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1. OBJECTIVES & SUMMARY
1) Migrated CS 5604 software from CS container cluster to DLRL
2) Made necessary changes to ensure operability
3) Documented new cluster structure for future reference
2. THE DLRL CLUSTER
## Container Clusters: CS, DLRL

<table>
<thead>
<tr>
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<th>CS</th>
<th>DLRL</th>
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<tbody>
<tr>
<td># Nodes</td>
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<tr>
<td>Namespaces</td>
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<tr>
<td>Kubectl Version</td>
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<tr>
<td>Deployed Images</td>
<td>23</td>
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<tr>
<td>Rancher</td>
<td>Yes</td>
<td>No</td>
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Significant Changes

- All data stored in NFS
- Rancher not utilized
- 3 node cluster - no known performance issues
3. FUTURE WORK
Small Changes

- Additional changes to suit user needs
- Application error debugging
“Dangling Containers”

● Many containers stuck in CrashLoopBackOff error states
● Most errors come from containers exiting incorrectly
● Must be fixed on the application level
4. ASSESSMENT OF WORK
<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>Average</th>
<th>Poor</th>
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<tbody>
<tr>
<td>Teamwork</td>
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<td>Documentation</td>
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<td>Timeline Adherence</td>
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Major Takeaways

● Learning new technology quickly
  ○ Resource utilization
● Kubernetes debugging
  ○ Problem scope assessment
● Networking with professionals
● Delegation of tasks
  ○ Support for teammates
Thank you to:

Prashant Chandrasekar

Ola Karajeh

Edward Fox

Xinyue Wang

& the amazing VT Tech Staff!
References


Thank you for listening

Any questions?