

## Brocade San Troubleshooting Training Global Knowledge

*This IBM® Redbooks® publication captures several of the preferred practices and describes the performance gains that can be achieved by implementing the IBM FlashSystem products. These practices are based on field experience. This book highlights configuration guidelines and preferred practices for the storage area network (SAN) topology, clustered system, back-end storage, storage pools and managed disks, volumes, remote copy services, and hosts. It explains how you can optimize disk performance with the IBM System Storage® Easy Tier® function. It also provides preferred practices for monitoring, maintaining, and troubleshooting. This book is intended for experienced storage, SAN, IBM FlashSystem, SAN Volume Controller (SVC), and IBM Storwize® administrators and technicians. Understanding this book requires advanced knowledge of these environments.*

*This book is written in a friendly manner written by an expert with numerous years of practical experience utilizing SolarWinds Orion NPM as a network monitoring solution. This book is for systems administrators, system analysts, and systems engineers who are tasked with installing and implementing a network performance monitor. Knowledge of basic network concepts is required.*

*This IBM® Redbooks® publication describes the new features that have been added with the release of the IBM System Storage® SAN Volume Controller (SVC) and IBM System Storage Storwize® V7000 6.4.0 code, including Replication Family Services. Replication Family Services refers to the various copy services available on the SVC and Storwize V7000 including IBM FlashCopy®, Metro Mirror and Global Mirror, Global Mirror with Change Volumes, Volume Mirroring, and Stretched Cluster Volume Mirroring. The details behind the theory and practice of these services are examined, and SAN design suggestions and troubleshooting tips are provided. Planning requirements, automating copy services processed, and fabric design are explained. Multiple examples including implementation and server integration are included, along with a discussion of software solutions and services that are based on Replication Family Services. This book is intended for use by pre-sales and post-sales support, and storage administrators. Readers are expected to have an advanced knowledge of the SVC, Storwize V7000, and the SAN environment. The following publications are useful resources that provide background information: Implementing the IBM System Storage SAN Volume Controller V6.3, SG24-7933 Implementing the IBM Storwize V7000 V6.3, SG24-7938 IBM SAN Volume Controller and Brocade Disaster Recovery Solutions for VMware, REDP-4626 IBM System Storage SAN Volume Controller Upgrade Path from Version 4.3.1 to 6.1, REDP-4716 Real-time Compression in SAN Volume Controller and Storwize V7000, REDP-4859 SAN Volume Controller: Best Practices and Performance Guidelines, SG24-7521 Implementing the Storwize V7000 and the IBM System Storage SAN32B-E4 Encryption Switch, SG24-7977 Software Defined Networks*

*Consultants & Consulting Organizations Directory*

*97 Things Every Cloud Engineer Should Know*

*Introduction to Storage Area Networks*

### *Beginning Programming with Python For Dummies*

This IBM® Redbooks® publication represents a compilation of best practices for deploying and configuring IBM Midrange System Storage servers, which include the DS4000® and the DS5000 family of products. This book is intended for IBM technical professionals, IBM Business Partners, and customers responsible for the planning, deployment, and maintenance of the IBM Midrange System Storage family. We realize that setting up DS4000 and DS5000 Storage Servers can be a complex task. There is no single configuration that works for every application or situation. First, we provide a conceptual framework for understanding the hardware in a Storage Area Network (SAN). Then we offer our guidelines, hints, and tips for the physical installation, cabling, and zoning, using the Storage Manager setup tasks. Next, we turn our attention to the performance and tuning of various components and features, including numerous guidelines. We look at the performance implications for various application products such as DB2®, Oracle, Tivoli® Storage Manager, Microsoft® SQL server, and in particular, Microsoft Exchange with IBM Midrange System Storage servers. Then we review the various tools available to simulate workloads, to measure, collect, and analyze performance data. We also consider the AIX® environment, including High Availability Cluster Multiplexing (HACMP™) and General Parallel File System (GPFS™). Finally, we provide a quick guide to the storage server installation and configuration using best practices. This edition of the book also includes guidelines for managing and using the DS4000 and DS5000 IBM System Storage SAN Volume Controller (SVC).

