**Root Cause Analysis**

**Issue with Dev Account in USAA Due to CFT Deletion**

**Prepared By –** Madhukar Ponnala

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**Reviewed By –** Swapna Gullapally

1. **Problem Statement:**

It has been observed that on 18/03/2020, FUJI team members were unable to do ssh in dev env. Server **bastion-host-dev** in Dev env and not able to connect the EMR to run the spark jobs.

1. **Business Impact/Impact of the issue:**

Since team was unable to connect to Dev account for USAA that impacted the productivity of the team.

1. **Why it’s happened? /Root Cause:**

Following investigation steps have been performed:

* Server (Ec2) instance got deleted (not running)
* Check the CFT got deleted

Outcome of the investigation:

* After investigation, found CFT got deleted on (2020-03-18 15:34:57 UTC+0530) which is causing this issue.

Reasons/events that happened for

* E-mail request from Chitra on Cloud Formation issue
* Verified CFT stack limit, the limit goes full. The threshold is 200
* There were 2 options in front of associate
* Increase the capacity with the help of EITS team. 🡪 EITS is not available at that moment to do this.
* Delete unwanted CFT templates. 🡪 By considering the criticality, chosen this option.
* Dropped message to Rajeswari (Development head) to confirm on the deletion. Associate was not completely aware of process.
* Request for deletion has been approved *–* (2020-03-18 15:22:30 UTC+0530).
* CFT got deleted on (2020-03-18 15:34:57 UTC+0530), causing DEV account server down.

1. **Resolution Steps:**

* Modified the CFT and ran the temple again. Then server got created, but Ip changed (Informed the team with new charges/updates).
* Updated the new role in S3 bucket and User ID in S3 bucket policy, they were able to access s3 object’s from EMR.

1. **Steps to be taken so that the issue will not appear again:**

* Avoid deleting CFT in future – with immediate effect.
* In case of any deletion, take management (Alvaro’s) approval. - with immediate effect.
* Get required knowledge on the setup. Training will be conducted to the associate to ensure the understanding of the process – 15-April-2020.
* Going forward to reduce the Limit issues, Deletion of EMR Cluster (which got created using Service catalog) will happen, so that CFT will get delete automatically.
* To ensure that process standardization, Check list will be created for these steps and trained all other associates in this area. - 30-April-2020

**Screenshots:**



















