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1. Subscribe to Eyeglass Updates

- How to Subscribe Eyeglass updates

How to Subscribe Eyeglass updates

1. All users registered in our support system will **automatically** be enrolled to receive updates about Major/Minor release announcements and technical advisories.

2. Each email type has an opt out option when an email is received.

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2. Eyeglass Professional Services

- Install Maintenance Task

- Product Installation Services

- DR Design Services

  - Check List Comparison of the DR Design Services

- Easy Auditor Services Services

- Cluster Tech Refresh Services

- Training Services

- DR Monitoring Services

- Cloud Data Archive Services

- Ransomware Defender Advanced Services

Install Maintenance Task

1. Superna ™ Eyeglass Installation Maintenance Task Description

Product Installation Services

1. Service - Superna ™ Eyeglass Cluster Install and Config Service Description (Ransomware Defender, Easy Auditor , Search & Recover, Performance Auditor, Golden Copy)

DR Design Services

Check List Comparison of the DR Design Services

3

Key Tasks	DR Quick Start (eyeglass-P015)	DR Design and Implementation (eyeglass-P013)
Overall DR Design and Document Deliverable	Yes	Yes
Configure All Access Zones	No (only Runbook robot)	Yes
Configure All Policies for DFS	No (only 1 as sample)	Yes
Configure Continuous DR Test Feature (runbook Robot)	Yes	Yes
Document all Access zones, IP Pools, Smartconnect Aliases, DNS changes, AD changes	No (only Runbook Robot Zone)	Yes
Train on Failover Operations	Yes	Yes
Complete Environment Assessment (SyncIQ, AD, DNS, Eyeglass) included in Design document	No	Yes
Failover customer production Data	No	No

1. Services - Superna ™ Eyeglass Best Practice DR Quick Start

2. Services - Superna ™ Eyeglass PowerScale DR Design and Implementation Service Description

3. Services - Services - Superna ™ Eyeglass DR Event Audit Planning &, Failover training Service Description

Easy Auditor Services Services

1. Service - Superna ™ Eyeglass Easy Auditor Auditing Best Practices

Cluster Tech Refresh Services

1. Service - Superna ™ Eyeglass 1 Cluster Tech Refresh Service Description
2. Service - Superna ™ Eyeglass 2 Cluster Tech Refresh Service Description

Training Services

1. Training - Superna ™ Eyeglass ILT DR Plan, Config, Execute and Monitor

DR Monitoring Services

1. Eyeglass Service Description - DR Monitoring Subscription Service

Cloud Data Archive Services

1. Service - Superna ™ Eyeglass Cloud Archive Quick Start Service

Ransomware Defender Advanced Services

1. Service - Superna Eyeglass AirGap Design and Implementation

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2.1. Superna ™ Eyeglass Installation Maintenance Task Description

Superna ™ Eyeglass Installation Maintenance Task Description

Overview:

This support task is designed for customers who have a need for deployment and knowledge transfer on monitoring, troubleshooting and basic operations of Eyeglass.

- **Delivery:** Remote WebEx
- **Operating Hours:** Monday to Friday 2:00 AM to 3:00 PM EDT
- **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement
- Exclusions:
  - This maintenance task is included in product purchase and IS NOT a replacement for advanced services that include DR design and failover training and knowledge transfer
  - Available once per customer purchase of 8 or more node licenses or 2 or greater cluster licenses
  - No external configuration of AD, DNS, PowerScale
  - Installation Technicians are not authorized to provide design recommendations, initiate failover operations OR make

material cluster configuration changes that can compromise cluster data availability.

- o **NOTE:** **Installation Technician will defer all known install questions to post sales team.**

- **Mandatory**: Eyeglass PowerScale Basic Installation Questionnaire Form completed located here
- **Mandatory** Schedule service installation here.
- **Restrictions:** Entitlement is one per purchase of 8 or more nodes or 2 or greater cluster licenses
    - o Superna reserves the right to cancel this entitlement quick start task 60 days from purchase date or for any other reason at Superna's sole discretion.

Eyeglass Installation Quick Start Maintenance Task:

This service includes the following:

1. **Eyeglass for PowerScale Installation** - Remote Install with customer via WebEx meeting to accomplish the following
    a. Gather site installation requirements from checklist above
    b. Provide guidance on Install of appliance on VMware host only
        i. Excludes RHEL and Windows Hyperv
    c. If Eyeglass was previously installed for Eyeglass trial, reset system to factory default removing trial configuration.
    d. License Eyeglass with transaction number and appliance ID
    e. Provide guidance on create service account for authentication to customer clusters

f. Sync Cluster configuration inventory (add clusters)

g. Verify correct job creation and successful sync

    i. Run one policy sync job to verify sync status

h. Run appliance backup

i. Configure email for alarms and change report

    i. Test and verify email

j. Configure phone home support

    i. Test phone home is successful

k. Installation Completed install document provided.

2. **Knowledge Transfer Session** - WebEx

a. Review installation, and operating procedure to monitor the system replication status, overall DR status, inventory status.

b. Review monitoring tools email, twitter, logging export to log analysis tools

c. Review online help system for errors within Eyeglass webui

d. Provide installation summary document and system status test results

e. Review appliance backup

f. Review appliance restore procedure

g. Review Eyeglass CLI and capabilities

h. Walk through support account enrollment, knowledge base access, feature request process

i. Review Failover planning documentation and review support process for failover.

j. Identify Next steps documentation for customer to review configuration steps for DR design.

k. Review appliance HA documentation links and explain choices for HA of the appliance

l. Review Free hands on virtual training and online self paced courses links.

2.2. Service - Superna ™ Eyeglass Cluster Install and Config Service Description (Ransomware Defender, Easy Auditor , Search & Recover, Golden Copy, Performance Auditor)

Eyeglass Service Description

Part number "**SEL-Eyeglass Cluster Addon Install Service - myqotes eyeglass-P016 Dell SKU AB109744**"

Revision 2 Feb 6, 2020

Service - Superna ™ Eyeglass Cluster Install and Config Service Description

(Ransomware Defender, Easy Auditor , Search & Recover, Golden Copy, Performance Auditor)

- Overview
- Project Plan Summary
- Prerequisites
- ECA Cluster Install & Config Service:
- Ransomware Defender Section:

-

Overview

This service is designed for customers who are deploying Superna Eyeglass Ransomware defender and/or Easy Auditor and need installation and configuration assistance.

- **NOTE:** This part number is used for Ransomware Defender OR Easy Auditor products. Quantity 2 of this service is required if both products have been ordered.
    - Scope: Covers a single clustered Eyeglass agent installation and configuration, with up to 2 collocated same site Clusters.
- **Service Delivery:** Remote WebEx
- **Operating Hours:** Monday to Friday 2:00 AM to 3:00 PM EDT
- **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement
- **Mandatory**: Eyeglass Installation Questionnaire Form completed located here with all questions answered. Service will not be scheduled until completed in full.
- **Exclusions:**
    - **NOTE: Only product documentation will be followed. This is not a consulting service.**

- Installation Technicians are not authorized to provide design recommendations, for DR features.
- Hands on changes to external IT components example DNS, PowerScale, Active Directory or other non Superna supplied products.
- Service delivery requires customer to have hands on knowledge of all external IT components.
- NOTE: This service is not a security audit. Consulting services should be purchased. Installation technician is not authorized to provide security advice.

Project Plan Summary

Project Plan:
1. Times are estimates only.
2. Change Management not factored into the times below.
3. Typical end to end completion of products using the same ECA cluster instance is 3 hours on a single call.
4. Knowledge Transfer for all products is completed during this call except for Ransomware Defender that requires a separate 30 minute call

Prerequisite Phase
Customer

Customer prepares all prerequisites sent prior to the scheduled installation day

Sent via email with links to all information that must be completed before installation day.

If not completed it will require the installation to be rescheduled

Installation and Configuration
Joint

Installation Day

Boot the VM's for the first time

Verify IP reachability

Configure NFS mounts

Isilon NFS exports

Smartconnect names

HDFS pool configuration

ECA cluster configuration

ECA Startup test

End to end validation

Est. Time: 2 hours

Knowledge Transfer on Key Features (all products)
Joint

Review key features of each product

Test and demonstrate each key feature

Answer key questions about key features

Wrap up

Email installation report summary

Est. Time: 1 hour

Knowledge Transfer Ransomware Defender
Joint

Review operational steps to process alerts

External alarm forwarding email or syslog

Review learning mode

Review flag as false positive

Review enforcement mode
Review risk profile decision

Est. Time: 30 minutes

Prerequisites

==Customers must complete these steps prior to scheduled installation and configuration==

- Confirm that Eyeglass DR Edition is installed
- Ransomware Defender and/or Easy Auditor Installation and/or Search & Recover Checklist Form has been submitted
- **Easy Auditor Only** - HDFS license key is installed , contact Dell EMC account team to request the license key.
  - ==**Confirmed the license key is installed before scheduled installation date by emailing sales@superna.net**==
  - Access Zone has been configured for the Easy Auditor database. ==**Consult Dell documentation to complete these steps.**==
    - **Access Zone name eyeglass with path /ifs/data/igls/analyticsdb**
    - **An IP pool created with 3 node members and the pool assigned to the Access zone eyeglass created in the previous step**
    - **3 ip addresses allocated**
    - **Smartconnect name configured and DNS delegation correctly resolves with round robin IP addresses**
    - ==**NOTE: Installation cannot be scheduled until these steps are confirmed to sales@superna.net**==
  - ==On the day of installation confirm availability of the DNS administrator to make changes if the above steps requires debugging or was mis configured.==
- **All products**
  - Firewall ports opened as per documentation for Eyeglass
    Eyeglass Ports Requirements and Scalability Limits

  ○ Firewall ports opened as per documentation for ECA clusters. ECA Cluster application port requirements.

ECA Cluster Install & Config Service:

Initial Setup:
The following are initial setup steps whether installing Ransomware Defender, Easy Auditor , or Search & Recover:

1. **Eyeglass Ransomware Defender/Easy Auditor Install Phase** - Remote Install with customer via Webex meeting to accomplish the following:
   a. **Prerequisite** - Gather site installation requirements from submitted Installation Checklist Form for review
   b. **Prerequisite**- Identify VM deployment option:
      i. VM count depends on products purchased
      ii. 1 physical ESX host and 3-6 VM's (lowest HA option)
      iii. 3 physical hosts and 1 VM per host (highest HA option)
   c. **Prerequisite** - Deploy OVA (vcenter administrator required)
      i. Require 3-6 VM ip addresses
      ii. Require Eyeglass IP address
      iii. Require open ports between Agent and Eyeglass, Agent and cluster as per installation guide
      iv. Require Access Zone (HDFS enabled) to be created for Agent database
      v. Create IP pool with at least 3 nodes in the IP pool and 3 IP addresses
   d. Install OVA with above prerequisites
   e. Test connectivity ip and ports between components (Eyeglass, Agent and cluster)
   f. Installation Completed

2. **Configuration Phase** - Webex
    c. Apply License to Eyeglass
        iii. Verify license
    d. Edit configuration file on agent startup (api token created in Eyeglass)
    e. Startup clustered agent code
        iii. Validate correct startup
        iv. Validate DB create on HDFS Access Zone
        v. Validate Service heartbeat in Eyeglass with Service Manager Icon
        vi. Validate shutdown and restart of cluster success
    f. Configure PowerScale to audit files in an Access Zone for testing phase
        iii. Configure Turboaudit with NFS mounts on audit directory on all ECA nodes
        iv. **Enable auditing on one or more access zones**
7. Verify audit messages are being processed
    viii.   **Completed**

Ransomware Defender Section:

This only applies if the service was purchased with Ransomware Defender.