The superabundance of data that is created by today's businesses is making storage a strategic investment priority for companies. As storage takes precedence, the following major initiatives emerge: Flatten and converge your network: IBM® takes an open, standards-based approach to implement the latest advances in the flat, converged data center network designs of today. IBM Storage solutions help you deploy a high-speed, low-latency Unified Fabric Architecture. Optimize and automate virtualization: Advanced virtualization architectures reduce the cost and complexity of deploying physical and virtual data center infrastructure. Simplify management: IBM data center solutions are easy to deploy, maintain, scale, and virtualize, delivering the foundation of consolidated operations for dynamic infrastructure management. Storage is no longer an afterthought. Too much is at stake. Companies are searching for more ways to efficiently manage expanding volumes of data, and to make that data accessible throughout the enterprise. This demand is propelling the move to a converged network. Also, the increasing complexity of managing large numbers of storage devices and vast amounts of data is driving growth in value into software and services. With current estimates of the amount of data to be managed and made available increasing rapidly, this outlook is where a storage area network (SAN) enters the arena. SANs are the leading storage infrastructure for the globe today. SANs offer simplified storage management, scalability, flexibility, and availability; and improved data access, movement, and protection. Welcome to the cognitive era. The smarter data center with the improved economics of IT can be achieved by connecting servers with a high-speed and intelligent network fabric. A smarter data center that hosts IBM Storage solutions can provide an environment that is smarter, faster, greener, open, and easy to manage. This IBM® Redbooks® publication provides an introduction to SAN and Ethernet networking, and how these networks help to achieve a smarter data center. This book is intended for people who are not very familiar with SAN or who are just starting out in the IT world.

IBM® System Storage® Gen 5 fabric backbones are among the industry's most powerful Fibre Channel switching infrastructures. They provide reliable, scalable, and high-performance foundations for mission-critical storage. These fabric backbones also deliver connectivity options to add support for IBM FICON® connectivity, offering a high-performing and reliable FICON infrastructure for scalable IBM System z® servers. Designed to increase business agility while providing nonstop access to information and reducing infrastructure and administrative costs, Gen 5 Fibre Channel fabric backbones deliver a new level of scalability and advanced performance with this robust, reliable, and high-performance technology. Although every network type has unique management requirements, managers face similar challenges managing their network environments. These challenges can include minimizing network downtime, reducing operational expenses, managing application service level agreements (SLAs), and providing robust security. Until now, no single tool addressed these needs across different network types. To address this issue, the IBM Network Advisor management tool provides unified management for data, storage, and converged networks. This single application can deliver end-to-end visibility and insight across all network types by integrating with Fabric Vision technology; it supports Fibre Channel SANs, including Gen 5 Fibre Channel platforms, FICON, and IBM b-type SAN FCoE networks. In addition, this tool supports comprehensive lifecycle management capabilities across all networks through a simple, seamless user experience. This IBM Redbooks® publication introduces the concepts, architecture, and implementation of Gen 5 and IBM Network Advisor. It is aimed at system administrators, and pre- and post-sales support staff.

First Year Nurse

Liars and Outliers

IBM System Storage SAN Volume Controller and Storwize V7000 Replication Family Services

InfoWorld

IBM System Storage DS5000 Series Hardware Guide

**Storage Area Networks provide highly reliable, high-performance connectivity between hosts and storage devices. This allows storage resource sharing, improving asset utilization, and enabling solutions such as high availability, disaster recovery, information lifecycle management, and utility computing. These solutions provide a high return on investment, resulting in an accelerating SAN adoption rate in all IT markets. This book provides an overview of SAN protocols and technologies, and practical guidance on SAN design, implementation, and management topics. Some future SAN trends and technologies are discussed, but the focus is on designing SANs with current, real-world products such as Fibre Channel switches and routers. Principles of SAN Design offers a "one stop shop" for SAN design knowledge. Why wait? Read the definitive work on SAN design today!**

