap-northeast-2.elb.amazonaws.com** | |
| 10. ACM 설정 | 1) ACM 설정   |  |  | | --- | --- | | Domain Name | Additional names | | \*.englishgem.co.kr | \*.englishgem.net, \*.englishgem.kr, \*.englishgem.com, \*.egem.co.kr, \*.egem.kr | |
| 11. OpenVPN 설정 | 1. Client 설치 및 설정  - 아래 사이트에 접속하셔서 OS 버전에 맞는 설치 파일을 다운로드  - Linux or Windows : https://openvpn.net/index.php/open-source/downloads.html  - Mac OS : https://tunnelblick.net/downloads.html  - 설치된 client에 ovpn 파일 설정  - Windows: 설치된 폴더의 config 폴더 속에 해당 파일을 복사  - Mac: ovpn 파일을 더블클릭하여 적용(적용이 되지않을 경우 S/W를 quit 한 뒤 다시 시도)  2. VPN 계정   |  |  | | --- | --- | | ID | PW | | idcvpn | WnL4agB3HU | | enmvpn | GIP5A4isYL | | enmdevvpn | DJWKGTBSPP | |
| 12. 결과확인 | 작업자: CJ올리브네트웍스 현정민 |
| 13. 작업결과 전달 | Key Pair:  catchon-keypair.ppk,  catchon-keypair.pem  catchon-enmadmin-keypair.ppk,  catchon-enmadmin-keypair.pem  catchon-enmdev-keypair.ppk,  catchon-enmdev-keypair.pem  catchon.ovpn |