1. **Test and Configuration Phase** - **Ransomware**

a. Configure Security Guard feature
    i. Validate successful execution
    ii. Configure schedule
    iii. Knowledge transfer on log file validation for Security guard
b. Enable monitor mode to baseline user behavior
c. Review Security assessment on enforcement section in the admin guide
    i. Customer to decide on Low , Medium or High risk profile. Review decision criteria in the admin guide. [How to determine threat response settings to meet your Company's Risk Profile](#)
    ii. Update check list in installation document this section was reviewed
    iii. Configure settings as per customer risk profile decision.
d. Over 2-3 weeks schedule validation sessions on the installation
    i. Collect support logs
    ii. Explain white list settings to customer and future behaviors that have lockout that may require ongoing white list updates.
    iii. Make white list changes from analysis of statistics and user behaviors detected apply to installation. Repeat process until detections are set correctly for customer environment
2. **Knowledge Transfer Phase** - Ransomware
a. How to enable production mode
b. Operational cluster management section
    i. Start, stop, upgrade

     c. How to process security incidents work flow from the admin guide How to respond to Security Events for Warning, Major or Critical Events

     d. How and when to make white list changes when introducing new server applications that write data to PowerScale.

          i. Enable monitor mode

          ii. Monitor application and events

          iii. Exit monitor mode when application work flow does not generate security incidents

     e. How to use ECACTL CLI and key command troubleshooting

          i. Start cluster **ecactl cluster start**

          ii. Stop cluster **ecactl cluster down**

          iii. Check for running containers **ecactl containers ps**

          iv. Get stats on running containers **ecactl stats**

     f. UI walk through ransomware

          i. Active Events

          ii. Event History

          iii. Settings

          iv. Statistics

              1. Licensing

          v. Managed Services Icon

          vi. Security Guard

3. **Service complete**

Easy Auditor Section:

This only applies if the service was purchased with Easy Auditor.

1. **Test and Configuration Phase** - **Easy Auditor**

a. Verify audit data is being stored in the analytics database with query interface

b. Run test user query report

c. Run test path based report

d. Test Where did my folder go?

      i. Rename a directory or drag and drop a directory

      ii. Run search in Where did my folder go?

e. Review test **wiretap** functionality on a path with a test user mounting and accessing files

      i. Verify user activity is visible in the UI

      ii. Review decode of open files and actions

2. **Knowledge Transfer Phase** - **Easy Auditor**

a. How to build a query and filter on user, path, file extension, file action

b. How to run query reports

c. Where to read documentation on Easy Auditor Operations.

d. **Cluster Operations**

      i. How to use ECACTL CLI and key command troubleshooting ECA cluster issues

      ii. Start cluster **ecactl cluster up**

      iii. Stop cluster **ecactl cluster down**

3. **Service complete**

Search & Recover Section:

This only applies if the service was purchased with Search & Recover.

1. Configuration Phase - Search & Recover

1. Download: The OVA can be downloaded by following the normal download instructions here.

a. The menu item to select is VMware OVF installers and select the **Eyeglass Search & Recover** download

2. **Deploy to vCenter**: During deployment to VMware enter the IP address information for each node, Enter cluster name all lowercase with no special characters.

3. **Add License keys**:

   a. Download keys using supplied token in process here.

   b. Copy the license zip file to node 1 using SCP or Winscp utility to copy the zip file using Secure Shell protocol, login with ecaadmin and password above

4. **Apply License keys**:

   a. Follow add license keys CLI instructions section "Licensing CLI Commands " in the Admin Guide.

5. **Add cluster**:

   a. Follow add cluster CLI instructions section "Adding, Viewing Clusters " in the Admin Guide.

6. **Add Path to be indexed**:

   a. Follow the instructions to add a folder for indexing in the section "How to add a folder path to be Indexed" in the Admin Guide.

7. **Start Indexing Jobs**:

   a. Follow the instructions to start indexing job in the section "How to start a full index job on a path" in the Admin Guide.

8. **Monitor Indexing Statistics**:

   a. Follow the instructions to monitor indexing progress of the folder path added above in the section "How to Monitor Index Jobs" in the Admin Guide.

1. **Test Phase - Search & Recover**

1. **Login and try some searches**:

   a. open a browser https://x.x.x.x (ip is node 1 of the cluster)

   b. Enter an AD user login using DOMAIN\user or user@example.com (note domain name must be uppercase) and then password.

   c. Try a search for data in the path you indexed.

      d. **NOTE: The user you login must have Share permissions to the path was added to be indexed data**

2. **Advanced Feature Walk though**

      a. Try a file size range search

      b. Download the results to CSV

      c. Download a script with example ISI command isi get -D and output to a results file >> results.txt

1. **Knowledge Transfer Phase - Search & Recover**

      a. Explain Solutions available with the product. Guide here.

      b. Explain how to use the diagnostic tools and how to access. Guide here.

      c. Explain index process for full versus incremental and lag to detect changed files.

      d. Demonstrate how to generate a support backup and how to download from the admin download page Guide here.

      e. Explain how to download CSV and large scripts from the admin download page. Guide here.

      f. Explain how to set the results location FQDN for smartconnect and how SMB share names are inserted dynamically. Guide here.

      g. Explain where to find advanced field search syntax examples and search rules with wild cards. Guide here.

      h. Explain the security modes on indexed folders, guide Here.

Golden Copy Section

This only applies if the service was purchased with Golden Copy.

1. **Configuration Phase** - Golden Copy

1. **Download**: The OVA can be downloaded by following the normal download instructions here.
   a. The menu item to select is VMware OVF installers and select the **Eyeglass Golden Copy** download

2. **Deploy to vCenter**: During deployment to VMware enter the IP address information for each node, Enter cluster name all lowercase with no special characters.

3. **Add License keys**:
   a. Download keys using supplied token in process here.
   b. Copy the license zip file to node 1 using SCP or Winscp utility to copy the zip file using Secure Shell protocol, login with ecaadmin and password above

4. **Apply License keys**:
   a. Follow add license keys CLI instructions section "Licensing CLI Commands " in the Admin Guide.

5. **Add cluster**:
   a. Follow add cluster CLI instructions section "Adding, Viewing Clusters " in the Admin Guide .

6. **Add Path to be copied**:
   a. Follow the instructions to add a folder for archiving in the section "How to manage folders to be copied or synced" in the Admin Guide .

7. **Start Archiving Jobs**:
   a. Follow the instructions to start indexing job in the section "archive (start a copy job)" in the Admin Guide .

8. **Monitor Archive jobs**:
   a. Follow the instructions to monitor indexing progress of the folder path added above in the section "How to monitor copy job performance and job log" in the Admin Guide .

9. **Verify Copy Jobs and How to Review reports:**
   a. Review summary copy reports
   b. Review detailed copy reports

1. **Test Phase - Golden Copy**

1. **Login and try monitor copy reports**:

   a. open a browser https://x.x.x.x (ip is node 1 of the cluster)

   b. eccaadmin and password

   c. Start a file copy, monitor the copy, review copy logs

2. **Advanced Feature Walk though**

   a. How to configure folders for S3 storage types (add, modify , delete)

   b. Walk through folder flags and meaning of how to configure features

1. **Knowledge Transfer Phase - Golden Copy**

   a. Explain best practices and when to use copy, vs sync mode

   b. Explain use cases for deferred delete, Airgap

   c. Explain single file restore

   d. Explain bulk restore and commands

   e. Explain rate limiting options for bandwidth

   f. Explain concurrent file copy settings and impact of increasing

   g. Explain PowerScale node use case

   h. Explain load balancing copies to target storage

Performance Auditor Section

This only applies if the service was purchased with Performance Auditor.

1. **Configuration Phase** - Performance Auditor

1. Enable the EVTreporter service on the ECA cluster
2. Increase RAM on ECA nodes as per sizing table here.
3. Verify Eyeglass open ports for the Performance Auditor application table is here.

4. Verify Turbo audit events are being processed by EVT reporter container

5. Verify cluster audit events are enabled to support the Performance Auditor features here.

   1. **Test Phase - Performance Auditor**

      1. Open the Performance Auditor application and verify the display is showing analysis data

      2. Switch views to verify all metrics are reported including AD user names

   1. **Knowledge Transfer Phase - Performance Auditor**

      a. Explain top 5 per category display and view switching

      b. Explain drill in to an object in each view and how this is used to identify who, what user , what files or application is generating the most work load per node or cluster wide

      c. Explain yellow band display is baseline computed from all nodes in the cluster as 2 standard deviations above and below cluster wide average and how to use this baseline to track which nodes are above average load level (same applies to all the other views)

      d. Explain application read and write mode tracks SMB or NFS application requests per second as a way to understand relative application efficiency for NAS operations.

e. Demonstrate pinning feature to add a user to the display that is not in the top 5, explain who pinning allows comparison of an object outside the top 5. Demonstrate file extension pinning to monitor an applications impact on cluster resources.

f. Demonstrate how to switch rate from MB's to GB's or KB's depending on the throughput rates of the monitored object.

2.3. Services - Superna ™ Eyeglass Best Practice DR Quick Start

Superna ™ Eyeglass Service Description

Part number " myquotes = eyeglass-P015 Dell SKU AA977302"

Revision 1 Feb 11, 2018

Services - Superna ™ Eyeglass Best Practice DR Quick Start

This service ensures customers understand all the best practices to achieve DR readiness with PowerScale and Superna ™ Eyeglass. Provides training on operational steps to failover, planning process, and recovery from failures training for controlled and uncontrolled failovers.

Recommended For: For customers that prefer to have Superna ™ Professional Services recommend a design or validate a design. Continuous DR Automation Configured and DR configuration training and operations of failover procedures along with DR planning. **Best for customers that will complete environment wide configuration changes themselves.**

1. **Requirements to Engage Services - Mandatory to complete the service questionnaire before service team resources are assigned. [The link to service questionnaire](#).**

2. **Access Requirements: None access to customer site or equipment, WebEx**

3. Terms and Conditions of task covered in product maintenance agreement **Support Services Agreement**

4. **Service Delivery: Remote WebEx. Approximately 4 days depending on customer technical resource availability and changement process.**

   a. **Exclusions:**

      i. **Service operates Monday to Friday 2:00 AM to 3:00 PM EDT excluding major holidays (Alternate schedules can be arranged on request)**

      ii. **Failover knowledge transfer cannot use customer equipment or any type of customer data.**

      iii. **Not a live DR service or support function for failover of production data**

      iv. **Not a substitute for customer developed procedural run books, (runbooks are step by step, command level documents, and include external application procedures to validate DR end to end)**

      v. **Demonstration of configuration steps to be implemented will exclusively use Superna Data center resources to show procedures.**

         1. **Only PowerScale configuration will be implemented, external equipment DNS, Active Directory changes will be sent as instructions for customer to execute (with assistance via WebEx support)**

         2. **customer is responsible to make all changes to all 3rd party devices or software components and have expertise in AD, DNS, Firewall, Windows, DFS, NFS**

> > > sufficient to follow the directions provided by this service

> > vi. **Exceptions: 2 Cluster design coverage, Addition clusters added to a design requires quantity 1 of the 4 block of hours part (eyeglass-b4-2).**

> **Prerequisites:**

- o Installed Superna **™** Eyeglass appliance
- o Customer SME (subject Matter expert) technical contact to to make changes to PowerScale, AD, DNS, networking, host access to shares or exports
- o Customer IT admin knowledge of DNS or Active Directory and DFS admin teams when required for DNS, AD and DFS configuration changes are required, NFS linux environment, PowerScale hands on knowledge