**This IBM® Redbooks® Product Guide publication describes the IBM FlashSystem® 9200 solution, which is a comprehensive, all-flash, and NVMe-enabled enterprise storage solution that delivers the full capabilities of IBM FlashCore® technology. In addition, it provides a rich set of software-defined storage (SDS) features, including data reduction and de-duplication, dynamic tiering, thin-provisioning, snapshots, cloning, replication, data copy services, and IBM HyperSwap® for high availability (HA). Scale-out and scale-up configurations further enhance capacity and throughput for better availability.**

**"A killer resume gets more job interviews."**

**Fabric Resiliency and Best Practices for IBM c-type Products**

**Data Storage Networking**

**Implementing or Migrating to an IBM Gen 5 b-type SAN**

**IBM Midrange System Storage Hardware Guide**

**SolarWinds Orion Network Performance Monitor**

Software Defined Networks: A Comprehensive Approach, Second Edition provides in-depth coverage of the technologies collectively known as Software Defined Networking (SDN). The book shows how to explain to business decision-makers the benefits and risks in shifting parts of a network to the SDN model, when to integrate SDN technologies in a network, and how to develop or acquire SDN applications. In addition, the book emphasizes the parts of the technology that encourage opening up the network, providing treatment for alternative approaches to SDN that expand the definition of SDN as networking vendors adopt traits of SDN to their existing solutions. Since the first edition was published, the SDN market has matured, and is being gradually integrated and morphed into something more compatible with mainstream networking vendors. This book reflects these changes, with coverage of the OpenDaylight controller and its support for multiple southbound protocols, the Inclusion of NETCONF in discussions on controllers and devices, expanded coverage of NFV, and updated coverage of the latest approved version (1.5.1) of the OpenFlow specification. Contains expanded coverage of controllers Includes a new chapter on NETCONF and SDN Presents expanded coverage of SDN in optical networks Provides support materials for use in computer networking courses InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

**A Comprehensive Approach**

**IBM System Storage DS3500 Introduction and Implementation Guide**

**A Straightforward Approach to Understanding IPv6**

**IBM FlashSystem 9200 Product Guide**

**Enabling the Trust that Society Needs to Thrive**

**This IBM® Redbooks® publication consolidates, in one document, detailed descriptions of the hardware configurations and options offered as part of the IBM Midrange System Storage™ servers, which include the IBM System Storage DS4000® and DS5000 families of products. This edition covers updates and additional functions available with the IBM System Storage DS® Storage Manager Version 10.60 (firmware level 7.60). This book presents the concepts**

**and functions used in planning and managing the storage servers, such as multipathing and path failover. The book offers a step-by-step guide to using the Storage Manager to create arrays, logical drives, and other basic (as well as advanced) management tasks. This publication also contains practical information about diagnostics and troubleshooting, and includes practical examples of how to use scripts and the command-line interface. This publication is intended for customers, IBM Business Partners, and IBM technical professionals who want to learn more about the capabilities and advanced functions of the DS4000 series of storage servers with Storage Manager Software V10.60. It also targets those who have a DS4000 and DS5000 storage subsystem and need detailed advice about how to configure it. In today's hyper-connected society, understanding the mechanisms of trust is crucial. Issues of trust are critical to solving problems as diverse as corporate responsibility, global warming, and the political system. In this insightful and entertaining book, Schneier weaves together ideas from across the social and biological sciences to explain how society induces trust. He shows the unique role of trust in facilitating and stabilizing human society. He discusses why and how trust has evolved, why it works the way it does, and the ways the information society is changing everything.**

