**POC Upgrade Summary**

* **Current Status:**
  + Ongoing calls and discussions with the US team regarding the POC upgrade.
  + Recent updates were executed manually.
* **Concerns:**
  + The US team is uncomfortable using Ansible for updates due to concerns about data corruption.
* **Recent Discussions:**
  + A call was held yesterday.
  + Another call was conducted with Suresh and Vishnu.
* **Upcoming Plans:**
  + There is a scheduled touch base today.
  + The team is inclined towards continuing with manual updates.
* **Considerations for Ansible:**
  + The possibility of trying Ansible on a new pair of POC servers was discussed.
  + Currently, there are no available clusters for this purpose.
* **Next Steps:**
  + Adjustments will be made based on conditions and newly identified requirements.
  + The team will follow an agile approach to accommodate these changes.

**Action Items:**

* **Touch Base Today:**
  + Discuss and finalize the decision on the update process (manual vs. Ansible).
  + Consider and address any new requirements or conditions that have emerged.
* **Explore Options:**
  + Investigate possibilities for securing a new pair of POC servers for testing Ansible.
* **Plan Adjustments:**
  + Make necessary changes to the upgrade plan based on the team’s discussions and decisions.

**Notes:**

* Continuous communication and collaboration with the US team, Suresh, and Vishnu are crucial.
* I am prepared to adapt to changes swiftly and efficiently, following agile methodologies.

**Health Reporting for Clusters Update**

* **Task Overview:**
  + Health reporting for clusters for apm , kibana and apm .
  + A script can be created and run to obtain component-level results and i can share it and develop
* **Communication with Component Developer:**
  + Pavan who worked on the component has not shared the code with others.
  + There is no documentation available in confluence.
  + His code need ramp up as he only work on this using test folder
* **Concerns and Suggestions:**
  + Pawan should ideally share a demo and explain the code to everyone.
  + This approach would allow any team member to update the components.
  + Pawan agreed but is taking time to update the documentation.
* **Task Allocation and Planning:**
  + Consideration is being given to taking on new tasks instead of jumping into others’ tasks.
  + There are new build requirements for Ansible.

**Action Items:**

* **Documentation Update:**
  + Encourage Pawan to expedite the process of updating and sharing documentation.
  + Ensure that documentation is accessible to all relevant team members.
  + .

Synthetic Monitoring Update:

* **Engagement with Suresh and Elastic:**
  + I've been working closely with Suresh and Elastic.
  + My research, which is based on Elastic’s documentation, shows that we don't have the necessary infrastructure to complete the task.
* **Infrastructure Limitations:**
  + We are missing some modules that are crucial for monitoring solutions.
  + There isn’t a server available for the task. Suresh thought we didn’t need a server setup, but it turns out we do.
  + We are making efforts to get Kubernetes clusters to move things forward.
* **Team and Ownership Issues:**
  + It’s been hard to get a team copy of the last file that was run since it isn’t owned by our team. Both Suresh and I are eager to get an old copy so we can develop from there, but it’s missing.
  + I talked to Kushagra and learned that he has done significant work on certificates and Jenkins deployment. He has developer access, which I don’t have as i been moved to a support role after handing over grafana.
  + To give you a brief overview, I developed the files that are run for Grafana, as you can verify in the GitHub history. I handled all plugin integration and connectivity, including certification work and GitHub synchronization for all plugins. I launched the product on prod and BCP and ran 10 instances before the current team took over. I believe there haven’t been major changes to the architecture since then.
* **Role Clarification and Task Requirements:**
  + I’m not serving in a developer role but a support role and cannot access git or modify Jenkins jobs and that too owned by Grafana and that team has done all that work for us.
  + We need new servers or services for development purposes which is not approved
  + The task isn’t critical, and its value is uncertain.
  + My main job is to run a JavaScript, which I can create.
* **Ongoing Efforts and Support Needed:**
  + I’ve reached out to Elastic for updates.
  + Suresh agrees that we need fleet services and those are not approved
  + I’m looking into solutions and need help to run old files and make changes. I expect there will be challenges due as I cannot run it myself to role change .
* **Communication and Support Concerns:**
  + I don’t own the services or software needed for the task, which is a concern as we figure out how to proceed.