Superna ™ Supplied Project Tools

1. Zoom or WebEx account for screen sharing training sessions

Service Flow

Times are estimates only. Change Management not factored into times. Typical end to end completion is 2+ weeks of elapsed time.
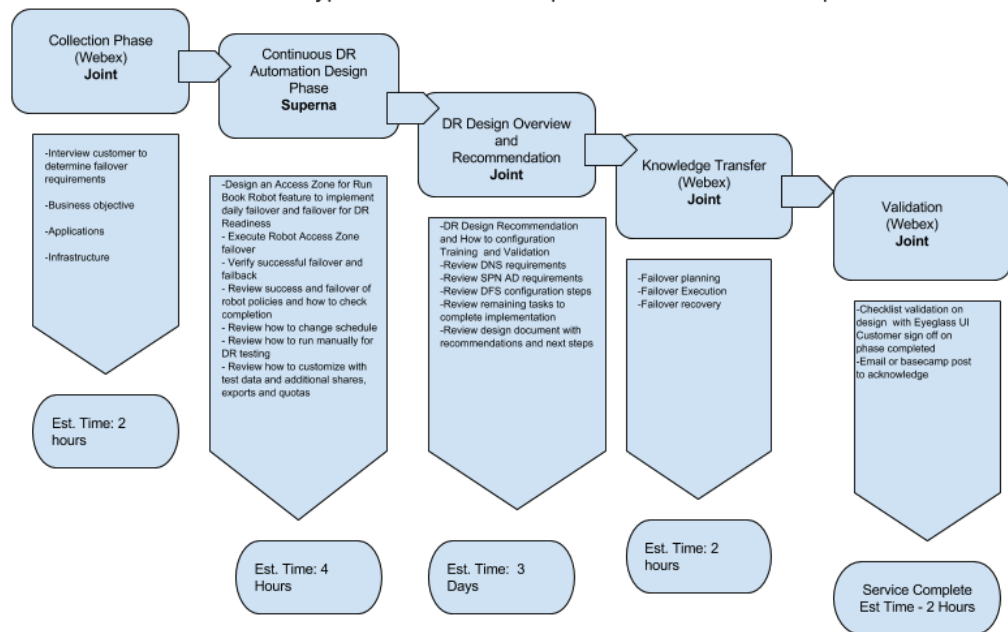
1. **Collection Phase - DR Design and Implementation - Interview**

   a. Review DR mode choices with customer from the Eyeglass Start Here First .

      i. Collect cluster replication topology (Hot/Cold or Hot/Hot)

   b. Collect SMB and NFS mounts from the cluster configuration - **via Eyeglass Report**

      i. SMB mounts

         1. current DFS usage and configuration - **Get screenshot**

      ii. NFS mounts

      iii. Update summary in **Design document**.

   c. Collect configuration reports from Superna ™ Eyeglass for each cluster

   d. Set Cluster RPO value in Eyeglass to customer objective for SyncIQ data loss exposure in minutes/hours per cluster)- **via Eyeglass reports to validate SyncIQ schedules**

  i. Demonstrate to customer the RPO report and how to run and review the report that measures RPO compliance percentage in reports on demand.

e. Collect current SyncIQ configuration

  i. SyncIQ configuration schedules (on change detection) **Eyeglass report**

  ii. subnet and IP used for replication, restrict at source, DNS target host using smartconnect **Eyeglass report**

  iii. Best practice review versus current syncIQ configuration

f. Collect SmartConnect Zones configuration and usage - **Eyeglass report**

  i. Include in Design document summary

g. Collect Access zone usage - **Eyeglass report**

  i. Include in Design document summary

h. Collect DNS resolution of Smartconnect names - **nslookup**

  i. Verify nameservers returned are Subnet service ip from each cluster.

  ii. Include in Design document summary

i. Design SmartConnect failover mappings for Pool to Pool mappings between sites - **Eyeglass report**

  i. Requires IP pool to IP pool mapping between cluster sites

  ii. Update design document mapping table aliases for each pool that is recommended. **Customer to make these changes to the environment.**

j. Collect Active Directory information (domain name, machine account names) - **Eyeglass report**

  i. Demonstrate AD delegation using documentation link How to Configure Delegation of Cluster Machine Accounts with Active Directory Users and Computers Snapin.

  ii. Customer to complete delegation steps with AD administrator

   iii. Test AD delegation is completed correctly using document How to Validate AD Cluster Delegation is Ready for Failover and failback of SPNs published.

  k. **Customer sign off on phase completed - Email to acknowledge**

2. **Continuous DR Automation Design and Configure Phase - RunBook Robot Access Zone Failover Automation**

  a. Design an Access Zone for Run Book Robot feature to implement daily failover and failover for DR Readiness

   i. Review Runbook robot configuration requirements (guide Eyeglass Runbook Robot Guide)

   ii. All Steps covered in this section are repeated on remaining Access Zones in the customer environment by the customer using this phase as training and guide.

   iii. Configure Robot access zone, ip pools, DNS delegation - **Requires customer administrators.**

  b. Execute Robot Access Zone failover - **Via Webex**

   i. Verify successful failover and failback

   ii. Review success and failover of robot policies and how to check completion

   iii. Review how to change schedule

   iv. Review how to run manually for DR testing

   v. Review how to customize with test data and additional shares, exports and quotas

  c. **Customer sign off on phase completed - Email to acknowledge**

3. **Design Overview and Recommendation Phase - DR Design Recommendation and How to Configure Training**

  a. Customer chooses failover mode that matches customer environment requirements based on Collection phase

   i. **Document Deliverable delivered as draft describes changes and shows chosen with links to relevant admin guides**

b. Demonstrate and walk through the configuration steps to build the design using Superna ™ Data center systems **- Via Webex**

    i. Review DNS delegation requirements for smartconnect zones with Access Zone failover - **demonstration**

    ii. Review SPN Delegation using Superna ™ AD to show delegation correctly set, review instructions and demonstrate delegation.

        1. Review SPN delegation and verify its functioning correctly by creating alias and verify it appears in SPN property (check alarms and logs for SPN sudoer permissions)

        2. Review SPN updates applied by Eyeglass to during failover using logs as example to show delete and add of SPN's.

    iii. Review SmartConnect zones used for DFS protected data and review igls-ignore hints requirements

        1. Document in design guide pools that require igls-ignore

        2. Demonstrate igls hints, ignore hints on pre-existing setup network mapping view Access Zones in Superna ™ lab

    iv. **Demonstrate** Access Zone and DR dashboard fully completed in Superna ™ lab

    v. **Demonstrate** DFS readiness DR Dashboard (explain data async and config sync)

        1. Review when to use ignore hints with DFS and SyncIQ replication

        2. Review DFS folder configuration using example from Superna ™ Data Center system

        3. Review DFS client folder DFS tab mount example to show what DFS failover switching referrals paths pre and post failover using Superna ™ lab system.

      vi. **Demonstrate -** Review the Robot implementation to show the design confirmation (SyncIQ policy matching Access Zone base path, ignore hints, DR Dashboard, failover logs, network mapping, policy and mirror policies in Eyeglass

      vii. **Demonstrate** How to check alarms, audit failures, failover logs and create backup logs for support

  c. **Customer sign off on phase completed - Email to acknowledge**

4. **Knowledge Transfer phase: - Via Webex approximately 1 hour**

  a. **Review failover planning guide on how to plan a failover**

  b. **Review best practices guide on how to execute steps pre-failover and verify the cluster environment before any failover**

  c. **Review failover release notes document on last minute release specific steps or instructions**

  d. **Review DR assistant validation screen warnings and process for open files decision with Data Integrity failover option**

  e. **Review failover logs in detail to explain how to read them and diagnose successful vs unsuccessful steps**

  f. **Review failover recovery guide and how to use this to recovery from failed steps**

  g. **Review process to raise support request correctly to get failover log analysis completed.**

  h. **Customer sign off on phase completed - Email to acknowledge**

5. **Service Completed - Customer Deliverable - Webex**

  a. **Schedule Webex wrap up**

    i. **Hand off summary document with design overview with links to design documentation required to manage and maintain DR Readiness**

    ii. **Summary of failover configuration document with diagram**

    iii. **Documentation links to required guides for customer to complete the implementation**

         iv. **Planning links and checklist**

    b. **Customer sign off on phase completed - Email to acknowledge**

2.4. Services - Superna ™ Eyeglass PowerScale DR Design and Implementation Service Description

Superna ™ Eyeglass Service Description

Part number "SEL-EyeGlass DR Design-Implement-v1 -

myquotes = eyeglass-P013 Dell SKU AB109743 "

Revision 1 Feb 11, 2018

Services - Superna ™ Eyeglass PowerScale DR Design and Implementation

This service ensures the highest level of DR readiness possible for PowerScale customers with Superna Eyeglass. **Recommended For: For customers that prefer to have Superna PS recommend and validate customer implementation of cluster, DNS, AD changes and validate the end to end design and implementation to achieve high level of confidence the key business data is protected for all possible DR impacts. Customers that view DR investments as a way to achieve continuous operations level of storage availability.**

1. **Description**: This service is a stand alone service that provides PowerScale cluster remote implementation of cluster DR configuration required for failover using one of the supported failover modes (Access Zone dual delegation, SyncIQ or DFS mode). The configuration changes will also address SyncIQ best practices to enable a robust DR solution with PowerScale and Superna ™ Eyeglass.   In addition, DR Readiness automation will be configured to ensure continuous DR testing is fully automated using the RunBook Robot feature in Superna ™ Eyeglass

1. **Requirements to Engage Services - Mandatory to complete the service questionnaire before service team resources are assigned. [The link to service questionnaire](#).**
2. **Access Requirements: PowerScale cluster login with admin and root access**
3. Terms and Conditions of task covered in product maintenance agreement **Support Services Agreement**
4. **Service Delivery:** Remote WebEx, VPN or alternate remote access to customers PowerScale equipment. Approximately 8 days with dedicated customer technical resources.
    a. **Exclusions**:
        i. Service operates Monday to Friday 2:00 AM to 3:00 PM EDT excluding major holidays (Alternate schedules can be arranged on request)
        ii. Failover knowledge transfer **cannot** use customer equipment or any type of customer data.
        iii. Not a live DR service or support function for failover of production data

iv. Not a substitute for customer developed procedural run books, (runbooks are step by step, command level documents, and include external application procedures to validate DR end to end)

v. Demonstration of configuration steps to be implemented will exclusively use Superna Data center resources to show procedures.

