

FalconStor®

SUPPORT HANDBOOK

FalconStor Support Handbook

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Introduction

With over ten years of experience, FalconStor takes pride in providing customers with swift, focused, and courteous service that is just a click or phone call away. From critical issues to “how to” questions, our global FalconStor Technical Support engineers are ready to assure the success of your company’s solution.

To provide the best support possible, our technical support engineers work closely with fellow FalconStor experts representing Development, Storage Architecture, and Quality Assurance and have a full understanding of many different types of hardware and software.

FalconStor Software offers comprehensive technical support and troubleshooting assistance services for customers, partners, and distributors (the “customer”) who purchase FalconStor products. To upgrade, renew, or change your technical support plan, contact your FalconStor Sales representative, who can help you identify the best support package for your business.

We have created this Handbook to help you quickly get the information you need for working with FalconStor support.

Effective date of this Handbook

The information and support policy details presented in this Handbook apply to all purchases of FalconStor software and hardware as of the date of publication shown on the page following the cover. Support policies for all FalconStor software and hardware purchased prior to that date are defined in the support document(s) linked from the software “Welcome” letter or shipped with hardware. If you have any questions, contact your FalconStor Sales representative.

Maintenance and technical support

Purchase of renewable Silver or Gold maintenance with your software or hardware gives you access to technical support engineers and a variety of support services for a period of at least one year.

Purchase and renewal of software and appliance maintenance plans is subject to policy details specified in this Handbook (refer to [Software/Hardware Support Policy](#)).

Per-incident support

Per-incident support may be available if a company does not have a Maintenance and Support Agreement in place and special approval is obtained. The fee for this service will be waived if Maintenance and Technical Support is purchased within 15 days following the purchased incident support.

Access to support

Silver Maintenance – You have access to technical support engineers between 9 am and 6 pm local time, excluding weekends and holidays.

Gold Maintenance – You have access to technical support engineers 24x7x365.

All maintenance plans include 24x7x365 access to the FalconStor support community sites. Type support.falconstor.com into your browser’s address field. On the Technical Support page of the FalconStor website, select the link for the Customer Support Community or Partner Support Community, then create a login account. After you log in, you can create a case for your issue and then track the case until it is closed. You can also search for and download articles from the Knowledge Base and download product upgrades, maintenance updates, server patches, and documentation.

FalconStor website

The [Support & Services](#) page of the FalconStor web site gives an overview of support services. For details, go to the [Technical Support](#) page, which provides the following:

- Links to support policy documents
- Support contact information
- Links to the FalconStor support community sites, the central support location for customers and partners (login account required).

Contacting Technical Support

Americas

- Phone: +1 631.777.3332
- Fax: +1 631.501.7633

Europe, Middle East, and Africa (EMEA)

- Phone: +49.89.589.7887.28

Asia Pacific (APAC)

- Phone: +886-4-2258-6118
- *Japan*: 050-6864-8177 (local)
- *China*: 400-120-6287 (local)
- *Singapore*: 800-866-1071 (local)

If this is a critical issue without an open ticket, be prepared to provide the following:

- Company name, phone, and email address
- Site where problem has occurred
- FalconStor software product(s): version and build number(s), stage of deployment
- Issue description: area, symptoms, start/end date/time, names of server/client machines
- Issue characteristics: frequency, trigger, extent, history
- Impact assessment: current condition, functional impact, business impact, urgency
- Error message(s)
- Copy of the X-ray(s)
- Steps taken to troubleshoot the case so far

Additional information for appliance support:

- Model number
- Serial number
- Service Tag number
- Express Service code

General support exceptions

- FalconStor does not support storage systems that have not been certified for use with FalconStor software, as specified in the online Certification Matrix.
- FalconStor Technical Support does not include deployment support including, but not limited to, installation/reinstallation/deployment of appliances, troubleshooting SAN or IP network environments, installing Linux kernels, zone preparation and configuration of SAN switches, SAN connection preparation and configuration, IP connection and configuration, storage connection and configuration, or installing software not supplied by FalconStor (such as a backup package or SNMP package). Deployment support is available at current FalconStor Professional Services rates.

- Technical support does not include major product version upgrades, as defined by FalconStor. Upon the release of a major product version, FalconStor Professional Services can assist in upgrading your environment to the latest version of the product.

Third-party support

FalconStor acknowledges that customers work with other vendors and we are committed to finding a quick resolution by working collaboratively with other third party support organizations.