**Action Items:**

* + **Seek Support and Clarification:**
  + Need to get the necessary support and resources to run old files and make changes.
  + Need clarity on who owns and can access the services and software needed for the task.
  + **Infrastructure and Resource Planning:**
  + Need to work with the team and others involved to address the missing infrastructure and get what we need.
  + **Communication and Collaboration:**
  + Need to work closely with team members, including Suresh and Kushagra, for coordinated efforts and support.
  + but as pointed we don’t have approved infra in wells Fargo for it and it is not strategic solution

**Rack Awareness and Shard Failures:**

Shard Allocation Awareness:

Elasticsearch facilitates the configuration of shard allocation awareness, a feature pivotal for controlling shard allocation within the cluster. With this feature activated, the system ensures the strategic placement of primary and replica shards across different racks, zones, or any designated awareness attributes. This strategic placement guarantees that a failure in a rack, whether due to patching or other reasons, won't result in the loss of all shard copies, thereby safeguarding data availability.

How It Works:

Upon configuring shard allocation awareness, you'll need to define specific awareness attributes (e.g., rack\_id). Elasticsearch ingeniously utilizes these attributes to distribute shards amongst nodes, enhancing the cluster's resilience significantly. For instance, with two racks labeled rack1 and rack2, Elasticsearch will evenly allocate primary and replica shards across both, ensuring that a failure in rack1 won't affect the availability of shards in rack2.

Implementation:

Implementing rack awareness necessitates the configuration of each node with an awareness attribute within the elasticsearch.yml file as illustrated below:

yaml

node.attr.rack\_id: rack1

Subsequently, the shard allocator should be configured to recognize and utilize this attribute:

yaml

cluster.routing.allocation.awareness.attributes: rack\_id

Considerations:

It's imperative to acknowledge that while rack awareness significantly reduces the risk of total data loss during shard failures in the patching process, it doesn't outrightly prevent shard failures. Therefore, meticulous monitoring of your cluster during patching, comprehension of the patch's implications, and preemptive measures are crucial to averting shard failures.

Conclusion:

The incorporation of rack awareness in Elasticsearch offers a robust layer of protection against shard failures during patching. This is achieved by ensuring shards are not confined to a single rack, thereby providing an additional safeguard. Nonetheless, the minimization of shard failure risks during patching still demands careful planning, vigilant monitoring, and precise configuration.

**Update on Ansible Scripts:**

I wanted to inform you that the work on the Ansible scripts has been completed successfully. I have already conducted a demo for the India team, in which you were present as well.

Another Note

Along with this i am doing another crucial work which is not part of this sheet

It is observed that the team had overlooked boot scripts on almost all clusters, which is a concern that now after my finding and helping in providing information is slowly mitigated

**Upcoming Demo on 10th October with USA team**

I would like to notify you that I will not be conducting the demo scheduled for the 10th of October. However, I will ensure that all relevant materials, including the git sheet and the detailed working process, will be shared with the team. This documentation is already there on confluence which provide comprehensive insights into the work done and serves as a valuable resource for understanding and implementing the Ansible scripts effectively for this work

**Next Steps:**

* .
* **Engagement with the Team:** Continuous engagement and collaboration with the team are crucial to ensure that all concerns and questions, like those raised about the boot scripts and git process , are addressed promptly and efficiently.

**Enterprise Work Setup in Dev Environment:**

I noticed that a task related to setting up enterprise work in the Dev environment is listed. However, there are a few concerns and clarifications needed regarding this assignment:

* **Assignment Clarification:** As per my understanding, this task hasn't been officially assigned to me. It would be helpful if you could clarify the assignment details and expectations.
* **Lack of Approval for Software:** We currently don't have the approved software necessary to proceed with this task. Without the required tools, progressing effectively with the setup is challenging.
* **Engagement with Other Teams:** As discussed previously, this task involves engagement with different teams. If this task is indeed assigned to me , it wasn’t communicated during the PI planning phase. Clear communication and planning are crucial f.
* **Task Assignment in Jira:** If this task is meant to be assigned to me, could you please ensure that the corresponding Jira tickets are sent my way along with EPIC ? As of now, I have been assigned different tasks, and having the Jira tickets would provide clarity on the expectations and responsibilities associated with the enterprise work setup.
* **Communication Regarding Task Assignment:** We have previously discussed this matter, and it was agreed upon that I would be handling two epics instead of one. However, this hasn't been communicated to everyone involved. It’s essential for everyone on the team to be on the same page regarding task assignments to ensure smooth workflow and avoid confusion.

**Action Needed:**

* Could you please provide clarification on the assignment of the enterprise work setup task?
* Kindly ensure that the necessary software approvals are secured so that the assigned individual can proceed without hindrance.
* Clear communication regarding task assignments, especially concerning the two epics, needs to be disseminated to all team members.