**Backup Solution**

**Backup System Requirements**

* 1. Backup solution should be deployed on Virtual Machine or on Virtual Appliance, compatible with: Hyper-V 2012, 2016.
	2. Backup solution should be licensed for 30 TB Backup Data.
	3. License should include deploying at least two instances for High Availability and Replication Purposes.
	4. Solution must include Manufacturer Software Support for 3 Year

**Backup Management Requirements**

* 1. Web or Desktop client GUI for Management purposes, also cli for advanced parameter management.
	2. Ability to centrally manage installed clients. LDAP or Active Directory Support, role-based access permissions per Backup Client Granularity.

**Application Backup/Restore Mandatory Requirements**

1. **Microsoft Windows Server**
	1. Windows 2012 R2, 2016 Support
	2. Windows Files System VSS Backup
	3. Windows Cluster Support
	4. Supported File systems: FAT16, FAT32, NTFS, ReFS, exFAT
	5. Restore options: Restore Same location, Restore Different Location
	6. Bare Metal Recovery Support
2. **Microsoft Exchange Server**
	1. Standalone Exchange Server 2013, 2016
	2. Restore DB to Standalone Exchange Server
	3. Restore DB to File
	4. Granular Level Recovery without recovering Complete Database, directly mounting Backup from DataDomain system to Exchange Server.
	5. Restore Individual Mailbox
	6. Restore Individual Mail Message to: Mailbox, redirect restore to different mailbox, restore to file
	7. Public Folder Mailbox Recovery Support
3. **Virtualization**

4.1Full VM Backup and Restore

* 1. Granular Level Backup/Restore
		1. Application-aware backup and restore: Microsoft File Server, SQL Server, Exchange Server, SharePoint Server.
	2. Guest Backup customization: exclusion of certain files or file types
	3. Windows Hyper-V Server clusters with CSV
		1. Hyper-V, Backup Proxies Support to Redistribute Backup load in Hyper-V Cluster
	4. System Center Virtual Machine Manager (SCVMM) Support
	5. Restore of virtual machine files and the Host Components to the original location on the original Hyper-V Server.
	6. Restore of virtual machine files to a different file system location on the original Hyper-V Server.
	7. Restore of virtual machine files to a different Hyper-V Server to create a new Virtual machine.
	8. Restore of virtual machine files for manual provisioning.
1. **Microsoft MS SQL Server**
	1. Microsoft SQL Server 2012, 2014, 2016 Support
	2. MS SQL Failover Cluster and Always on Availability Group Support
	3. Simultaneous backup of Nodes in “Active/Active” SQL Cluster
	4. Backup from Primary or Secondary Replica support in AG
	5. Database Consistency Check
	6. Backup SQL Server with SQL or Windows Service Account
	7. Full, Incremental, Differential Backup Support
	8. Ability to Truncate or leave, Transaction Logs after backup.
	9. Transaction Log Gap Detection
	10. Backup Client Performance Threshold support
	11. Copy Only Backup Support
	12. Restore to only the primary replica in AG
	13. Restore to both the primary and secondary replicas in AG
	14. Restore to the original location
	15. Restore to a new database in the original instance
	16. Restore to a different instance on the original server
	17. Restore to an instance on a different server
	18. Restore to a file
	19. Restore of a database with an intact log file
	20. Restore of system databases
		1. Automatic restore of system databases after DB Restore and ability to restart SQL Services Automatically
	21. Tail-Log Backup
	22. Last Full backup Automatic Restore ability
	23. Point-in-time restore – By Mark and/or Time Stamp
2. **DataDomain Integration**
	1. EMC DataDomain Integration Support
	2. DataDomain Replication Support
	3. DDBoost Protocol Support
	4. DDBoost Dynamic Interface Group Support
	5. Backup Client to DataDomain Direct Backup/Restore Support
	6. Multi Streaming Support for backups and restores

**Additional Requirements**

* Manufacturer Authorization Form
* Minimum 1 similar Project within last 1 year