We will ask that our customers log a case with the other vendor so they can troubleshoot the issue with their product.

In addition to coordinating support with the customer we are also a member of TSANet (Technical Support Alliance Network). TSANet is a worldwide, vendor-neutral infrastructure that provides legal framework and contact databases for collaborative support among members. Using the TSANet process, members agree to collaborate when a multivendor problem exists. TSANet allows partners to have a common entry point when contacting partners' support centers in multivendor support incidents.



FalconStor Support Community Sites

The FalconStor support community sites are your starting point for product support. Separate sites are provided for customers and partners. Login is required. To create a login account, type support.falconstor.com into your browser's address field. This takes you to the Technical Support page on the FalconStor website. Select the *Customer Support Community* or *Partner Support Community* link, click *Sign up*, and provide the required information.

A person who logs into the Customer Support Community can view account information related to their own company. A person who logs into the Partner Support Community can view their own account and information related to end users associated with the account.

After you log in, take some time to explore the display.

Cases

This landing page for customers and partners displays all, open, or closed cases, depending upon the selected filter. From here, you can create a new case or review case history. You can review or add case comments and attach supporting documents, screenshots, or X-rays. You can also provide links to supporting documents that you have uploaded to your FTP site for FalconStor to retrieve. You also have the ability to print a case detail pages or save a page as an .html or .txt file.

Accounts

The information in this page allows customers or partners to view information about the accounts registered by FalconStor on the site, including contact information, cases, site locations, and maintenance contracts for purchased FalconStor solutions. You can also create new cases and print account detail pages, or save a page as an .html or .txt file.

Contacts

This page is available only on the partner site. On this page, partner users can submit and manage information about contacts associated with accounts, as well as view and create cases. You also have the ability to print contact detail pages or save a page as an .html or .txt file.

Knowledge Base

Designed to be the first line of customer and partner support, the Knowledge Base is a repository of technical documents that may allow you to solve your issue without the need to create a support case.

The Knowledge Base is available to all FalconStor customers and solution provider partners. It captures years' worth of technical expertise from FalconStor developers, engineers, and consultants.

Available articles can be filtered by product name, or you can display articles in the following categories:

- **FalconStor Products How-To.** Easy-to-follow for technical procedures for FalconStor product configuration, implementation, upgrade, data migration, third-party product integration, etc.
- **Troubleshooting.** Step-by-step instructions to help technical personnel diagnose and resolve issues regarding FalconStor products and product environments.
- **General FAQ.** Answers to common questions about FalconStor products specifications, technologies, applications, etc.

You can also search for specific articles by number or content.

Products

This page displays information and downloads for products that are available to you based upon purchased licenses. Technical alerts and update notifications, as well as links to the latest FalconStor news items, are displayed at the top of the page.

To obtain Generally Available builds, patches, and documentation, select the product category and product, then choose the software you want to download. After you select a product file, you can also download the associated documentation.



FalconStor University

FalconStor University is an educational program designed to provide comprehensive training to FalconStor customers and partners. From self-paced online courses to hands-on, instructor-led classroom courses, our comprehensive sales training, technical training, and certification programs will enable you to get the most from your investments in FalconStor solutions. To register for courses, customers can go to support.falconstor.com and select *Training* in the *Support* menu; partners can log in to FalconStor PartnerPlace at partners.falconstor.com.

Self-paced e-Learning

Self-paced e-Learning courses are offered continuously and you can register at any time. You must complete a course within three months from the date of registration. Each e-Learning course focuses on a specific FalconStor solution and discusses the basic administration tasks required to manage it. Each course consists of a series of lesson modules. As you progress through a module, step-by-step visual tutorials will reinforce what you have learned. A final assessment is given at the end of the course. You must achieve a passing grade in order to complete the course and receive a certificate.

Instructor-led training

Intensive technical classroom-based courses, led by seasoned instructors who are professionals in the field, provide in-depth instruction for partners and IT administrators. These courses provide a more sophisticated and explicit level of product expertise, offering hands-on instruction and troubleshooting experience in a virtual and/or physical lab environment. On-site training is also available upon request. Contact a FalconStor Sales representative to inquire about on-site training requirements and pricing.

Learning paths

FalconStor offers four primary learning paths based upon job roles. Sales, Pre-Sales, and Deployment courses are exclusively available to members of the FalconStor PartnerChoice program. These courses empower our partners with the information they need to successfully sell and implement FalconStor technologies.

