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The Pervasive Encryption Information Goldmine

The IBM Z content solution for pervasive encryption is a goldmine of technical resources to help guide you along the journey.



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Pervasive encryption is a consumable approach to enable extensive encryption associated with protecting data and achieving compliance mandates. With the z14, you can encrypt all data—in flight and at rest—faster, and less expensively. Pervasive encryption capabilities on the z14 enable you to protect data efficiently, allowing you to encrypt data at the database, data set and disk level, with no changes to applications.

But where can you find information about the different pervasive encryption solutions? Where do you go to get started with pervasive encryption? Where can you go to learn about planning considerations and setup procedures? In this article, we take a step back, and show you where to find answers to all kinds of questions

about pervasive encryption. The [IBM Z content solution for pervasive encryption \(https://www.ibm.com/support/z-content-solutions/pervasive-encryption/\)](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/) is a goldmine of technical resources to help guide you along the journey.

What Is Pervasive Encryption and Why Is it Important?

At the core of every enterprise are business assets which, if lost or compromised, could cause irreparable damage. Core business data may be governed by regulatory requirements designed to protect data and safeguard privacy, with high penalties in the event of loss. Establishing a fortified perimeter around core business data using encryption is one of the most impactful ways to help protect data and prevent loss. IBM Z pervasive encryption provides a set of solutions which span hardware, software and middleware to help you protect data. Naturally, there is plenty of interest in what pervasive encryption has to offer, and many organizations have already signed on. Now, having a location with a consolidation of technical information related to pervasive encryption would be extremely beneficial.

Where Can You Learn How to Get Started With Pervasive Encryption?

When you search the internet for pervasive encryption, you'll find IBM's "[Pervasive Encryption on IBM Z](https://www.ibm.com/it-infrastructure/z/technologies/pervasive-encryption/)" [product page](https://www.ibm.com/it-infrastructure/z/technologies/pervasive-encryption/). (https://www.ibm.com/it-infrastructure/z/technologies/pervasive-encryption) This is where you can learn how to invest in data protection and about the hardware enhancements that make the z14 the cryptographic powerhouse. The product page can also transport you to a wealth of technical how-to resources on the [pervasive encryption for IBM Z content solution](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/). (https://www.ibm.com/support/z-content-solutions/pervasive-encryption/)

The content solution is built into the product page, and if you're ready to start implementing pervasive encryption, this is precisely the link you need. The most current technical resources available for pervasive encryption are organized into a single view to make searching for the information you need most productive. Anyone in your organization that is responsible for encryption may find useful information, including z/OS administrators (security, system, storage, network, DBA) as well as anyone who manages cryptographic keys.

Where Can You Learn About Solutions Related to Pervasive Encryption?

The content solution is a collection of the technical resources related to pervasive encryption for IBM Z. If you are new to pervasive encryption, and want an overview of how it works, the [pervasive encryption in action video](https://www.youtube.com/watch?time_continue=2&v=D5LXbkaxuQQ) (https://www.youtube.com/watch?time_continue=2&v=D5LXbkaxuQQ) explains how the various solutions that comprise pervasive encryption protect data against potential threats. If you are ready to learn about the different solutions and components of pervasive encryption, see "[How to get started with pervasive encryption on IBM Z.](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#get-started)" (https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#get-started) This section provides you with a solution view for each of the following components:

z/OS Data Set Encryption

Data set encryption enables encryption through the DFSMS access methods. It is application transparent and can be enabled by policy. This section covers an overview along with considerations, guidelines and steps for setting up the environment and creating encrypted data sets. It also points to information regarding how other IBM products and components exploit data set encryption, such as Db2, IMS, CICS, zFS and more.

z/OS Coupling Facility Encryption

Coupling facility resource management (CFRM) policy statements are used to enable encryption on a structure-by-structure basis. Pervasive encryption of coupling facility structures protects user data and simplifies the task of compliance. This section covers considerations and steps to encrypt coupling facility structures.

z/OS Encryption Readiness Technology

This section shows how z/OS administrators can use z/OS Communications Server's z/OS Encryption Readiness technology to determine which TCP and Enterprise Extender connections to and from their z/OS systems meet approved network encryption criteria.

Pervasive Encryption for IBM Linux on Z and LinuxONE

To simplify the journey to pervasive encryption on LinuxONE and Linux on Z, IBM has designed a consumable solution to enable extensive encryption of data in flight and at rest while reducing costs associated with protecting data. The IBM [Secure Service Container](https://www.ibm.com/us-en/marketplace/secure-service-container) (<https://www.ibm.com/us-en/marketplace/secure-service-container>) for IBM Cloud Private is a software solution that hosts container-based applications for hybrid and private cloud workloads on IBM LinuxONE and Z servers, while providing automatic pervasive encryption of data in flight and at rest.

How Do You Know You Have All of the Information You Need?

For each solution related to pervasive encryption for IBM Z, the [“Technical Resources for Pervasive Encryption for IBM Z”](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#resources) (<https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#resources>) section has the most up-to-date Knowledge Center publications, IBM Redbooks, pervasive encryption FAQs, Education WIKIs, Data Set Encryption Support, IBM Developer videos and more. The content solution is designed to provide a solutions-based approach to help you get started with pervasive encryption for IBM Z. Think of it as a one-stop-shop for clients responsible for implementing one or more of the solutions.

Where Do You Find the Latest Information?

The content solution is updated when new information is created. Be sure to bookmark the page and come back frequently to see the latest updates and additions in the [“What’s New”](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#new) (<https://www.ibm.com/support/z-content-solutions/pervasive-encryption/#new>) section. If you have questions or comments about the page, please let us know by clicking “Rate this Content.”

Finally, the “Coming Soon” section lists content that is in the works. Critical to any encryption strategy is key management! As you progress through your pervasive encryption journey, it is important to consider enhancements to your policies and procedures which include a robust key management strategy. The pervasive encryption Z content solution plans to add a key management section designed to provide you with the information you need. Stay tuned!

Pervasive encryption is a journey. If you’re ready to start implementing one or more of the pervasive encryption solutions, you can use the [pervasive encryption IBM Z content solution](https://www.ibm.com/support/z-content-solutions/pervasive-encryption/) (<https://www.ibm.com/support/z-content-solutions/pervasive-encryption/>) to learn how to get started. A goldmine of information to help protect your enterprise data with pervasive encryption for IBM Z awaits!

About the author

Cecilia Carranza Lewis is a senior technical staff member at IBM with over 30 years of experience in z/OS.

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