   1. External component or software changes are excluded from all meetings including AD, DNS, PowerScale

   2. Only PowerScale configuration will be implemented, external equipment DNS, Active Directory changes will be sent as instructions for customer to execute (with assistance via WebEx support)

vi. customer is responsible to make all changes to all 3rd party devices or software components and have expertise in AD, DNS, Firewall, Windows, DFS, NFS sufficient to follow the directions provided by this service, 100% of all hands on changes to 3rd party product MUST be done by the customer.

vii. **Exceptions**: **2 Cluster design coverage**, 4 block of additional hours (part eyeglass-b4-2) added for each additional cluster requested as part of the service.
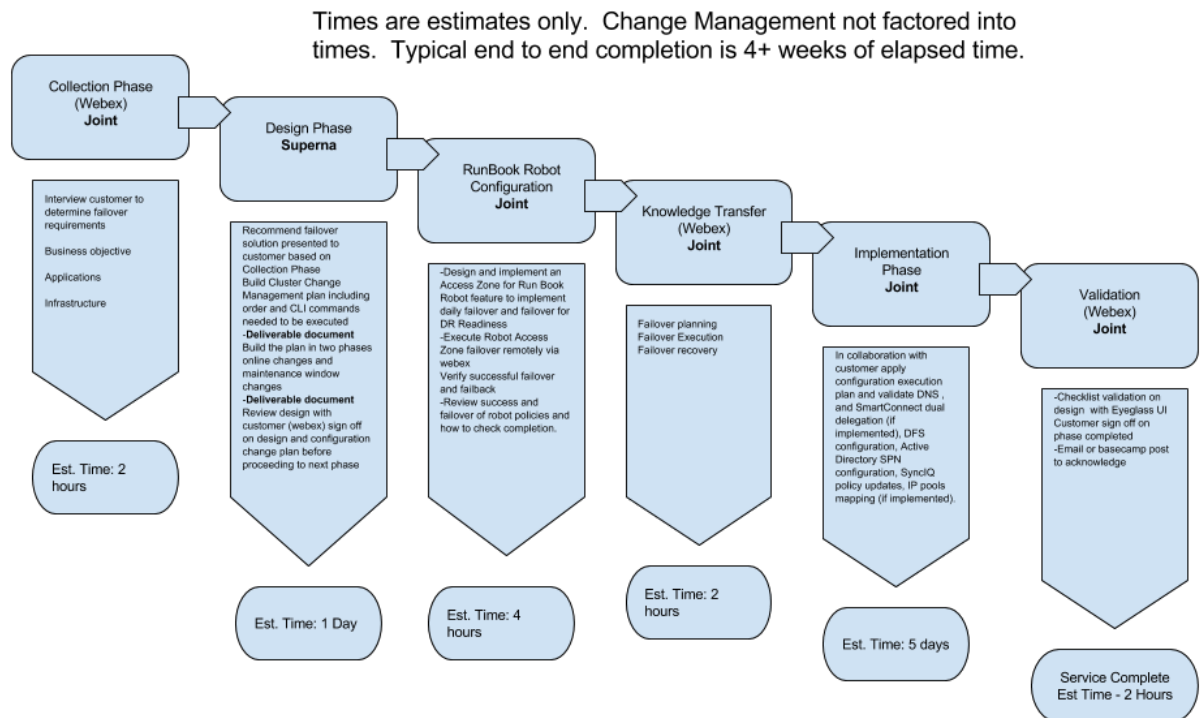
Prerequisites:

o Installed Superna ™ Eyeglass appliance
o Customer SME (subject Matter expert) technical contact to to make changes to PowerScale, AD, DNS, networking, host access to shares or exports

- o Customer IT admin knowledge of DNS or Active Directory and DFS admin teams when required for DNS, AD and DFS configuration changes are required, NFS linux environment, PowerScale hands on knowledge

Superna ™ Supplied Project Tools

1. Zoom or Webex account for screen sharing

Service Flow

Times are estimates only. Change Management not factored into times. Typical end to end completion is 4+ weeks of elapsed time.

1. **Collection Phase - DR Design and Implementation - Interview**
   a. Review DR mode choices with customer from the Eyeglass Start Here First .
      i. Collect cluster replication topology (Hot/Cold or Hot/Hot)

b. Collect SMB and NFS mounts from the cluster configuration - **via Eyeglass Report**

     i. SMB mounts

     ii. current DFS usage and configuration - **Get screenshot**

     iii. NFS mounts

     iv. Update summary in **Design document**.

c. Collect configuration reports from Superna ™ Eyeglass for each cluster

d. Set Cluster RPO value in Eyeglass to customer objective for SyncIQ data loss exposure in minutes/hours per cluster)- **via Eyeglass reports to validate SyncIQ schedules**

     i. Demonstrate to customer the RPO report and how to run and review the report that measures RPO compliance percentage in reports on demand.

e. Collect current SyncIQ configuration

     i. SyncIQ configuration schedules (on change detection) **Eyeglass report**

     ii. subnet and IP used for replication, restrict at source, DNS target host using smartconnect **Eyeglass report**

     iii. **Best practice review versus current syncIQ configuration**

f. Collect SmartConnect Zones configuration and usage - **Eyeglass report**

     i. Include in Design document summary

g. Collect Access zone usage - **Eyeglass report**

     i. Include in Design document summary

h. Collect DNS resolution of Smartconnect names - **nslookup**

    i. Verify nameservers returned are Subnet service ip from each cluster.

    ii. Include in Design document summary

i. Design SmartConnect failover mappings for Pool to Pool mappings between sites - **Eyeglass report**

    i. Requires IP pool to IP pool mapping between cluster sites

    ii. Update design document mapping table aliases for each pool that is recommended. **Customer to make these changes to the environment.**

j. Collect Active Directory information (domain name, machine account names) - **Eyeglass report**

    i. Demonstrate AD delegation using documentation link How to Configure Delegation of Cluster Machine Accounts with Active Directory Users and Computers Snapin

    ii. Customer to complete delegation steps with AD administrator

    iii. Test AD delegation is completed correctly using document How to Validate AD Cluster Delegation is Ready for Failover and failback of SPNs published.

k. **Customer sign off on phase completed - Email to acknowledge**

2. **Design Phase - DR configuration**

a. Recommend failover solution presented to customer based on Collection Phase

       i. **All Access Zone changes on the cluster are covered in this section and documented in the design document.**

      ii. Includes AD delegation SPN failover

     iii. Smartconnect name changes and DNS delegation changes

     iv. configuration sync issue resolution

     v. syncIQ policy configuration changes

     vi. Eyeglass configuration changes

     vii. DFS (if used) changes

    viii. pool mapping aliases for failover (access zone or pool failover)

b. Build Cluster Change Management plan including order and CLI commands needed to be executed by customer and validated by Superna - **Customer Deliverable document**

c. Build the plan in two phases online changes and maintenance window changes - **Customer Deliverable document**

d. Review design document with customer (webex) sign off on design and configuration change plan before proceeding to next phase

e. **Customer sign off on phase completed - Email to acknowledge**

3. **Continuous DR Automation Design and Configure Phase - RunBook Robot Access Zone Failover Automation**

a. Design an Access Zone for Run Book Robot feature to implement daily failover and failover for DR Readiness

     i. Review Runbook robot configuration requirements (guide Eyeglass Runbook Robot Guide)

    ii. Configure Robot access zone, ip pools, DNS delegation - **Requires customer administrators.**

    iii. Execute Robot Access Zone failover - **Via Webex**

1. Verify successful failover and failback

2. Review success and failover of robot policies and how to check completion

3. Review how to change schedule

4. Review how to run manually for DR testing

5. Review how to customize with test data and additional shares, exports and quotas

5.

    d. **Customer sign off on phase completed - Email to acknowledge**

4. **Knowledge Transfer phase: - Via Webex 1-2 hours**

    a. **Review failover planning guide on how to plan a failover**

    b. **Review best practices guide on how to execute steps pre-failover and verify the cluster environment before any failover**

    c. **Review failover release notes document on last minute release specific steps or instructions**

    d. **Review DR assistant validation screen warnings and process for open files**

    e. **Review failover logs in detail to explain how to read them and diagnose successful vs unsuccessful steps**

    f. **Review failover recovery guide and how to use this to recovery from failed steps**

    g. **Review process to raise support request correctly to get failover log analysis completed.**

    h. **Customer sign off on phase completed - Email or basecamp post to acknowledge**

5. **Implementation phase:**

    a. **In collaboration with customer apply configuration changes defined in the build design document following execution plan.**

        i. **Customer applies changes coordinating with SME within customer organization to apply changes from the design guide document.**

  ii. **Superna validates DNS and SmartConnect dual delegation (if implemented), DFS configuration, Active Directory SPN configuration, SyncIQ policy updates, IP pools mapping (if implemented), Eyeglass configuration and job definitions and DR dashboard.**

  iii. **Submit support logs for validation of correct configuration.**

  iv. **Scheduled via multiple webex sessions with customer technical resources based on change management requirements**

 b. **Customer sign off on phase completed - Email to acknowledge**

6. **Validation phase: via Webex**

 a. **Checklist validation on design with Eyeglass UI and support log analysis**

 b. **Customer sign off on phase completed - Email to acknowledge**

2.5. Service - Superna ™ Eyeglass Easy Auditor Auditing Best Practices

Eyeglass Service Description

Part number "**SEL-EyeGlass Auditing Best Practices - myquotes = eyeglass-P017 Dell SKU AB109745**"

Revision 1 Dec 28, 2017

Service - Superna ™ Eyeglass Easy Auditor Security Assessment

- Overview

- Prerequisites

- Phase I - Data Collection: - Interview

  - Customer Interview - WebEx/Zoom

- Design Phase - Document deliverable

- Implementation & Testing Phase - webex/Zoom

  - Review Design document and Apply Configuration

- Knowledge Transfer Phase - webex/Zoom

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Overview

This service is designed for customers who have deployed Superna Eyeglass Easy Auditor and need an assessment of there IT NAS environment for audit best practices to audit

- **Scope**: Covers a Eyeglass Easy Auditor
- **Service Delivery:** Remote WebEx
- **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement
- **Operating Hours:** Monday to Friday 2:00 AM to 3:00 PM EDT
- **Exclusions:**
  - Hands on changes to external IT components example DNS, PowerScale, Active Directory or other non Superna supplied products.
  - Security changes to any infrastructure
  - Service delivery requires customer to have hands on knowledge of all external IT components.

Prerequisites

- Eyeglass DR Edition is installed already
- Easy Auditor Installed and configured or purchased installation service for Easy Auditor
- Schedule service installation here

The following tasks will be completed in this phase:

1. Phase I - Data Collection: - Interview

     a. **Customer Interview - WebEx/Zoom**

        a. Identify audit requirements and objectives.
        b. Identify security use case requirements for customer environment (limited to 3 use cases) based on Auditing the File system with Easy Auditor.

2. Design Phase - Document deliverable

     a. Design document that outlines how to configure easy Auditor for each objective
        i. Per Use case instructions on how to configure and monitor reports or alerts related to the use case.
        ii. Email based routing and Syslog forwarding of alerts, reports and triggers
            i. Guide for Email based routing
            ii. Guide for Syslog forwarding

3. Implementation & Testing Phase - webex/Zoom

     a. Review Design document and Apply Configuration

        i. Schedule implementation call to apply configurations for each use case
        ii. Test each use case to verify results and how to interpret the results

4. Knowledge Transfer Phase - webex/Zoom

     a. Review results from use case testing results to verify the criteria for each use case has been met.

     b. Wrap up Service Delivery

2.6. Service - Superna ™ Eyeglass 1 Cluster Tech Refresh Service Description

Eyeglass Service Description - 1 Cluster Tech Refresh

Part number myquotes = eyeglass-p018 Dell SKU AB109746 "SEL-EyeGlass 1 Cluster Tech Refresh Service"

Revision 1 March 12, 2019

Overview:

This service assists with Tech Refresh of data and configuration from one cluster in a hot\cold configuration to a new pair of clusters. This service offers expertise, planning, design and configuration assistance to enable migration from one cluster to another. Typical use cases are: data center move, hardware refresh, retiring an older cluster.

The service provides the following:

1. Rental Eyeglass licenses for the duration of the project. During the project more clusters exist than will be required in the final location. This provides fully supported license keys during this time for all clusters added to eyeglass during the service.
   a. Limited to 6 months.

      b. **For longer migration projects additional fees are required.**

2. Design, planning, Configuration of migration to leveraging Eyeglass features to enable:

      a. **1 x one way failover for 1 cluster to a new cluster**

      b. Data migration with Access Zone migration feature as required

3. Planning assistance before scheduled cut over event

4. Actual cut over uses standard Eyeglass support process for the day of the event and is not an assisted failover.

5. Includes DR quick Start scope of service if no previous DR design exists. See scope details here. If previous DR Design exists these same settings will be reapplied to the new cluster.