Administration courses are available to all FalconStor customers and partners.



Escalation Policy

Each support ticket is assigned a severity level:

Level	Definition	Examples	Response target
Severity 1- Critical	Severe problem- customer or workgroup cannot perform normal job functions or performance is severely degraded	System Down, or seriously degraded Data unavailable Workaround unavailable Critical resource unavailable and could cause significant financial impact to the customer	Within 1 hour
Severity 2- Severe	Major Functionality Impact Degraded level of service, immediate workaround required	Major system function is unavailable or degraded Repeated failures Problem is time sensitive but not causing an immediate work stoppage. No workaround is available and operation can continue in a restricted fashion	Within 2 hours
Severity 3- Moderate	Issue has affected or will affect customer productivity. Workaround exists, but problem must be fixed.	Failure in software component that is non-critical Failure in redundant component Problem affects some users	Within 8 hours
Severity 4- Mild	Information	"How to" questions Documentation issues Enhancement requests	Next business day

For a *Severity 1- Critical* event or when it has not been possible to close a support ticket using normal procedures, it may be necessary to request an escalation. To do this, call us at the number for your region and ask to speak to the Duty Manager. The Duty Manager will review the case with the engineer, engage other FalconStor resources if necessary, define the action plan, and communicate the plan to the requestor.



Software/Hardware Support Policy

Software support

FalconStor strives to be a technology leader. As technology evolves, so do the products and services we offer to our customers. To provide our customers with the most innovative solutions available, FalconStor software maintenance is available for any software product licensed from FalconStor.

Every Maintenance and Technical Support Agreement entitles customers to patches and updates for their products. A Maintenance and Technical Support Agreement that includes Upgrade Assurance entitles customers to upgrades as well.

Typically, FalconStor provides the following support services for a Generally Available (GA) release in conjunction with your maintenance contract terms:

- Updates, patches, and bug fixes (downloadable from the FalconStor Customer Support portal).
- Troubleshooting, diagnostics, and workarounds (provided by FalconStor Technical Support professionals).
- Access to the Knowledge Base, product documentation, and all features available on the FalconStor Customer Support portal.
- Upgrades (with Upgrade Assurance)

Maintenance and Technical Support can be purchased for a minimum of one year at a time. Contact your FalconStor Sales representative for information on available support plans and pricing.

You must include Upgrade Assurance in your purchase of a Silver or Gold Software Maintenance contract when you initially license a current FalconStor GA product.

Notes:

- Upgrades that require updates to the customer's operating system or data structure may require assistance from Professional Services, which is available for an additional cost. Contact your FalconStor Sales representative for details.
- If you are using the latest shipping version of a FalconStor solution but *do not* have a maintenance contract in place, you must purchase maintenance for the period of time during which you have not had a maintenance contract (retroactively to the date of purchase or renewal from the date on which a maintenance contract expired). You can then purchase Software Maintenance with Upgrade Assurance.

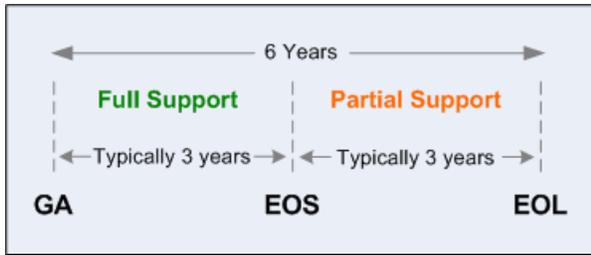
EOS/EOL Policy

When a new version of a FalconStor software product becomes generally available (GA), FalconStor will communicate End of Service (EOS) and End of Life (EOL) dates for previous versions and releases.

In the EOS phase, all general support listed above is available, but new updates or patches will no longer be made generally available.

Once a product reaches the EOL phase, support includes only previously released patches and online resources (such as the Knowledge Base) located from the FalconStor support community sites.

While the actual EOS/EOL dates vary for each product, the timeline below shows a typical lifecycle for a product.



Hardware support

FalconStor appliance maintenance covers all FalconStor-branded hardware.

Renewable Appliance Maintenance (Silver and Gold) includes the hardware warranty and on-site parts replacement, as well as periodic software patches and updates. A maintenance agreement that includes Upgrade Assurance entitles customers to upgrades as well.