**This IBM® Redbooks product guide describes Fabric Vision technology. The use of virtualization, flash storage, and automation tools has allowed applications and services to be deployed faster while shattering performance barriers. The unprecedented number of application and service interactions has also increased the complexity, risk, and instability of mission-critical operations. As a result, IT organizations need flexible storage networks that can adapt to dynamic environments and performance requirements for high-density virtualization, flash storage, and cloud infrastructures. To achieve Service Level Agreement (SLA) objectives, IT administrators also need new tools that can help ensure non-stop operations, quickly identify potential points of congestion, and maximize application performance, while simplifying administration. Fabric Vision technology with IO Insight, an extension of Gen 6 Fibre Channel, provides outstanding insight and visibility across the storage network with powerful, integrated monitoring, management, and diagnostic tools that help organizations to simplify monitoring, increase operational stability, and dramatically**

**reduce costs.**

**The Shadow Factory**

**Software Defined Networking (SDN): Anatomy of OpenFlow Volume I**

**IBM SAN Volume Controller Best Practices and Performance Guidelines**

**Implementing the IBM Storwize**

**The New Data Center**

For more than 20 years, Network World has been the premier provider of information, intelligence and insight for network and IT executives responsible for the digital nervous systems of large organizations. Readers are responsible for designing, implementing and managing the voice, data and video systems their companies use to support everything from business critical applications to employee collaboration and electronic commerce.

This IBM Redpaper publication describes best practices for deploying and using advanced Cisco NX-OS features to identify, monitor, and protect Fibre Channel (FC) Storage Area Networks (SANs) from problematic devices and media behavior. The paper focuses on the IBM c-type SAN switches with firmware Cisco MDS NX-OS Release 8.4(2a).

The IBM® b-type Gen 5 Fibre Channel directors and switches provide reliable, scalable, and secure high-performance foundations for high-density server virtualization, cloud architectures, and next generation flash and SSD storage. They are designed to meet the demands of highly virtualized private cloud storage and data center environments. This IBM Redbooks® publication helps administrators learn how to implement or migrate to an IBM Gen 5 b-type SAN. It provides an overview of the key hardware and software products and explains how to install, monitor, tune, and troubleshoot your storage area network (SAN). Read this publication to learn about fabric design, managing and monitoring your network, key tools such as IBM Network Advisor and Fabric Vision, and troubleshooting.

Real World Skills for the CompTIA Storage+ Certification and Beyond

Fabric Vision Technology

Computerworld

Wisdom, Warnings, and What I Wish I'd Known My First 100 Days on the Job

IBM b-type Gen 5 16 Gbps Switches and Network Advisor

Software Defined Networking is revolutionizing the networking world. While the industry transitions to a software-centric architecture, a clear definition of SDN remains murky at best. This book clarifies the current industry confusion about what SDN is, why it's important, and most importantly the protocols and use cases that define SDN. OpenFlow (OF) is a critical piece of the SDN puzzle. While SDN solutions exist that do not require OF, it is undeniable that OF helped spur the innovation in SDN. The history of OF, its current and future status, and the associated use cases will be explained in detail in this book. Lastly, the book attempts to lay out SDN deployments that are real and current today, and apply practicality to the vast world of SDN architectures.

Learn efficient ways to harness and manage your data storage networks Whether you're preparing for the CompTIA Storage+ exam or simply seeking a deeper understanding of data storage networks, this Sybex guide will help you get there. This book covers data storage from the basics to advanced topics, and provides practical examples to show you ways to deliver world-class solutions. In addition, it covers all the objectives of the CompTIA Storage+ exam (SG0-001), including storage components, connectivity, storage management, data protection, and storage performance. Focuses on designing, implementing, and administering storage for today's evolving organizations, getting under the hood of the technologies that enable performance, resiliency, availability, recoverability, and simplicity Covers virtualization, big data, cloud storage, security, and scalability as well as how storage fits in to the wider technology environments prevalent in today's cloud era Provides advice and real-world examples that storage administrators in the trenches can actually use An excellent study aid for the CompTIA Storage+ exam (SG0-001), covering all the exam objectives Data Storage Networking: Real World Skills for the CompTIA Storage+ Certification and Beyond provides a solid foundation for data storage administrators and a reference that can be consulted again and again.