6. The migration service is a professional service and includes extra support during the cutover window, we offer an observer model with this service: (Note: Not included in normal product support)

      a. Support case is opened ahead of time with Superna support for their awareness (support will also complete a pre-cutover readiness assessment of their own)

      b. Superna resource joins a remote meeting but does not take control. This resource will be guiding the customer on execution, order of steps, etc. according to the approved migration plan.

      c. **Exclusions**:

          i. No screen control from Superna resource

          ii. Decisions on data are not Superna resource responsibility

          iii. External 3rd party hardware and software, according to EULA and failover support process document here.

Terms of Service

1. **Service Delivery:** Remote webex

   a. Service operates Monday to Friday **2:00 AM to 3:00 PM EDT** excluding major holidays

2. **Availability**: Monday to Friday 8:00 AM EDT to 6:00 PM EDT, excluding holidays And weekends

3. **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement

4. **Service Description**: This service will assist in outline of steps required to configure a one way failover of data from 1 existing cluster to 1 existing new cluster and OR how to migrate data + configuration to new target cluster. It will only cover Eyeglass related steps in detail and outline external steps that must be done to complete the overall migration.

   a. **NOTE: The destination clusters must have permanent eyeglass licenses.**

   Prerequisite:

   - Eyeglass is installed (install SOW required and offered free of charge)
   - Supported Onefs Release 7.1.1.3 or later

   **Exceptions excluded from hours usage:**

   - Outage or issue resolution, recovery of any kind for execution day tasks
   - Customers are expected to dry run any procedures that are applicable to their environment, network, applications and internal processes, maintenance windows
   - Assisted DR hands on or remote or procedural assistance of any kind in a production environment

- This is a planning and design service not an assisted migration service which means monitoring of migration of data, data access validation (security access, networking, firewall, permissions testing, lan or wan changes) , data sync confirmation and completeness, assessment of application health pre and post migration are customer responsibilities.
- Assisted migration steps are not included. Customer is expected to test all procedures in documents provided to ensure they understand how to execute all steps.
  - Example host mount testing
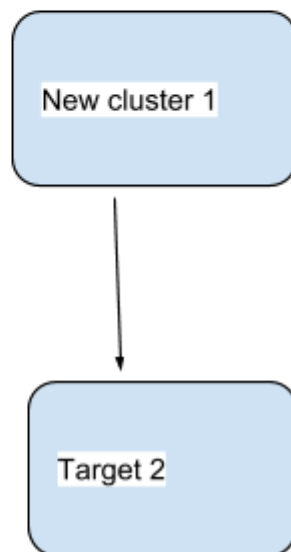 - DNS and AD changes are documented but applied by customer IT teams

1. Project summary :

Source 1 and Target 1 are in Hot\Cold Configuration

1. Configure One way failover Source 1 to New Cluster 1
   a. Config sync mirrored (eyeglass)
2. Re-protect Data New Cluster 1 to Target 1

a.

Final Configuration Hot\Cold

New cluster 1

Target 2
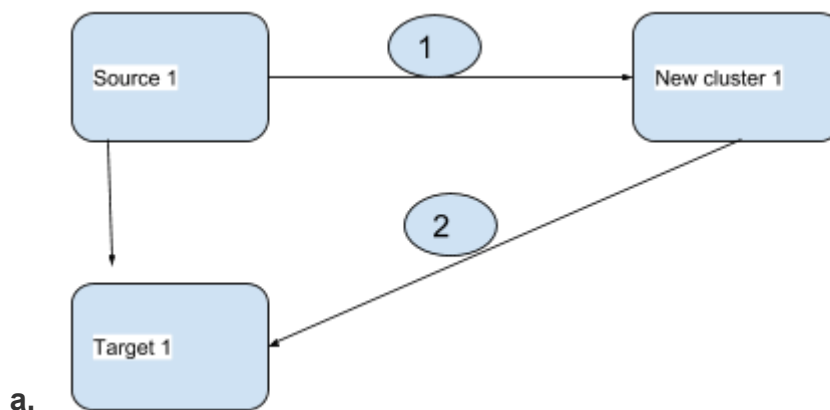
2.

3. Scope of activity

Objective: Swing 1 cluster over to a new cluster. Phased project that will address hot\cold cluster pair migrated to new cluster as production cluster. The scope covers the configuration and design and planning of the 1 phase cutover.

1. Plan Overall Migration and Cutover
   a. Supported configuration synced data is listed Configuration Replication

b. All configuration data not listed above is not supported or included via Eyeglass and will be manually recreated on target cluster.

2. **Migration Document deliverable** that covers the configuration required for one way failover, data sync, config sync, planning of failover execution.

    a. Configure failover for data+config migration from **source 1 to new cluster 1**

        i. Who participates: **Superna + Customer --> AD , DNS, PowerScale configuration, Eyeglass**

    b. **Data Sync Phase (Source 1 and New Cluster 1)**

        i. **Who participates: Superna + Customer --> Data and Path assessment to failover to new clusters.**

        ii. **Configure syncIQ policies to sync required data and configuration from source 1 cluster to New cluster 1**

        iii. **Start Data sync**

        iv. **Note: Requires dedicated IP pool and smartconnect names for SyncIQ. Best practices followed.**

    c. **Configuration sync phase (New Cluster 1) - pre failover**

        i. **Who participates: Superna + Customer**

        ii. Verify all config matches synciq paths (only supported syncable objects)

        iii. Verify - audit configuration data for sync errors and correct as required

            a. Compare config counts on both clusters as an audit of configuration data

        iv. Objects synced shares, exports (single path exports only), nfs aliases, quotas , access zone user mappings (note local users not supported), snapshot schedules

            a. **Note: only config that matches synciq paths**

            b. Plan for any unprotected configuration data audited using Eyeglass cluster report and log parsing tools

    c. Report to Customer exposed data for decision on how to migrate with access Zone migration feature or manual migration.

d. Eyeglass Failover Mode Configuration

    i. **Who participates: Superna + Customer**

    ii. **Configure appropriate failover mode from source 1 to new cluster 1**

    iii. **Validate DR Readiness**

e. Execute planning guide steps pre-failover

    i. Who participates: **Customer**

    ii. Customer will be responsible for running through planning guide and providing updates on status to support - **Customer + Superna Support**

    iii. Audit checklist steps - **Superna Support**

f. Failover #1 - completed for source 1 to new cluster 1

    i. **Who participates: Customer**

    ii. **Failover scheduled and executed - Customer**

        a. **Normal Support process for failover**

        b. **Test Data Access Procedure completed**

        c. **Failover Completed**

g. Post Failover - Re-Protect Data Sync from New Cluster 1 to Target 1

    i. This step will cut over data replication services to allow decommissioning of source cluster 1

    ii. Resync data with new SyncIQ policies from New cluster 1 to Target 1.

        a. Data sync complete

    iii. Decommission policies from New Cluster 1 to Source 1

    iv. Decommission Source 1 cluster - **Not included in scope, Customer responsibility. Documented here for completeness.**

v. **If previous DR configuration existed on source clusters, reconfiguration of the same DR configuration will be applied to the new clusters.**

vi. **If No previous DR configruation existed the scope of the DR quick start service (eyeglass-P015) scope will be executed on the New cluster pair.**

vii. **Service complete**

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2.7. Service - Superna ™ Eyeglass 2 Cluster Tech Refresh Service Description

Eyeglass Service Description - 2 Cluster Tech Refresh

Part number myquotes = eyeglass-p019 Dell SKU AB109747 "SEL-EyeGlass 2 Cluster Tech Refresh Service"

Revision 1 March 12, 2019

Overview:

This service assists with Tech Refresh of data and configuration from two clusters in a hot\hot configuration or when 2 clusters are being refreshed to a new pair of clusters. This service offers expertise, planning, design and configuration assistance to enable migration from one cluster to another. Typical use cases are: data center move, hardware refresh, retiring an older cluster.

The service provides the following:

1. Rental Eyeglass licenses for the duration of the project. During the project more clusters exist than will be required in the final location. This provides fully supported license keys during this time for all clusters added to eyeglass during the service. .
    a. Limited to 6 months.
    b. **For longer migration projects additional fees are required.**

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2. Design, planning, Configuration of migration to leveraging Eyeglass features to enable:

    a. 2 cluster 1 way failover to 2 new clusters

    b. Migration to 2 new clusters

        a. Data migration with Access Zone migration feature as required

3. Planning assistance before scheduled cut over event

4. Actual cut over uses standard Eyeglass support process for the day of the event

5. Includes DR quick Start scope of service if no previous DR design exists. See scope details here.

6. The migration service is a professional service and includes extra support during the cutover window, we offer an observer model with this service: (Note: Not included in normal product support)

    a. Support case is opened ahead of time with Superna support for their awareness (support will also complete a pre-cutover readiness assessment of their own)

    b. Superna resource joins a remote meeting but does not take control. This resource will be guiding the customer on execution, order of steps, etc. according to the approved migration plan.

    c. **Exclusions**:

        i. No screen control from Superna resource

        ii. Decisions on data are not Superna resource responsibility

        iii. External 3rd party hardware and software, according to EULA and failover support process document here.

Terms of Service

1. **Service Delivery:** Remote webex

   a. Service operates Monday to Friday **2:00 AM to 3:00 PM EDT** excluding major holidays

2. **Availability**: Monday to Friday 8:00 AM EDT to 6:00 PM EDT, excluding holidays And weekends

3. **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement

4. **Service Description**: This service will assist in outline of steps required to configure a one way failover of data from 2 existing clusters to 2 existing new clusters and OR how to migrate data + configuration to new target cluster. It will only cover Eyeglass related steps in detail and outline external steps that must be done to complete the overall migration.

   a. **NOTE: The destination clusters must have permanent eyeglass licenses.**

   Prerequisite:

- Eyeglass is installed (install SOW required and offered free of charge)
- Supported Onefs Release 7.1.1.3 or later

Exceptions excluded from hours usage:

- Outage or issue resolution, recovery of any kind for execution day tasks
- Customers are expected to dry run any procedures that are applicable to their environment, network, applications and internal processes, maintenance windows
- Assisted DR hands on or remote or procedural assistance of any kind in a production environment
- This is a planning and design service not an assisted migration service which means monitoring of migration of data, data access validation (security access, networking, firewall, permissions testing, lan or wan

changes) , data sync confirmation and completeness, assessment of application health pre and post migration are customer responsibilities.

- Assisted migration steps are not included. Customer is expected to test all procedures in documents provided to ensure they understand how to execute all steps.
    - o   Example host mount testing
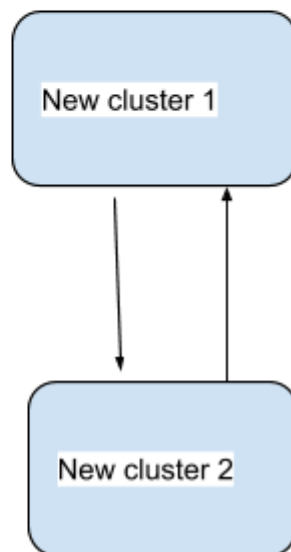   - o   DNS and AD changes are documented but applied by customer IT teams

1.   Project summary :

Source 1 and Source 2 are in Hot\Hot Configuration

1. Configure One way failover Source 1 to New Cluster 1
   a.   Config sync mirrored (eyeglass)
2. **Source 2 Hot/Hot** - Configure One way failover Source 2 to New Cluster 2
   a.   Config sync mirrored (eyeglass)

a.

