Database Assessment Checklist

Company Name: _____
Contact Name: _____
Title_____
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This report has been prepared for CUST NAME as part of an initial SQL Server health check and discovery for the CUST NAME SQL environment. Data collection was completed on the 8th October 2013 with the help of Bart Joy and Dilton Fong. Three servers have been identified of which two (IHWECGSQL3V, IHWECGSQL4V) are designated production servers and the remainder UAT (IHWECGSQL1VS).

Currently, no DR equivalent for the production servers exists as well as no SQL Server DR documentation for business continuity. Therefore, as the environment currently stands, the provided recovery point objectives (RPO) and recovery time objectives (RTO) cannot be achieved. A high-availability and disaster recovery section has been included in this report and two examples of potential implementations to meet the RPO and RTO requirements are provided.

The information collected during the discovery highlighted several non-best practice issues with the underlying implementation of the SQL Server instances at CUST NAME.

Overall, the performance of the SQL Servers can be improved by addressing missing indexes identified as part of this review. The underlying disk subsystem should also be investigated. Implementation of the indexes as well as query tuning where applicable would reduce CPU and I/O overheads as well as improve query performance.

THE FOLLOWING IS A LIST OF RECOMMENDATIONS TO REMEDIATE EXISTING ISSUES AND REDUCE OPERATIONAL RISK:

- Validation of SQL Server Backups as well as Hyper-V images
- Documentation and Testing of Hyper-V DR process
- Creation of SQL Server Agent Alerts to notify system administrators of errors *
- Monitoring and Trending of SQL Servers performance to establish baselines *
- Alter maintenance plans to encompass all databases or create if one does not exist *
- Review privileged users and access *
- Review enabling of automatic creation and update of statistics on the hub database *
- Review and implement missing indexes *
- Review and tune top queries identified *
- Change recovery model for UAT/Production databases to ensure RPO/RTO is achieved *
- Move the umbracoCMS database to a production server
- Implement regular log backups for umbracoCMS to allow for point in time recovery, otherwise set the database to SIMPLE recovery mode. *
- Investigate high-availability and DR options. The above examples can be further refined to meet Cust Name's specific requirements
- Change database ownership to 'sa' *
- Implement recommended values from section 3.6 – Non-Standard Server Configuration *
- Patching of SQL Server to the recommended patch level