Upgrades are subject to hardware compatibility compliance and any Professional Services requirements. Refer to the Compatibility Matrix on falconstor.com or to product release notes for information on hardware requirements.

Refer to [Software support](#) for information on software upgrades and Upgrade Assurance.

Availability of on-site dispatch of technician and/or delivery of service parts to a Customer location depends on Customer location and the purchased level of maintenance.

Support for non-FalconStor-branded components is provided by other vendors; refer to [Third-party support](#).

Support availability

Hardware maintenance and technical support can be purchased for a minimum of one year and a maximum of three years, with pricing for years four and five guaranteed at the same rate.

Contact your FalconStor sales representative for information on available support plans and pricing.

On-site response

When a Customer opens a ticket for a hardware problem, a FalconStor Technical Support representative will assist the Customer by phone using a series of troubleshooting steps to help diagnose the issue. On-site service is provided by a third party, coordinated by FalconStor. If the FalconStor representative determines that the hardware problem should be addressed on-site, the representative will contact the authorized on-site service vendor hardware support provider on your behalf, or refer you to the on-site service vendor.

If all applicable terms and conditions in the support policy defined in this Handbook have been fulfilled, the authorized on-site service vendor will dispatch a service technician to the Customer's business location, pursuant to the severity level assigned to the ticket and level of purchased maintenance service.

For regions and countries where 4-hour or next-business-day service is not available, on-site parts replacement will be performed on a best-effort basis.

Contact your FalconStor Sales representative to confirm the service level offered in your area.

Parts service

Parts service provides parts required by a technician for on-site repairs, as well as parts that will be installed by the Customer.

The authorized support vendor currently stocks parts in various locations throughout the world. If a part that is needed to repair the supported product cannot be provided from a vendor facility near the Customer's location and must be transferred from another facility, response times may be impacted.

If the FalconStor representative determines that it is necessary to return an entire system, the representative will advise the customer how to proceed.

Firmware updates

For all hardware, support includes maintenance software updates and the introduction of new features to firmware. Customers perform all firmware upgrades according to procedures provided by FalconStor. Assistance is available upon request.

Support exceptions

Hardware service does not include:

- Activities such as installation, de-installation, relocation, preventative maintenance, training assistance, remote administration, or any activities or services not expressly described in this Handbook.
- Accessories, supply items, media replacement, operating supplies, peripherals, or parts such as batteries, frames, and covers or support thereon.
- Software troubleshooting and support of any kind, unless it is explicitly specified above.
- Third-party hardware and software product support.
- Support for hardware and/or software pre-installed or post-installed by the Customer.
- Support for equipment damaged by act of nature (such as but not limited to, lightning, flooding, tornado, earthquakes, and hurricanes), misuse, accident, abuse of supported hardware or components (such as, but not limited to, use of incorrect line voltages, use of incorrect fuses, use of incompatible devices or accessories, improper or insufficient ventilation, or failure to follow operating instructions), modification, unsuitable physical or operating environment, improper maintenance by the Customer (or Customer's agent), moving the supported hardware, removal or alteration of equipment or parts identification labels, or failure caused by a product for which FalconStor is not responsible.
- Spyware/virus removal or data backup services.
- Advanced wireless, networking or remote installation, setup, optimization, and configuration of applications beyond those described in this Handbook.
- Scripting, programming, database design/implementation, Web development, or recompiled kernels.

HARDWARE COVERAGE EXCEPTION

- The host-based RAID controller battery carries a 1-year limited hardware warranty.

Customer responsibilities

- **Authority to grant access.** Customer represents and warrants that the Customer, FalconStor, and if applicable the FalconStor-authorized support vendor will have access to and use of the supported product, the data on it, and all hardware and software components included in it, for the purpose of providing these services. If the Customer does not already have that permission, it is the Customer's responsibility to obtain it, at the Customer's expense, prior to asking FalconStor to perform these services.
- **Cooperating with FalconStor Technical Support and on-site technician.** Customer agrees to cooperate with and follow the instructions given by the FalconStor Technical Support representative.
- **Supported releases.** Customer must maintain software and supported hardware at required levels as specified in the Certification Matrix or in product release notes. Customer must also ensure installation of remedial replacement parts, patches, software updates, or subsequent

releases as directed by FalconStor in order to keep the supported hardware eligible for this service.

