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| **Description** | Likelihood and Impact | **Detection, how will we know it has happened** | **Immediate Action** | **Later Action** | Effect on Users | **Mitigation and Contingency (currently in place)** |
| Single Disk Failure | Medium | Nagios Warning | Replace failed disk in RAID volume. | Order new disks. Have existing disks destroyed. | No effect | Nagios monitoring of RAID volumes. Keep replacements drives available. |
| Multiple Disk Failure | Low | Nagios Warning | Replace failed disks in RAID volume. Restore from hot backup. | Order new disks. Have existing disks destroyed. | No effect (failover) | Nagios monitoring of RAID volumes. Keep replacements drives available. |
| Unauthorised modification of content | Low | Periodic Auditing of logs. Monitoring of application | Restore modified content. | Repair security breach. Determine root vulnerability. | Low effect on users. | Determine root vulnerability. Repair vulnerability. |
| Data loss | Low | Nagios Warning | Restore data from hot or offsite backup. | No later action necessary. | Users will not have access to their data. | Hot and offsite backups in place. |
| Software failure for each key piece of software used | Medium | Nagios Warning | Update/repair software. | Update/repair software. | Users will not have access to software. | Update software to latest stable version. |
| Multiple machine failure | Low | Nagios Warning | Repair machine, replace machine with hot backup machine. | Repair machine, replace machine with hot backup machine. Order new hot backup machine. | Low effect (failover). Performance will be compromised. | Monitor machine health with Nagios. |
| Software failure | Medium | Nagios Warning | Update/repair software. | Update/repair software. | Low effect or no access to software. | Update software to latest stable version. |
| Capacity overload | Medium/High | Nagios Warning | Bring on additional servers (hot backup servers) (5 hours). | Check power load of new servers. Allocated additional power as part of data center agreement. | Performance degradation. | Monitor capacity with Nagios. |
| Loss of building through fire, flood etc. | Low | Warning from hosting providers | Move application to backup data center (hot). (5 hours) | Move back to primary data center (when available). | No access to software. | n/a |
| Local network failure | Low | Nagios Warning | Repair network / replace switches (hot) or move to backup data center. (5-10 hours) | Replace failed hardware. | No access to software. | Hot backup data center in place as well as hot backup switches. |
| Power failure (generator down at data center) | Low | Nagios Warning, Warning from hosting provider. | Move application to backup data center (hot). (5 hours) | Move back to primary data center (when available). | No access to software. | Hot backup data center in place. |
| Loss of Internet Connection | Medium | Nagios Warning | Switch to (hot) backup T1 connection. (5 hours) | Switch back to primary T1 once enabled. | No access to software. | Hot backup T1 connection in place. |