



Professional Services Agreement

cb20 proposes the following Systems Engineering Services to Customer. Except as otherwise set forth herein, this Order and the products and/or services listed herein are governed by the cb20 Master Services Agreement available at <https://www.cb20.com/legal> (the "MSA") By executing and submitting this Order, customer expressly agrees to the MSA.

Executive Overview – Azure Site Recovery (ASR)

Azure Site Recovery offers flexibility of deployment, cost effectiveness, and dependability. Deploy replication, failover, and recovery processes through Azure Site Recovery to help keep your applications running during planned and unplanned outages.

Site Recovery is a native disaster recovery as a service (DRaaS) and a critical part of an overall Business Continuity and Disaster Recovery (BCDR) plan. Microsoft has been recognized as a leader in DRaaS based on completeness of vision and ability to execute by Gartner in the 2019 Magic Quadrant for Disaster Recovery as a Service.

Azure Site Recovery will provide replicated copies of production VMs and physical servers to the Microsoft Azure Cloud in a state ready to boot in the event of a Disaster. A near-constant data replication process makes sure copies are in sync.

cb20 will provide the following services to include analysis, planning, implementation, documentation of the Recovery Plan and failover process for disaster and testing scenarios. Once implemented, cb20 will review the configuration and documentation with Customer.

Note: There is no retention of data as part of the Azure Site Recovery service. Existing backup strategies can continue to provide retention. cb20 can provide backup solutions to supplement the implementation of Azure Site Recovery if desired, providing data retention required by the organization.

Project Goals

The cb20 project engineer(s) will:

- Analyze the workloads to be protected
- Estimate the Azure operating costs
- Plan the deployment
- Implement the solution
- Test the Recovery Plan with an offline test (sandbox) and a live failover test,
 - Document the process and outline changes to production environment to support a better outcome
- Provide an Azure Site Recovery implementation and failover Runbook



Project Deliverables for a single Datacenter or Cloud Deployment

Planning and Project Coordination:

- Review project scope and project goals
- Review any licensing requirements for this project
- Review access requirements for the cb20 engineer
- Review acceptable down time periods (if required)
- Review requirements
- Review cb20 and Customer responsibilities
- Determine project timeline
- Outline method and schedule for providing project updates
- Provide project updates per schedule

Azure Site Recovery Deployment Planner

The Azure Site Recovery Deployment Planner (ASRDP), aides in the deployment-planning of Azure Site Recovery, both technically and financially.

The ASRDP tool provides the following information:

- On-premises environment summary
- Site Recovery environment configuration requirements and recommendations for
 - On-premises bandwidth
 - On-premises Azure Site Recovery targets
 - Azure Storage account configurations
 - Azure cores/compute needs
- Cost estimates for
 - Monthly Azure storage requirements for protected servers
 - Azure workload during a DR scenario

Run ASRDP

- cb20 will outline the requirements for the ASRDP server VM
- establish the desire RPO
- Deploy the tool and run
- Review the results

ASR Planning

Review ASRDP results

- Bandwidth needs to meet RPO
- Azure workload estimate/spend
- Any other pertinent details

Identify and prioritize applications which need to be protected via ASR,

- Active Directory
- File shares
- Print servers
- Applications



User Access and Networking

- Determine VPN configuration
 - cb20 will configure the Azure VPN components selected, Customer will be responsible for on-premises networking
 - Customer will be responsible for setting up on-prem network connectivity to Azure during testing
- Review User access methods for access to the systems in Azure
 - Configurations to improve user access to systems running in Azure are outside the scope of this agreement.

Document server resources required in the event of a DR

- Provide final monthly pricing for the configuration
- Estimate what it will cost per month in DR scenario
- Estimate what a test will cost

Implementation

- Deploy Azure Site Recovery on-prem server
- Prep Azure environment for ASR replications
- Configure replications of all application server dependencies
- Create Recovery Plan to be used for streamlined failover during DR testing/DR
 - This is a process by which VMs are grouped and rules applied for proper startup in Azure, with focus on reducing RTO
 - Create all needed ASR recovery processes. Map out all manual tasks and thoroughly document instructions for IT staff
 - Build out supporting written process documentation for IT staff on how to execute a live test and true disaster failover using ASR

Testing

- Offline Test (sandbox)
 - Define test criteria and test plan
 - Minimally demonstrate the recovery of all servers in the plan and test access
 - Select testers if application tests will be done
 - During the offline test, servers will NOT be connected to on-prem networks, and is used to demonstrate the general ability to boot the server replications in Azure and perform rudimentary server access, and application testing where possible
- Perform live test
 - An online test where recovered servers in Azure are connected to on-prem networks.
 - All applications that can be tested should be tested, including on-prem access
- In all testing scenarios, cb20 works side-by-side with on-site IT staff for execution and knowledge transfer
 - Post-testing, adjust Azure Recovery Plans and update written process documentation as needed based on test results



Documentation and Knowledge Transfer:

- cb20 will document critical system settings
- cb20 will review the document with Customer IT staff
- cb20 will review changes to system administration tasks with Customer IT staff.

Customer Requirements

- Customer agrees to have maintenance/support on any application impacted by this project and will be prepared to provide contact and account information as needed.
- Customer agrees to provide VPN/remote access credentials for the environment for remote work, and timely access to equipment for onsite work.
- Customer will address on-premises network changes as needed
- Customer will address user access systems as needed
- Customer agrees to adhere to the schedule outlined in the project meetings and to complete customer required tasks in the timelines provided.

Note: These requirements are intended to communicate steps to be taken to enable cb20 to work efficiently. If these requirements are not addressed, a change order and additional time may be required.

Changes in Scope

- Changes to the project scope will be communicated in writing (email is acceptable).
- Changes and estimates will be approved before work continues.
- cb20 will not exceed the estimate by more than 10% without an approved change order.

ASR Estimate (Azure Cloud)

- Azure Site Recovery for VM's/Servers: \$25/per VM per month
- Azure Storage with Zone Redundancy: 1 TB: approx.. \$250/month
- Note 1: Azure resources will be consumed during tests. Customer will only be billed while the resources are consumed. During the planning cb20 will fine tune the estimate for the workloads to predict DR test costs and DR costs.
- Note 2: This sample pricing does not include other Azure components.

Professional Services Rate

- cb20 will provide the services outlined above at the discounted rate: **9,995**

Project Services Commencement Approval



Acceptance of this agreement authorizes the cb20 Engineer(s) to complete the work specified above. In the event work is required outside the above scope, a change order will be required.

The Information and pricing contained in this document are valid for 30 days from the date below.

I agree to these terms and conditions.

Customer

Date