- **Third-party warranties.** This support agreement may require that FalconStor Technical Support or the on-site technician access hardware or software that is not manufactured by FalconStor. Some manufacturer's warranties may become void if FalconStor or anyone other than the original manufacturer performs work on their products. It is the Customer's responsibility to ensure that FalconStor and/or its authorized on-site service vendor do not affect such warranties or, if it does, that the effect will be acceptable to the Customer. FALCONSTOR and FALCONSTOR'S AUTHORIZED RESELLERS DO NOT TAKE RESPONSIBILITY FOR THIRD PARTY WARRANTIES OR FOR ANY EFFECT THAT FALCONSTOR SERVICE MAY HAVE ON THOSE WARRANTIES.
- **Onsite obligations.** Where service requires on-site performance, the Customer must provide free, safe and sufficient access to the Customer's facilities and the supported product(s). Sufficient access includes ample working space, electricity and a local telephone line. A monitor or display, a mouse (or pointing device), and a keyboard must also be provided (at no cost to FalconStor) if the Supported Product does not already include those items.

Note: If the Customer fails to comply with the responsibilities and terms outlined in this support policy, then FalconStor is not obligated to provide the service.

CUSTOMER DATA BACKUP RESPONSIBILITIES

The Customer must complete a backup of all existing data and programs on all affected systems prior to the delivery of this Service.

FALCONSTOR WILL HAVE NO LIABILITY FOR LOSS OR RECOVERY OF DATA OR PROGRAMS or loss of use of system(s) arising out of the services or support or any act or omission, including negligence, by FalconStor or a third-party service provider.

Important additional information for all hardware services

1. **Assignment.** FalconStor may assign this service and/or service description to qualified third-party service providers.
2. **Whole unit replacement.** If the representative determines that the supported product is one that should be replaced as a whole unit, FalconStor reserves the right to have a whole replacement unit sent to the Customer. If an on-site technician delivers a replacement unit to the Customer, the Customer must relinquish the defective system or component thereof to the technician, unless Customer has purchased Keep Your Hard Drive for the affected system, in which case the Customer may retain the respective hard drive(s). If Customer does not relinquish the defective unit to the on-site technician as required above, or if (in the event the replacement unit was not delivered in person by an on-site technician) the defective unit is not returned within ten (10) days, Customer agrees to pay FalconStor for the replacement unit upon receipt of invoice. If Customer fails to pay such invoice within ten (10) days after receipt, in addition to any other legal rights and remedies available to FalconStor, FalconStor may terminate this hardware service upon notice.
3. **Cancellation.** FalconStor may cancel this service at any time during the service term for any of the following reasons:
 - Customer fails to pay the total price for this service in accordance with the invoice terms;
 - Customer refuses to cooperate with the assisting Technical Support representative or on-site technician; or
 - Customer fails to abide by all of the terms and conditions set forth in this support policy.

If FalconStor cancels this service, FalconStor will send Customer written notice of cancellation at the address indicated on Customer's invoice. The notice will include the reason for cancellation and the effective date of cancellation, which will be not less than ten (10) days from the date

FalconStor sends notice of cancellation to Customer, unless state law requires other cancellation provisions that may not be varied by agreement. IF FALCONSTOR CANCELS THIS SERVICE PURSUANT TO THIS PARAGRAPH, CUSTOMER SHALL NOT BE ENTITLED TO ANY REFUND OF FEES PAID OR DUE TO FALCONSTOR.

4. **Relocation.** This service will be delivered at the site(s) indicated on the Customer's invoice. This service is not available at all locations. FalconStor's obligation to supply the services to relocated supported products is subject to local service availability and may be subject to additional fees, and to inspection and recertification of the relocated supported products at FalconStor's then current time and materials consulting rates. Customer will provide FalconStor with sufficient and safe access to Customer's facilities at no cost to FalconStor for FalconStor to fulfill service obligations.
5. **Support limitations.** FalconStor is not liable for any failure or delay in performance due to any cause beyond its control. Service extends only to uses for which the supported product was designed.
6. **Service parts ownership.** All FalconStor service parts removed from the supported product and returned to FalconStor become the property of FalconStor. Customer must pay FalconStor at the current retail price(s) for any service parts removed from the system and retained by Customer (except for hard drives from systems covered by Keep Your Hard Drive service) if Customer has received replacement parts from FalconStor. The authorized service vendor uses new and reconditioned parts made by various manufacturers in performing warranty repairs.
7. **Optional services.** Optional services (including point-of-need support, installation, consulting, managed, and professional, support or training services) may be available for purchase from FalconStor and will vary by Customer location. Optional services may require a separate agreement with FalconStor and are charged according to then-current Professional Services rates. In the absence of such agreement, optional services are provided pursuant to this Agreement.
8. **Term and renewal.** Customer will receive Services for the term indicated on Customer's FalconStor invoice. Prior to the expiration of the service term, Customer may be entitled to extend the term depending on available options then in effect and in accordance with FalconStor's then-current procedures.