Final Configuration Hot\Hot
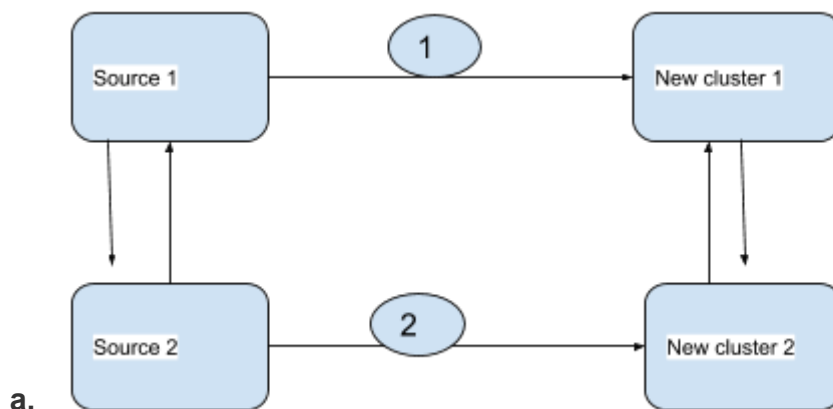
New cluster 1

New cluster 2

2.

3. OR plan and configure a migration of 2 replicating clusters to 2 new clusters using a one way failover design.

4. Scope of activity

Objective: Swing 2 cluster pairs over to a new cluster pair. Phased project that will address cluster pairs migrated to new clusters. The scope covers the configuration and design and planning of the 2 phase cutover.

1. Plan Overall Migration and Cutover
   a. Supported configuration synced data is listed Configuration Replication

b. All configuration data not listed above is not supported or included via Eyeglass and will be manually recreated on target cluster.

2. **Migration Document deliverable** per pair of clusters that covers the configuration required for one way failover, data sync, config sync, planning of failover execution.

   a. Configure failover for data+config migration from **source 1 to new cluster 1**

      i. Who participates: **Superna + Customer --> AD , DNS, PowerScale configuration, Eyeglass**

   b. Configure failover for data+config migration from **source 2 to new cluster 2**

      i. Who participates: **Superna + Customer --> AD , DNS, PowerScale configuration, Eyeglass**

   c. **Data Sync Phase (Source 1,2 and New Cluster 1,2)**

      i. **Who participates: Superna + Customer --> Data and Path assessment to failover to new clusters.**

      ii. **Configure syncIQ policies to sync required data and configuration from source 1 and 2 clusters to New cluster 1 and 2**

      iii. **Start Data sync**

      iv. **Note: Requires dedicated IP pool and smartconnect names for SyncIQ. Best practices followed.**

   d. **Configuration sync phase (New Cluster 1 and 2) - pre failover**

      i. **Who participates: Superna + Customer**

      ii. Verify all config matches synciq paths (only supported syncable objects)

      iii. Verify - audit configuration data for sync errors and correct as required

         a. Compare config counts on both clusters as an audit of configuration data

    iv. Objects synced shares, exports (single path exports only), nfs aliases, quotas , access zone user mappings (note local users not supported), snapshot schedules

        a. **Note: only configuration data that matches synciq paths will be migrated**

        b. Plan for any unprotected configuration data audited using Eyeglass cluster report and log parsing tools

        c. Report to Customer exposed data for decision on how to migrate with access Zone migration feature or manual migration.

e. **Eyeglass Failover Mode Configuration**

    i. **Who participates: Superna + Customer**

    ii. **Configure appropriate failover mode from source 1 to new cluster 1 and source 2 to new cluster 2**

    iii. **Validate DR Readiness**

f. **Execute planning guide steps pre-failover**

    i. Who participates: **Customer**

    ii. Customer will be responsible for running through planning guide and providing updates on status to support - **Customer + Superna Support**

    iii. Audit checklist steps - **Superna Support**

g. **Failover #1 - completed for source 1 to new cluster 1**

    i. **Who participates: Customer**

    ii. **Failover scheduled and executed - Customer**

        a. **Normal Support process for failover**

        b. **Test Data Access Procedure completed**

        c. **Failover Completed**

    iii. **(Hot\Hot Use case only) Failover #2 completed source 2 to new cluster 2**

        a. **Normal Support process for failover**

        b. **Test Data Access Procedure completed**

        c. **Failover Completed**

    d. **(Hot \ cold Use Case Only) Resync of data from New prod cluster to new Dr cluster**

        a. **New syncIQ policies are created to sync data to new DR cluster**

        b. **Verify Failover with Runbook Robot from New Prod to New DR**

        c. **Reconfigure New Prod to to New DR failover configuration and faiover mode used on old Prod and old DR**

        d. **Once data Sync is completed from New Prod to New DR**

        e. **if access zone failover or IP pool failover update Dual DNS delegation to use New DR**

h. **Post Failover - Re-Protect Data Sync from New Cluster 1 to New Cluster 2 and New Cluster 2 to New Cluster 1**

    i. This step will cut over data replication services to allow decommissioning of source cluster 1 and source cluster 2

    ii. Resync data with new SyncIQ policies from New cluster 1 to New cluster 2.

        a. Data sync complete

    iii. Resync data with new SyncIQ policies from New cluster 2 to New cluster 1.

        a. Data sync complete

    iv. Decommission policies from New Cluster 1 to Source 1

    v. Decommission policies from New cluster 2 to Source 2

    vi. Decommission Source 1 and 2 clusters - **Not included in scope, Customer responsibility. Documented here for completeness.**

    vii. **If previous DR configuration existed on source clusters, reconfiguration of the same DR configuration will be applied to the new clusters.**

viii.   **If No previous DR configruation existed the scope of the DR quick start service (eyeglass-P015) scope will be executed on the New cluster pair.**

ix. Service complete

2.8. Training - Superna ™ Eyeglass ILT DR Plan, Config, Execute and Monitor

Superna ™ Eyeglass Instructor Led Training

Part number quantity 1 myquotes IGLS-train-1 Dell SKU AB109751

Revision 1 Feb 11, 2018

Training - Superna ™ Eyeglass ILT DR Plan, Config, Execute and Monitor

- Who is the training targeting?

- How is the Course Structured?

  - Requirements

  - Delivery and Outline

Who is the training targeting?

1. **DR Architect** - Someone who needs backup ground on how this solution integrates into a larger solution and functionally meets business unit requirements in a DR design.

2. **DR Configuration** - Someone who needs background on configuration changes needed to implement a DR design that has changes to Cluster, DNS,

AD, Windows DFS, Linux hosts. This person will need to know the specifics of the change, impact to raise a change management requests for implementing a DR design.

3. **DR Operations -** Someone who needs to manage Eyeglass DR on a daily basis, be prepared to execute a failover, respond to alarms, review data replication reports and readiness assessment and respond correctly to daily monitoring operations.

How is the Course Structured?

This course is divided into 3 areas based on the target audience defined above. This means the content will be tailored to each functional area based on the roles above. If the 3 roles above are not required for your planned training session, we recommend request one of the areas or 2 of the functional areas to be the focus to ensure the instructor has this background to focus on the needs of the roles above.

Requirements

1. **Requirements to Engage Services - Mandatory to complete the service questionnaire before service team resources are assigned. [The link to service questionnaire](#). For Training the questions regarding terms and conditions of the service must be answered.**
2. Terms and Conditions of task covered in product maintenance agreement **Support Services Agreement**

Delivery and Outline

1. **Training delivery:**
   a. **Remote via webex**
2. **Availability**
   a. 8:00 AM to 4:00 PM EDT
3. **Number students:**
   a. **Online delivery 20**
4. **Training Curriculum :**
   a. **Understanding the DR building Blocks**
      i. **Covers AD, DNS, SMB/NFS client behaviour, SyncIQ and Superna Eyeglass automation**
      ii. **Learn about Use cases you didn't know Eyeglass solves for your Scale Out NAS investment**
   b. **Planning Scheduled DR Events:**
      i. **Covers the steps to plan a scheduled DR event**
      ii. **Best practise steps , before , during and after the event**
      iii. **Learn about communications planning, preparation testing and maintenance window calculations for planned failovers.**
   c. **Design and Architect DR Solutions:**
      i. **Translate business requirements and Rpo targets to Eyeglass and PowerScale Synciq configuration**
         1. **Learn about SMB failover with Microsoft DFS and multi protocol SMB/NFS solutions**
      ii. **Learn best practice design elements for a supportable DR solution for your business objectives**

     iii. Learn when to use Pre or post scripts with Eyeglass to solve special DR use case requirements

     iv. Learn how Eyeglass API and web widgets can extend DR monitoring and automation to your application teams and Business Continuity teams

d. DR Execution

     i. Learn execution of DR steps (the order matters) and best practises, learn how to execute DR failover and failback

     ii. Learn how to handle "When things do not go as planned"

     iii. Learn to debug failover logs for simply recovery of data and data access

e. Hands on DR labs

     i. Labs focused on the basics along with day to day administration

          1. Cover RPO report analysis to lower your RPO and identify problems in your infrastructure

          2. Configuration report

     ii. Apply best practise DNS ,AD, synciq policy and access zone design.

          1. Failover data at the policy and access zone level (planned and unplanned failovers)

          2. Learn how to recover from failures

     iii. Implement LiveOPS features to automate and simplify scheduled DR testing

f. Superna Eyeglass addons

     i. Learn about product addons that help secure, audit access, and reduce administration costs of data stored on Ision

     ii. Demo and overview

g. Wrap and Q&A

2.9. Service - DR Monitoring Subscription Services

Eyeglass Service Description - DR Monitoring Subscription Service

Part number qty 1 myquotes = eyeglass-p020 (Dell SKU AB109748), eyeglass-p021 (Dell SKU AB109749), eyeglass-p022 (Dell SKU AB109750) "SEL-DR Monitoring Subscription x year"

Revision 1 Feb 18, 2020

Overview:

Superna is introducing a subscription based monitoring service that uses Superna Eyeglass enhanced phone home feature to automate continuous DR monitoring from a Cloud service. DR Readiness requires specialized IT skills and tools to maintain all aspects of DR readiness, so that failover can be executed at a moment's notice. DR Monitoring is a frequently overlooked area that requires specialized skills to determine

readiness and root cause issues. IT staff with day to day priorities and projects frequently do not have time to respond to each and every alarm for devices that are part of critical systems.

- Readiness status is analyzed for a subscribed appliance multiple times per day.
- Any significant change in your infrastructure that affects
- DR Readiness triggers appliance automatic log submission without administrator assistance.
- DR Readiness alerts for managed appliances are diagnosed 7/24 hours with root cause, steps to resolve and
- Pro-active support case and webex meetings to correct issues.
- Includes managed upgrade assistance service

Key Values

- Continuous monitoring reduces business risk for unplanned DR events
- DR Subject matter experts review readiness errors 7/24 with plan to remediate
- Reduces unplanned outages with proactive cluster monitoring
- Free IT staff time from maintaining Superna Eyeglass DR software and assessing release fixes and patches againsts your environment
- SyncIQ performance monitoring

Terms of Service

1. **Service Delivery:** Remote phone home enabled appliance.
    a. Contact Support to get whitelist url and IP's required for the service.
2. **Availability**: 7/24/365
3. **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement

Prerequisite:

1. Latest Eyeglass release or N-1
2. Whitelist phone home url's required for service

-

Exceptions excluded from service:

1. Assisted failover on webex or zoom - normal support process
2. Resolution of non Eyeglass software or hardware example AD, DNS, PowerScale - see EULA above and failover support process documentation for full list of exclusions
3. Configuration or DR Design assistance - this requires prefessional services purchase
4. Notification of a DR impacting issue is customers responsiblity to resolve or work with support once notified of the issue
5. All issues are raised as support case with contact listed in the support system.
6. Customer responsibility to add any contacts to the support system for notification of DR impacting issues (https://support.supera.net). Or communciate an email to be notified of DR impacting issues by opening a case and stating the contact email for DR monitoring service.

