# Risk register Table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Risk ID** | **Risk Description** | **Likelihood** | **Impact** | **Risk Rating** | **Mitigation Strategy** | **Security Controls** | **Owner** | **Review Frequency** |
| R1 | Some of the risks of using the migration tools include loss of data in mid-transfer due to corrupt transfers. | Medium | High | High | AWS DataSync offers secure data transfer between supported sources and/or destinations, allow for multi-Region backups, and data verification via checksums. | AWS DataSync, AWS S3 Versioning, Multi-Region backups | Data Migration Team | Weekly |
| R2 | System misconfigurations resulting in misconfigured virtual Private Clouds and security groups. | High | High | High | Use CloudFormation to create VPC structures, put Config in use for automated compliance evaluations and perform security group rule reviews from time to time. | Cloud Formation of AWS, AWS configuration, periodic security assessments | Network Engineering Team | Daily |
| R3 | Just as in other cloud models, application compatibility issues lead to low levels of performance in the cloud. | Medium | Medium | Medium | Run test applications on an AWS practice environment, use AWS Application Discovery and provide any necessary application refactoring. | AWS Sandbox Test, AWS Auto-discovery Service, Cloud-native transformation | Application Development Team | Weekly |
| R4 | Lack of security controls and controls breach that makes the system open for the unauthorized users. | High | High | High | Use IAM best practices with AWS best security practices, AIS for DDoS with AWS Shield, use MFA, & AWS KMS for encryption. | AWS IAM, AWS shield, MFA, AWS KMS | Security Team | Daily |
| R5 | A risk that arises from this exploitable area is the use of multiple cloud services from the same cloud provider leading to vendor lock-in. | Medium | Medium | Medium | Where possible, both adopt a multi-cloud strategy; when sourcing cloud services, negotiate the best deals with the providers; and make sure that your data are portable. | The main goals of multi-cloud strategy are data portability and negotiated contracts. | Cloud Strategy Team | Monthly |
| R6 | Huge bills that are incurred through improper management of the cloud resources. | High | High | High | It is necessary to implement the precise microscopic control of budgets and costs, the use of AWS Budgets and Cost Explorer, and the ongoing process of resource utilization. | AWS Budgets, AWS Cost Analyzer, and Cost-optimization features. | The role of Department is Finance and Cloud Management Team | Weekly |