In addition, FalconStor may, at its option, propose to renew this service by sending Customer an invoice to renew the service. Customer may, at its option (where permitted by law), agree to such renewal of the service by paying such invoice by the due date. Payment of renewal invoices shall indicate Customer's agreement to extend the term of this service. By renewing this service, Customer agrees that the then-current terms will apply to the renewal period. If Customer elects not to pay a renewal invoice, service will be discontinued as of the expiration date set forth on the original or last paid Customer invoice.

9. **Transfer of service.** Subject to the limitations set forth in this Support Policy, Customer may transfer this service to a third party who purchases Customer's entire supported product before the expiration of the then-current service term, provided Customer is the original purchaser of the supported product and this service, or Customer purchased the supported product and this service from its original owner (or a previous transferee) and complied with all the transfer procedures. A transfer fee may apply. The third party must purchase valid support from FalconStor.

Please note that if Customer or Customer's transferee moves the supported product to a geographic location in which this service is not available or not available at the same price as Customer paid for this service, Customer may not have coverage or may incur an additional charge to maintain the same categories of support coverage at the new location. If Customer chooses not to pay such additional charges, Customer's service may be automatically changed to categories of support which are available at such price or a lesser price in such new location with no refund available.



Changes to the FalconStor Solution Environment

After a FalconStor software deployment has been completed, the flexibility and open architecture of FalconStor solutions allow customers to make changes to their environment. To ensure that hardware/software conflicts do not arise, FalconStor Technical Support professionals are available to help with any potential change(s) to the customer's storage or SAN infrastructure, even if these changes appear to be unrelated to the FalconStor solution. This assistance is not a part of maintenance service and will be charged at standard FalconStor Professional Services rates.

While most changes are simple, require no downtime, and do not impact the environment, other changes may be more involved. If not performed properly, modifications such as the addition of new storage, the changing of storage devices below the appliance or in the "downstream" SAN, and any adjustments to the Fibre Channel or Ethernet switches to which the appliance(s) connect(s) can adversely affect the production environment and could cause data corruption or loss of data.

Any issues arising from changes made without the input of FalconStor Technical Support professionals are not covered under the FalconStor support agreement.

Customers should follow the steps below when enacting the types of changes that affect the FalconStor solution. In this way, FalconStor and the customer can be sure all changes are made in the correct order, reducing or eliminating the need for downtime to the production environment, and minimizing the possibility of data loss or corruption.

Planning

1. When planning a change, the customer should notify FalconStor Technical Support at least one week before the planned change and provide the following:
 - a. A Microsoft Visio diagram or other picture representation of the current SAN, including all storage and servers currently managed by the FalconStor system and any storage or servers not yet migrated to this environment.
 - b. A spreadsheet detailing the current port number(s) and cabling, both source and destination, of all IP and Fibre Channel ports in the FalconStor SAN infrastructure, as well as the other storage and servers to be migrated into the FalconStor SAN infrastructure. This map should also include all open ports in both IP and Fibre Channel switches, servers, controllers, and FalconStor appliances.
 - c. Complete information about all FalconStor appliances and technology in the environment, including X-ray of FalconStor software products, even if it appears as if these systems may not be involved with the current change information.
 - d. A detailed Visio diagram or picture representation of the final design desired.
2. FalconStor and the customer will then work together on a step-by-step plan for how to arrive at the final solution. This step-by-step plan will cover the systematic changes, will ensure maximum uptime, will minimize any possibility of data loss or corruption, and will include checkpoints and contingency plans if necessary. The cabling and system changes will be detailed and incorporated into the cabling spreadsheets so the final picture and spreadsheet, once the process is complete, are identical both logically and physically.
3. The time of the proposed changes should be agreed upon between FalconStor and the customer to ensure the proper support personnel are available.