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2.10. Service - Superna ™ Eyeglass Cloud Archive Quick Start Service

Cloud Archive Quick Start Service

Part number myquotes = eyeglass-p023 Dell SKU AB291772 "SEL-Cloud Archive Quick Start Service "

Revision 1 June 9, 2020

- Overview:
- Service Description:
- Terms of Service
- Project summary

Overview:

This service assists with design, planning and implementing an archive project to Cloud storage from your PowerScale with Superna Eyeglass Golden Copy file to object archive product.

Service Description:

This service will assist with customers to design, and implement an archive project with Golden Copy and PowerScale to a cloud provider archive storage solution. The solution will include a design document, best practices, Cloud Storage configuration summary, network diagram of data flows and configuration of Golden Copy to archive a data set. It will include knowlege transfer on operational archive and recall work flows with Golden Copy, as well has high level basic knowledge transfer on the Cloud provider storage service specific to Golden Copy use cases.

Terms of Service

1. **Service Delivery:** Remote webex/Zoom
   a. Service operates Monday to Friday **2:00 AM to 3:00 PM EDT** excluding major holidays
2. **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement
3. **Prerequisite:**
   a. Supported Onefs Release 8.x or later
4. **Timeline:**
   a. Minimum 4 x 2 hour conference calls zoom/webex. Calls are scheduled based on customer ability to complete pre-requistes such as access to Cloud provider, networking team, proxy or Internet team.
5. **Exclusions:**
   a. Outage or issue resolution of customer networking equipment
   b. Any costs related to Cloud provider fees , overages, data usage transfer costs related to copy of data to a Cloud provider service
   c. Internet bandwidth costs related to copying of data

     d. Outage or issue resolution of Cloud provider services

Project summary

1. Data Collection Phase

   a. Interview process to collect use cases and review Cloud provider storage option pros and cons

   b. Information collected will include:

      i. Networking between PowerScale and the Internet, Internet connection speed

      ii. NAT or proxy access to the Internet

      iii. Data Set size review and file type for achiving

      iv. One time or continous copy requirements

      v. Version and retention requirments for archived data

      vi. Recall scenario's from archive to on premise storage frequency

2. Design Phase

   a. Design document to summarize data flows between all components of the solution, protocols and ports and devices inline between PowerScale and Internet access

   b. Golden Copy Configuration summary for the data set archive

   c. Cloud provider object storage configuration summary

    d. Operational monitoring procedures when active copies are in progress, key monitoring statistics for diagnosing copy issues

3. Wrap Up Phase

    a. Final Review of the design document

    b. Knowledge Transfer on the solution

    c. Q&A

2.11. Service - Superna Eyeglass AirGap Design and Implementation

AirGap Design and Implementation

Part number myquotes = eyeglass-p024 Dell SKU AB291773 "SEL-AirGap Design and Implementation"

Revision 1 June 26, 2020

- Overview:
- Service Description:
- Terms of Service
- Project summary

Overview:

This service assists with design and implementation of a Ransomware Defender AirGap solution. This service includes steps to configure Eyeglass Ransomware Defender for a production Isilon cluster and how to implement networking to the vault Isilon cluster.

Service Description:

This service will assist with customers to design, and implementation of an AirGap solution that vault a copy of data to an off line 3rd Isilon cluster. The service will require the customer to deploy 3rd Isilon cluster dedicated to the AirGap copy. The design will cover implementation details required on the production cluster, networking between production and the vault Isilon cluster and configuration of the vault Isilon. Knowledge transfer of operational procedures and monitoring.

Terms of Service

1. **Service Delivery:** Remote webex/Zoom
   a. Service operates Monday to Friday **2:00 AM to 3:00 PM EDT** excluding major holidays
2. Terms and Conditions of task covered in product maintenance agreement Support Services Agreement
3. **Limits:**
   a. 1 Airgap Vault Isilon with exclusions below
   b. 1 source Isilon to be protected
   c. For each addition source cluster purchase eyeglass-B4-2 qty 1
4. **Prerequisite:**
   a. Deployed Ransomware Defender
   b. 3rd Isilon cluster is deployed and reachable on the network at that start of the service
   c. DR license for vault cluster for Virtual Airgap OR Airgap Agent license for Enterprise Airgap solution.
5. **Time line:**

a. Minimum 4 x 2 hour conference calls zoom/webex. Calls are scheduled based on customer ability to complete prerequisites such as networking to 3rd cluster.

6. **Exclusions or provided by customer or Dell:**

   a. Outage or issue resolution of customer networking equipment

   b. Deployment of the 3rd vault Isilon - assumes Dell services are purchased for basic deployment of Isilon Vault cluster

   c. Inside the Vault

      i. ESX host hardware deployment and vmware OS installation is completed by customer.

      ii. Additional vmware tools or VM's for recovery not provided by Superna

   d. Hands on configuration of routing or switching equipment

Project summary

1. Data Collection Phase - Who participates: Customer and Superna

   a. Identify data on production cluster that requires a 3rd copy.

   b. Plan policy design to protect specific applications

   c. Plan data replication interval to maintain 3rd copy based on the change rate of the application data. Eyeglass RPO report used as input to decision on replication interval.

   d. AirGap policy replication planning for maximum protection with the goal of setting the optimal policy replication schedule in Ransomware Defender to ensure the AirGap is open the least number of minutes per day.

e. Collect network information on vlan routing or physical routing to the Vault Isilon cluster.

f. Collect Vault Isilon IP and system zone IP pool configuration

g. Validate if rapid recovery pre-staging will be configured on the vault Isilon.

2. **Design Phase - Who participates: Customer and Superna and Dell Deployment services**

   a. Build and delivery an "As built" AirGap design document covering AirGap polices, schedules, networking, physical diagram, configure recovery IP pools, Data Pool recovery interfaces, Rapid Recovery DNS smartconnect pre-staged, Repaid Recovery Configuration sync procedures.

3. **Configuration Phase - Who participates: Customer and Superna and Dell Deployment services**

   a. Implement "As built" Design document for the AirGap configuration and apply changes as per below:

      i. Customer configuration responsibilities

         1. Ethernet switches between production and vault cluster

         2. vault management Ethernet switch

      ii. Production cluster IP pool

      iii. Production cluster new policies and full data sync started

      iv. vault network routing configuration

v. vault cluster operating configuration

  vi. Ransomware Defender configuration with virtual AirGap and policy scheduling

  vii.   ping tests with AirGap open and closed

  viii.   AirGap SyncIQ policy test sync

  ix. Vault Isilon alarm monitoring test

4. **Wrap Up Phase - Who participates: Customer and Superna**

   a. Final Review of the design document

   b. Knowledge Transfer on operating procedures for recovery options, how to add policies to vault data and set schedules,   Alarm monitoring of the vault cluster, and airgap daily reports.   Maintenance procedure review, upgrade procedure review.

   c. Q&A

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2.12. Extended Knowledge Transfer

Extended Knowledge Transfer

Part number myquotes = eyeglass-b4-2 quantity 3 or Dell SKU AB109752

"Extended Knowledge Transfer"

Revision 1 Jan 15, 2021

- Overview:

- Service Description:

- Examples

- Terms of Service

- Project summary

  - Data Collection Phase

  - Design Phase

  - Configuration Phase

  - Wrap Up Phase

Overview:

This service is designed to augment basic product install services when customers have more complex use cases, integrations with external software tools or advanced features that are not covered under basic installation.

This service will assist customers to design and implement a feature or integration with external tools example SIEM software or provide deeper level of discussion around usage of a specific feature to address a specific business problem. This service will be limited in scope with a fixed number of use cases and limit on the duration of access to a Subject Matter Export (SME).

Examples

1. How to integrate Ransomware Defender, Easy Auditor alerts into SIEM tools

2. How to enable application specific email alerting

3. Deep Dive on Ransomware Defender, Easy Auditor triggers for Security teams to understand how to leverage within the security framework that is already in place

4. Deep Dive on showback and charge back with Search & Recover to solve business challenges with tiered data

5. How to Configure Cloud storage for archive compliance solutions with Golden Copy

6. How to use Performance Auditor to complete an assessment of application and user workloads to make changes to optimize Isilon storage usage

7. How to move data from System zone into new access zones to maximize data separation by department or application

8. How to maximize RBAC based on Internal business requirements example help desk, security, power user or departmental users.

9. How to configure Snapshot indexing for a data recovery solution for users or IT - Search & Recover

10.   How to empower users to copy data with SyncIQ and Eyeglass AnyCopy - Media entertainment , Medical or pharmaceutical research

Terms of Service

1. **Service Delivery:** Remote webex/Zoom

   a. Service operates Monday to Friday **2:00 AM to 3:00 PM EDT** excluding major holidays

2. **Terms and Conditions of task covered in product maintenance agreement** Support Services Agreement

3. **Limits:**

   a. Up to 3 items with any combination of products, and any mix of integration, feature implementation or deep dive knowledge transfer

   b. Not to Exceed 6 hours of meeting time combined for the 3 items selected for the service

4. **Prerequisite:**

   a. Installation and Configuration services have been purchased and executed fully before this service can start

5. **Exclusions:**

   a. Outage or issue resolution of customer equipment or software

   b. Configure 3rd party software or hardware is expected the customer supplies this expertise

   c. Development of any scripts, software or code is excluded in this service

Project summary

1. **Data Collection Phase**

a. Q&A 30 minute call to review 3 focus areas that can cover products Eyeglass DR, Ransomware Defender, Easy Auditor, Performance Auditor, Search & Recover, Cluster Storage Monitor, Golden Copy and AnyCopy

2. Design Phase

a. Document the 3 target areas in detail to ensure agreement on the objective and outputs for each item

b. Plan order and scheduling of kick off call to collect detailed requirements on each item. It is expected all SME's are available for this phase and call.

c. After kick off call a detailed item solution description will be documented.

3. Configuration Phase

a. Scheduled meetings for each item is scheduled with key stake holders to review the solution documentation prepared for each call for each item identified in the Collection phase.

4. Wrap Up Phase

a. Each item is completed at the end of the scheduled calls.