James Bamford has been the preeminent expert on the National Security Agency since his reporting revealed the agency ' s existence in the 1980s. Now Bamford describes the transformation of the NSA since 9/11, as the agency increasingly turns its high-tech ears on the American public. The Shadow Factory reconstructs how the NSA missed a chance to thwart the 9/11 hijackers and details how this mistake has led to a heightening of domestic surveillance. In disturbing detail, Bamford describes exactly how every American ' s data is being mined and what is being done with it. Any reader who thinks America ' s liberties are being protected by Congress will be shocked and appalled at what is revealed here.

IBM Midrange System Storage Implementation and Best Practices Guide

IBM SAN Survival Guide

Knock 'em Dead Resumes

Principles of SAN Design

IBM FlashSystem Best Practices and Performance Guidelines

If you create, manage, operate, or configure systems running in the cloud, you're a cloud engineer--even if you work as a system administrator, software developer, data scientist, or site reliability engineer. With this book, professionals from around the world provide valuable insight into today's cloud engineering role. These concise articles explore the entire cloud computing experience, including fundamentals, architecture, and migration. You'll delve into security and compliance, operations and reliability, and software development. And examine networking, organizational culture, and more. You're sure to find 1, 2, or 97 things that inspire you to dig deeper and expand your own career. "Three Keys to Making the Right Multicloud Decisions," Brendan O'Leary "Serverless Bad Practices," Manases Jesus

Galindo Bello "Failing a Cloud Migration," Lee Atchison "Treat Your Cloud Environment as If It Were On Premises," Iyana Garry "What Is Toil, and Why Are SREs Obsessed with It?", Zachary Nickens "Lean QA: The QA Evolving in the DevOps World," Theresa Neate "How Economies of Scale Work in the Cloud," Jon Moore "The Cloud Is Not About the Cloud," Ken Corless "Data Gravity: The Importance of Data Management in the Cloud," Geoff Hughes "Even in the Cloud, the Network Is the Foundation," David Murray "Cloud Engineering Is About Culture, Not Containers," Holly Cummins

Your first 100 days at a new job could be daunting---unless you go in prepared. First Year Nurse places the wisdom and warnings of hundreds of experienced nurses right at your fingertips. You'll learn all about how to start off on the right foot; plan and prioritize; communicate with your colleagues; cope with challenging patients; keep your energy up (and stress down); and set a course for professional growth. Best of all, you'll be inspired by the compassion, insight, and enthusiasm you'll find on every page of this charming, helpful book. Features: Valuable advice and personal accounts from experienced nurses; Tips on subjects from time management to avoiding burnout.

Organizations are increasingly transitioning to IPv6, the next generation protocol for defining how devices of all kinds communicate over networks. Now fully updated, IPv6 Fundamentals offers a thorough, friendly, and easy-to-understand introduction to the knowledge and skills you need to deploy and operate IPv6 networks. Leading networking instructor Rick Graziani explains all the basics simply and clearly, step-by-step, providing all the details you'll need to succeed. You'll learn why IPv6 is necessary, how it was created, how it works, and how it has become the protocol of choice in environments ranging from cloud to mobile and IoT. Graziani thoroughly introduces IPv6 addressing, configuration options, and routing protocols, including EIGRP for IPv6, and OSPFv3 (traditional configuration and with address families). Building on this coverage, he then includes more in-depth information involving these protocols and processes. This edition contains a completely revamped discussion of deploying IPv6 in your network, including IPv6/IPv4 integration, dynamic address allocation, and understanding IPv6 from the perspective of the network and host. You'll also find improved coverage of key topics such as Stateless Address Autoconfiguration (SLAAC), DHCPv6, and the advantages of the solicited node multicast address. Throughout, Graziani presents command syntax for Cisco IOS, Windows, Linux, and Mac OS, as well as many examples, diagrams, configuration tips, and updated links to white papers and official RFCs for even deeper understanding. Learn how IPv6 supports modern networks encompassing the cloud, mobile, IoT, and gaming devices Compare IPv6 with IPv4 to see what has changed and what hasn't Understand and represent IPv6 addresses for unicast, multicast, and anycast environments Master all facets of dynamic IPv6 address allocation with SLAAC, stateless DHCPv6, and stateful DHCPv6 Understand all the features of deploying IPv6 addresses in the network including temporary addresses and the privacy extension Improve operations by leveraging major enhancements built into ICMPv6 and ICMPv6 Neighbor Discovery Protocol

