ATOL: Cluster and Services

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Advanced Topics of Linux Administration

Resource Group Manager

- High availability failover of service groups
- Designed for 'cold' failover (application stop/start)
- Works with off-the-shelf application
- No difference between resource (e.g. IP address) and application (e.g. Apache)
- SystemV-style init script
- Failover domains

Service groups and resource agents

- ▶ Service group contains of 1+ resource agents (IP + apache + mysql + filesystem)
- ▶ Start/Stop sequence of resources (IP before apache) does not depend on order in configuration
- ▶ Resource agent has access to both siblings and child nodes in XML (a bit of inconsistency)
- ▶ *clustat* – cluster status
- ▶ *clusvcadm* – cluster services administration (cli tool) or lucii

Resource Recovery

- ▶ Recover policy is defined when service is created
- ▶ Policies:
  - ▶ Restart – tries to restart failed parts of group before relocate (default)
  - ▶ Relocate – move on another node
  - ▶ Disable – disable entire service

Goal A

- ▶ Create a simple service containing of IP address and move it on other node (then add failover domain)
- ▶ Create a service group for NFS export (parent-child data passing) - filesystem, nfs export, nfs client
- ▶ Create a service group for apache (sibling data passing) - apache, ip address

Goal B

- ▶ Create a service group for LAMP application (use NFS export from physical machine)
- ▶ Add support for connecting through ssh to such service group

Themes

- ▶ Themes:
    - ▶ Explain how to create a resource agent for application and describe problems
- ▶ Format:
    - ▶ Short presentation (15–20 minutes; 5-7 slides)
    - ▶ Paper containing comparision (1.000 words)