3. How to Raise an Eyeglass Support Request

How to Raise an Eyeglass Support Request

- Sign up for Support Account

- Eyeglass Full Backup

- ALTERNATE UPLOAD INSTRUCTIONS for All Eyeglass versions

Sign up for Support Account

1. Go to support.superna.net
2. If you don't already have an account - Sign up now!
3. Sign In
1.
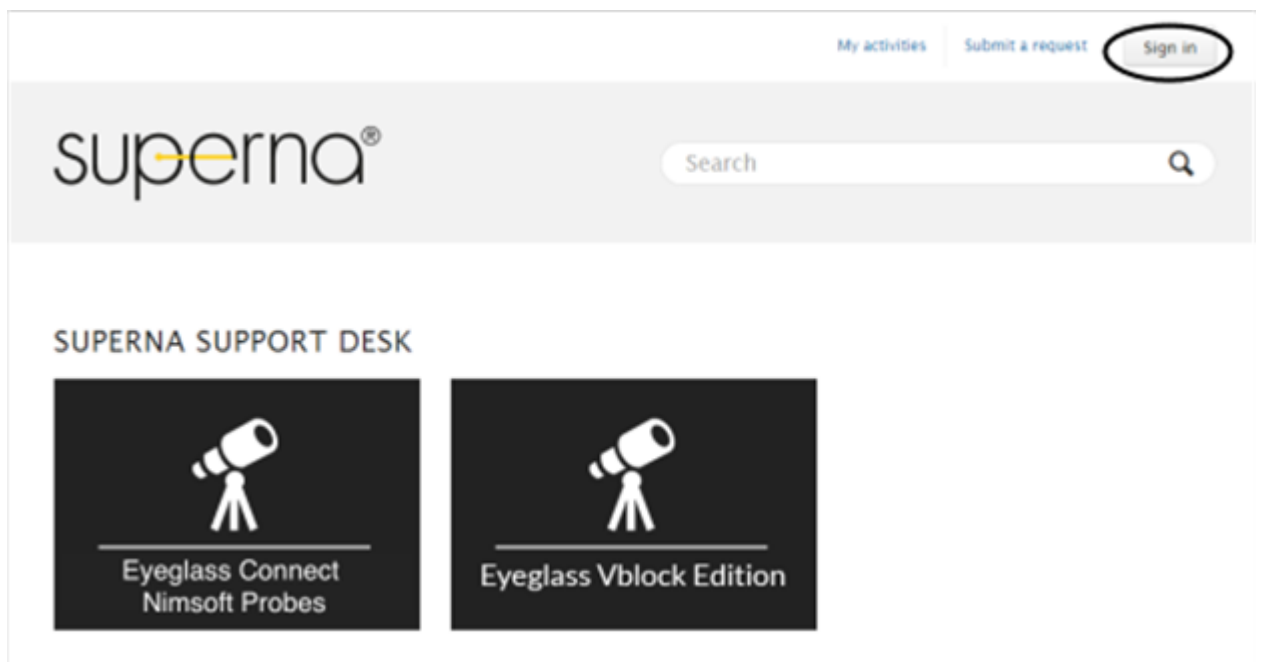
1. Select the Sign up link.

Sign in to Superna

Sign in with Twitter	
Sign in with Facebook	
Sign in with Google	

Email

Password

☐ Stay signed in

Sign in

Your credentials will be sent over a secure connection

Cancel

I am an Agent

Forgot my password

New to Superna? Sign up

Have you emailed us? Get a password

If you've communicated with our support staff through email previously,
you're already registered. You probably don't have a password yet, though.

1. **Fill in your name and email address and the verify text and Sign up.**

Sign up to Superna

Please fill out this form, and we'll send you a
welcome email so you can verify your email
address and sign in.

Your full name *

Your email *

Your Twitter

I'm not a robot

reCAPTCHA
Privacy - Terms

Sign up

cancel

1.

You will receive an email with instructions to verify your account.

Sign In to support.superna.net with your support account and password

Sign in to Superna

Sign in with Twitter

Sign in with Facebook

Sign in with Google

Email

Password

☐ Stay signed in

Sign in

Your credentials will be sent over a secure connection.

Cancel

I am an Agent

Forgot my password

New to Superna? Sign up

Have you emailed us? Get a password

If you've communicated with our support staff through email previously, you're already registered. You probably don't have a password yet, though.

1. Submit a Request

My activities   Submit a request   Dorothy Customer ▾

superna®

Search

SUPERNA SUPPORT DESK

Eyeglass Connect
Nimsoft Probes

Eyeglass Vblock Edition

Eyeglass Isilon Edition

Hints:

Product Name: Eyeglass PowerScale Edition

appliance ID: Found in the About / Contact window on your Eyeglass PowerScale Edition web page

EMC Site ID: ID assigned by EMC for the PowerScale clusters related to the support request

1.

Eyeglass Full Backup

Follow these steps in order to collect a full Eyeglass backup including Eyeglass configuration and log information:

1. Login to your Eyeglass appliance webpage.

2. Open the About / Contact window (located on the lower left corner).

3. Click the Backup option (below Contact Us).

4. Uncheck include screenshots if you do not want to include screenshots in Full Backup file (enabled by default)

5. Click the Create Full Backup button.

6. ==If you have internet connectivity on the Eyeglass appliance==, you can upload directly by following Step 7 otherwise please follow Step 12

7. Select the latest created Support Backup file and click "Upload Selected Files to Superna Support" **NOTE: The restore backup is only used for restoring an appliance to a new appliance for upgrade or recovery.**
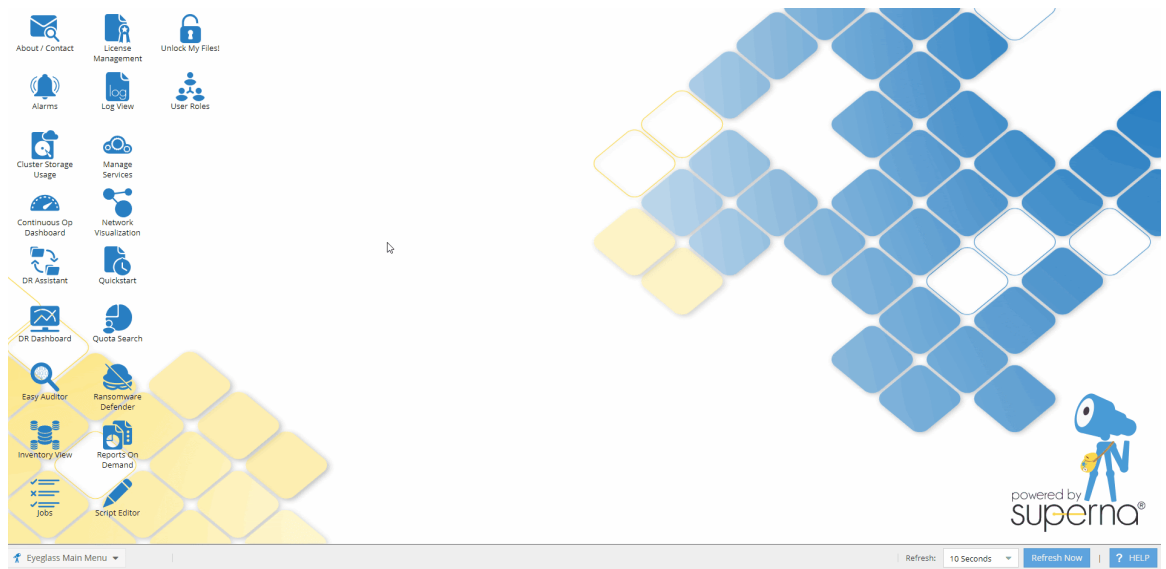
8.

9. You will see the Success message, please click OK.

10. You can see the progress of backup file upload via Eyeglass Jobs window → Running Jobs
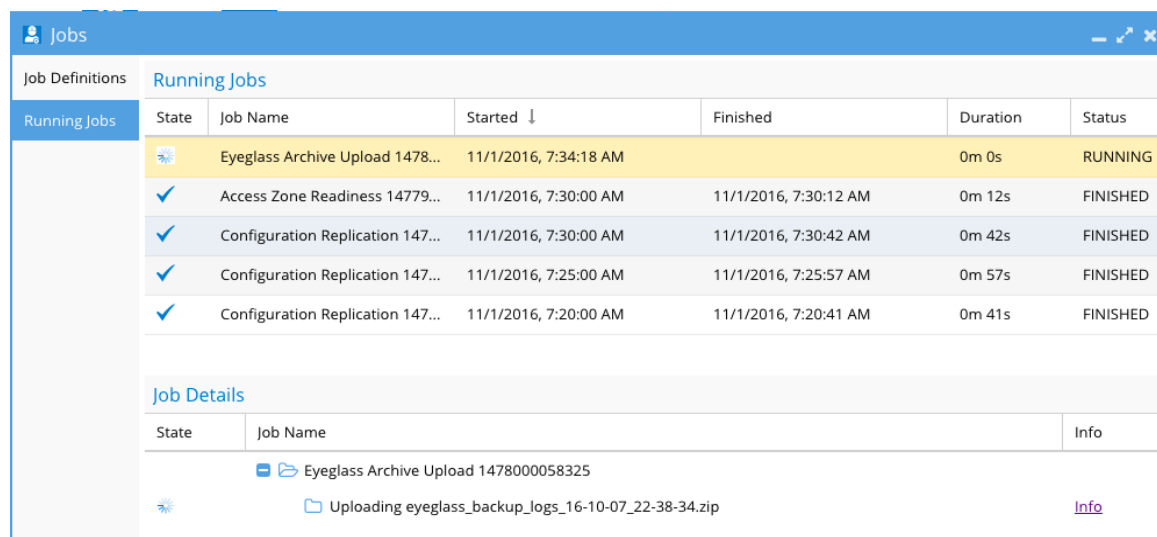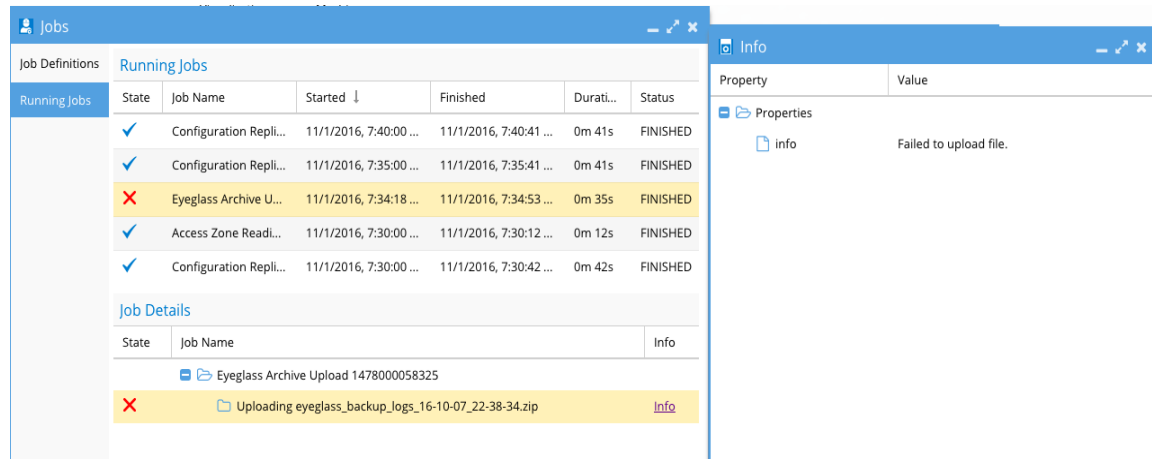

11.

12. If the Running Job shows successful, the backup archive has been uploaded to support and procedures is completed.

13. <mark>If an Error or failure to upload occurs (see screenshot of failed upload).</mark>

90

Continue on to the next ALTERNATE upload instructions below.

14.

1.

2.

ALTERNATE UPLOAD INSTRUCTIONS for All Eyeglass versions

1. Login to the support portal with a valid account
   https://support.superna.net

2. Scroll down the page until you see the upload support data section:

3.

4. Enter the appliance ID Into Field 1 (Required)

   a. Get the appliance ID from the Eyeglass desk top "About Eyeglass", (bottom of the page) and copy this string into the appliance ID field. **NOTE: Make sure to remove and leading**

spaces or trailing spaces when pasted into the form or the upload will fail to find the appliance ID)

Appliance ID: 2a7b88c1-S16.0v16080U16.0v16080-R16.0v16080C16.0v16080D16.0v
© Superna, 2016

b. _____

5. **Support Request ID - This is your Case Number.** (optional but recommended <mark>this notifies support automatically after your logs are uploaded).</mark>

6. Find the file and click submit

7. Update the ticket that upload is completed

8. Done

2.

3.

4.

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