Configure IPv6 addressing and Access Control Lists using a common topology Implement routing of IPv6 packets via static routing, EIGRP for IPv6, and OSPFv3 Walk step-by-step through deploying IPv6 in existing networks, and coexisting with or transitioning from IPv4  
Official Gazette of the United States Patent and Trademark Office

IPv6 Fundamentals

Trademarks

System z End-to-End Extended Distance Guide

Network World

**As we all know, large ocean going ships never collide with icebergs. However, occasionally life deals out some unexpected pleasures for us to cope with. Surviving any disaster in life is usually a lot easier if you have prepared adequately by taking into account the likely problems, solutions, and their implementation. In this IBM Redbooks publication, we limit ourselves to those situations in which it is likely that a SAN will be deployed. We present the IBM SAN portfolio of products, going a little under the surface to show the fault tolerant features that they utilize, and then describe solutions with all these features taken into account. Each of these solutions was built on practical experience, in some cases with cost in mind, in some cases with no cost in mind. Any well-thought-out SAN design will have taken every single one of these concerns into account, and either formulated a solution for it, or ignored it, but nonetheless understanding the potential exposure. With these points in mind, in this book we have two objectives: to position the IBM SAN products that are currently in our portfolio; and to show how those products can be configured together to build a SAN that not only allows you to survive most forms of disaster, but also provides performance benefits. So, make sure that you know what to do if you hit an iceberg!**

**This IBM® Redbooks® publication consolidates, in one document, detailed descriptions of the hardware configurations and options offered as part of the IBM System Storage DS5000 families of products. This edition covers updates and additional functions available with the IBM System Storage DS® Storage Manager Version 10.77 (firmware level 7.77). This book presents the concepts and functions used in planning and managing the storage servers, such as multipathing and path failover. The book offers a step-by-step guide to using the Storage Manager to create arrays, logical drives, and other basic (as well as advanced) management tasks. This publication also contains practical information about diagnostics and troubleshooting, and includes practical examples of how to use scripts and the command-line interface. This publication is intended for customers, IBM Business Partners, and IBM technical professionals who want to learn more about the capabilities and advanced functions of the DS5000 series of storage servers with Storage Manager Software V10.77. It also targets those who have a DS5000 storage subsystem and need detailed advice about how to configure it. This book is designed specifically to address the hardware features and configuration of the IBM System Storage DS5000 family and can be used in conjunction with the following IBM Redbooks**

**publications: IBM System Storage DS5000 Series Implementation and Best Practices Guide, SG24-8024 IBM System Storage DS Storage Manager Copy Services Guide, SG24-7822**