Deployment

1. The customer should notify FalconStor Technical Support at the start of the change process.
2. If any issues arise during the process, the customer should notify FalconStor Technical Support member and let them know immediately what step is not progressing as expected so that support can assist with the technical issue, before:
 - a. Additional steps are performed
 - b. The process is reversed, or
 - c. The contingency plan is initiated.

Post-deployment

1. Once the step-by-step procedure is completed successfully, the customer should notify FalconStor Technical Support by providing the final Visio diagram or picture representation and cabling spreadsheet. This confirms that, if the process was changed during the deployment phase, any differences between what was deployed and what was planned are reflected accurately.
2. The customer should also provide X-ray information from all FalconStor appliances and technology to regional FalconStor Technical Support. This alerts FalconStor that all the changes were completed successfully and provides current and accurate information for follow-up changes and future technical support calls.



Certification Matrix

The FalconStor Certification Matrix outlines all of the hardware and software that is certified to work with FalconStor products. This matrix is updated constantly, so please check back frequently for updates. This matrix is helpful when planning a change to the environment to make sure that the change will work smoothly with your FalconStor products.

Note: Our matrix is dependent upon the vendor's compatibility with supported operating systems. Contact the vendor for their list of supported operating systems.

To view the Certification Matrix, go to <http://www.falconstor.com/CertificationMatrix>. The matrix includes the following:

- A list of certified servers that can be used with FalconStor products
- A list of certified disk arrays that can be used for storage virtualization by FalconStor products
- A list of certified switches, hubs, routers, and bridges
- A list of certified HBA cards, SCSI cards, RAID controllers, iSCSI initiators, and network adapters that can be used with FalconStor servers and clients
- A list of operating systems and clustering software that have been certified for FalconStor CDP, FalconStor NSS, and FalconStor FreeStor servers, clients, and agents
- A list of enterprise management software, database and application software, and backup software certified for use with FalconStor CDP, FalconStor NSS, and FalconStor FreeStor
- A list of tape libraries, tape drives, compression cards, server platforms, and backup software certified with FalconStor Optimized Backup (VTL & NAS)
- A list of supported operating systems and database backup software certified with FalconStor FDS
- A list of recovery hardware that is compatible with FalconStor RecoverTrac

Software or hardware that is not listed within the Falconstor Certification Matrix should be requested through the customer's account representative.



About FalconStor

FalconStor Software, Inc. delivers a comprehensive solution suite designed to seamlessly migrate, recover, protect, and deduplicate data - on or off the cloud - without tying businesses to specific hardware, networks, or protocols. Based on the award-winning FreeStor platform, products include FreeStor, Optimized Backup and Deduplication, Continuous Data Protector (CDP), and Network Storage Server (NSS), each enabled with WAN-optimized replication for disaster recovery (DR) and remote office protection. Our solutions are available from major OEMs and solution providers and are deployed by thousands of customers worldwide, from small businesses to Fortune 1000 enterprises.

FalconStor® FreeStor

FalconStor FreeStor combines cutting-edge horizontal platform architecture with the ability to leverage new storage options. The result is greater efficiency, reduced downtime, lower costs, and improved simplicity. FreeStor provides horizontal architecture with a single platform, and a single price, and can access the latest storage venues: cloud, hybrid cloud, SDS, and Flash. Data migration can be accomplished seamlessly across storage platforms. FreeStor provides centralized management for enhanced simplicity.

FalconStor® Network Storage Server

FalconStor NSS provides high-performance primary storage through heterogeneous storage virtualization, provisioning, and management. Data protection features include mirroring, snapshots, and WAN-optimized replication. FalconStor NSS virtualizes storage from a wide variety of disk vendors and provides connectivity over iSCSI, Fibre Channel, or FCoE networks.

FalconStor® Continuous Data Protector

FalconStor CDP provides a complete data protection solution that offers unified backup and DR. It replaces conventional, periodic tape-based protection with continuous availability and 100% data integrity. Combining local protection with WAN-optimized replication, FalconStor CDP lets you recover any data, anytime, anywhere.

FalconStor® Optimized Backup and Deduplication

FalconStor Optimized Backup and Deduplication is a comprehensive disk-based backup deduplication solution that offers virtual tape, high-speed backup/restore, global data deduplication, enterprise-wide replication, and physical tape integration in one solution, without requiring changes to the existing environment. Optimized Backup and Deduplication also provides block-level deduplication for data on network-based file shares using the standard NAS protocols Common Internet File System (CIFS) and Network File System (NFS).