**Organizations of all sizes are faced with the challenge of managing massive volumes of increasingly valuable data. However, storing this data can be costly, and extracting value from the data is becoming more and more difficult. IT organizations have limited resources, but must stay responsive to dynamic environments and act quickly to consolidate, simplify, and optimize their IT infrastructures. The IBM® Storwize® V3700 system provides a solution that is affordable, easy to use, and self-optimizing, which enables organizations to overcome these storage challenges. Storwize V3700 delivers efficient, entry-level configurations that are specifically designed to meet the needs of small and midsize businesses. Designed to provide organizations with the ability to consolidate and share data at an affordable price, Storwize V3700 offers advanced software capabilities that are usually found in more expensive systems. Built on innovative IBM technology, Storwize V3700 addresses the block storage requirements of small and midsize organizations, Storwize V3700 is designed to accommodate the most common storage network technologies. This design enables easy implementation and management. Storwize V3700 includes the following features: Web-based GUI provides point-and-click management capabilities. Internal disk storage virtualization enables rapid, flexible provisioning and simple configuration changes. Thin provisioning enables applications to grow dynamically, but only use space they actually need. Enables simple data migration from external storage to Storwize V3700 storage (one-way from another storage device). Remote Mirror creates copies of data at remote locations for disaster recovery. IBM FlashCopy® creates instant application copies for backup or application testing. This IBM Redbooks® publication is intended for pre-sales and post-sales technical support professionals and storage administrators. The concepts in this book also relate to the IBM Storwize V3500. This book was written at a software level of version 7 release 4.**

**The Ultra-Secret NSA from 9/11 to the Eavesdropping on America**

**A Killer Resume Gets MORE Job Interviews!**

This IBM® Redbooks® publication describes several of the preferred practices and describes the performance gain that can be achieved by implementing the IBM SAN Volume Controller powered by IBM Spectrum® Virtualize V8.4. These practices are based on field experience. This book highlights configuration guidelines and preferred practices for the storage network (SAN) topology, clustered system, back-end storage, storage pools, and managed disks, volumes, Remote Copy services, and hosts. Then, it provides performance guidelines for IBM SAN Volume Controller, back-end storage, and applications. It explains how you can optimize disk performance with the IBM System Storage Easy Tier® function. This book provides preferred practices for monitoring, maintaining, and troubleshooting IBM SAN Volume Controller. This book is intended for experienced storage, SAN, and IBM SAN Volume Controller administrators and technicians. Understanding

book requires advanced knowledge of the IBM SAN Volume Controller, IBM FlashSystem, and SAN environments. This IBM® Redbooks® publication will help you design and manage an end-to-end, extended distance connectivity architecture for IBM System z®. This solution addresses your requirements now, and positions you to make effective use of new technologies in the future. Many enterprises implement extended distance connectivity in a silo manner. However, effective extended distance solutions require the involvement of different teams within an organization. Typically, these teams include a network group, a storage group, a systems group, and possibly other teams. The intent of this publication is to help you design and manage a solution that will provide for all of your System z extended distance needs in the most effective and flexible way possible. This book introduces an approach to help plan, optimize, and maintain all of the moving parts of your solution together.

The easy way to learn programming fundamentals with Python Python is a remarkably powerful and dynamic programming language that's used in a wide variety of application domains. Some of its key distinguishing features include a very readable syntax, strong introspection capabilities, intuitive object orientation, and natural expression of procedural programming. Plus, Python features full modularity, supporting hierarchical packages, exception-based error handling, and modules that can be written in C, C++, Java, R, or .NET languages, such as C#. In addition, Python supports a number of coding styles that include: functional, imperative, object-oriented, and procedural. Due to its ease of use and flexibility, Python is continuing to grow in popularity—and now you can wear your programming hat with pride and join the ranks of the pros with the help of this guide. Inside, expert author John Paul Mueller gives a complete step-by-step overview of all there is to know about Python. From performing common and advanced tasks, to collecting data, to interacting with packages—this book covers it all. Use Python to create and run your first application Find out how to troubleshoot and fix errors Learn to work with Anaconda and use Magic Functions Benefit from completely updated and revised information since the last edition. If you've never used Python or are new to programming in general, *Beginning Programming with Python For Dummies* is a hands-on resource that will set you up for success.