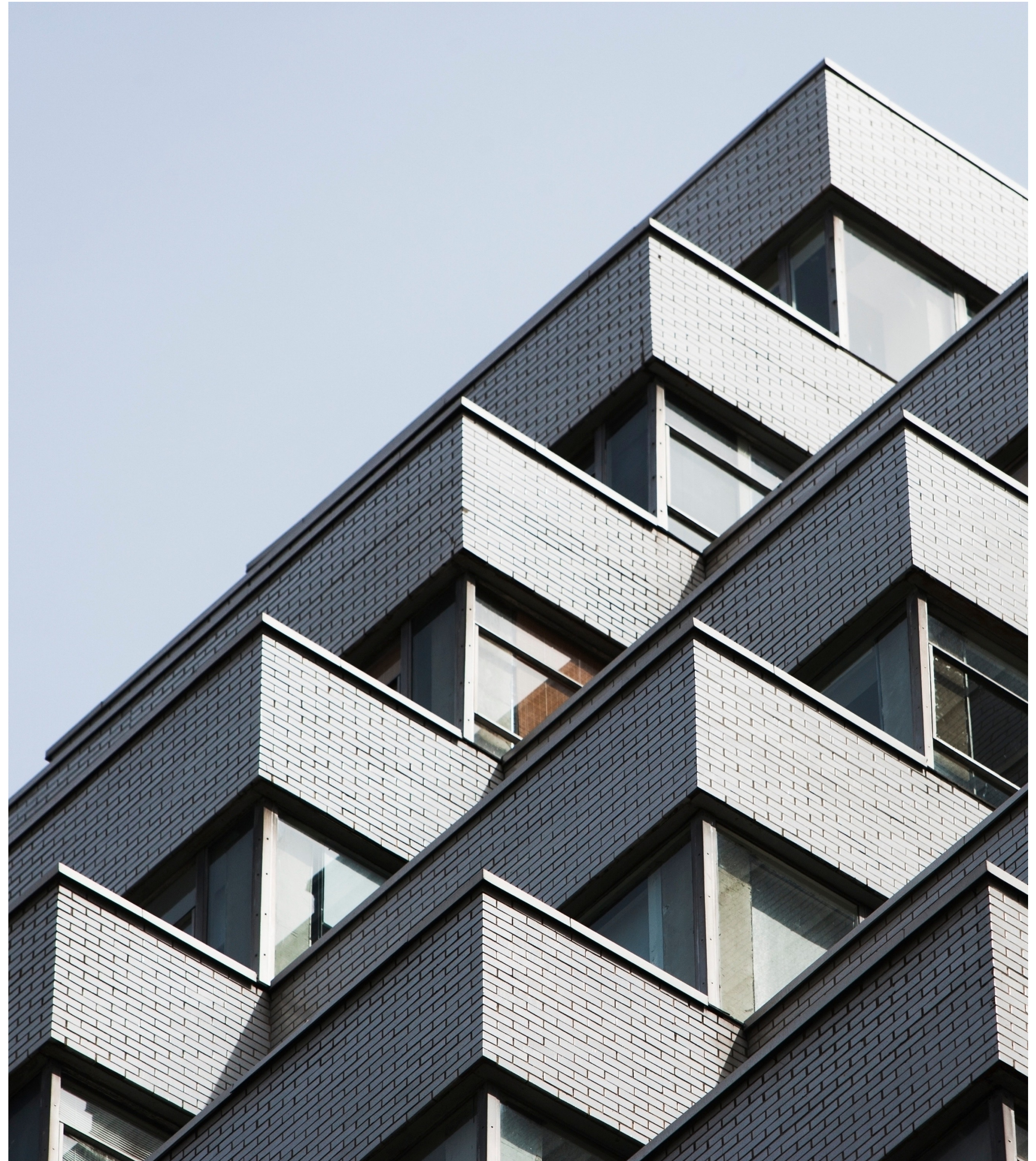


Where's the Best z/VM Information?

Arielle Goldberg
arielle.goldberg1@ibm.com



Agenda

Resource	z/VM Tourist	z/VM User
Education Roadmaps	✓	✓
z/VM Education Links	✓	✓
z/VM How-To Videos	✓	✓
z/VM-related Live Virtual Classes		✓
Online Help		✓
z/VM Documentation		✓
Key Books		✓
Product Alerts & Status Information Webpages		✓
Community Resources		✓

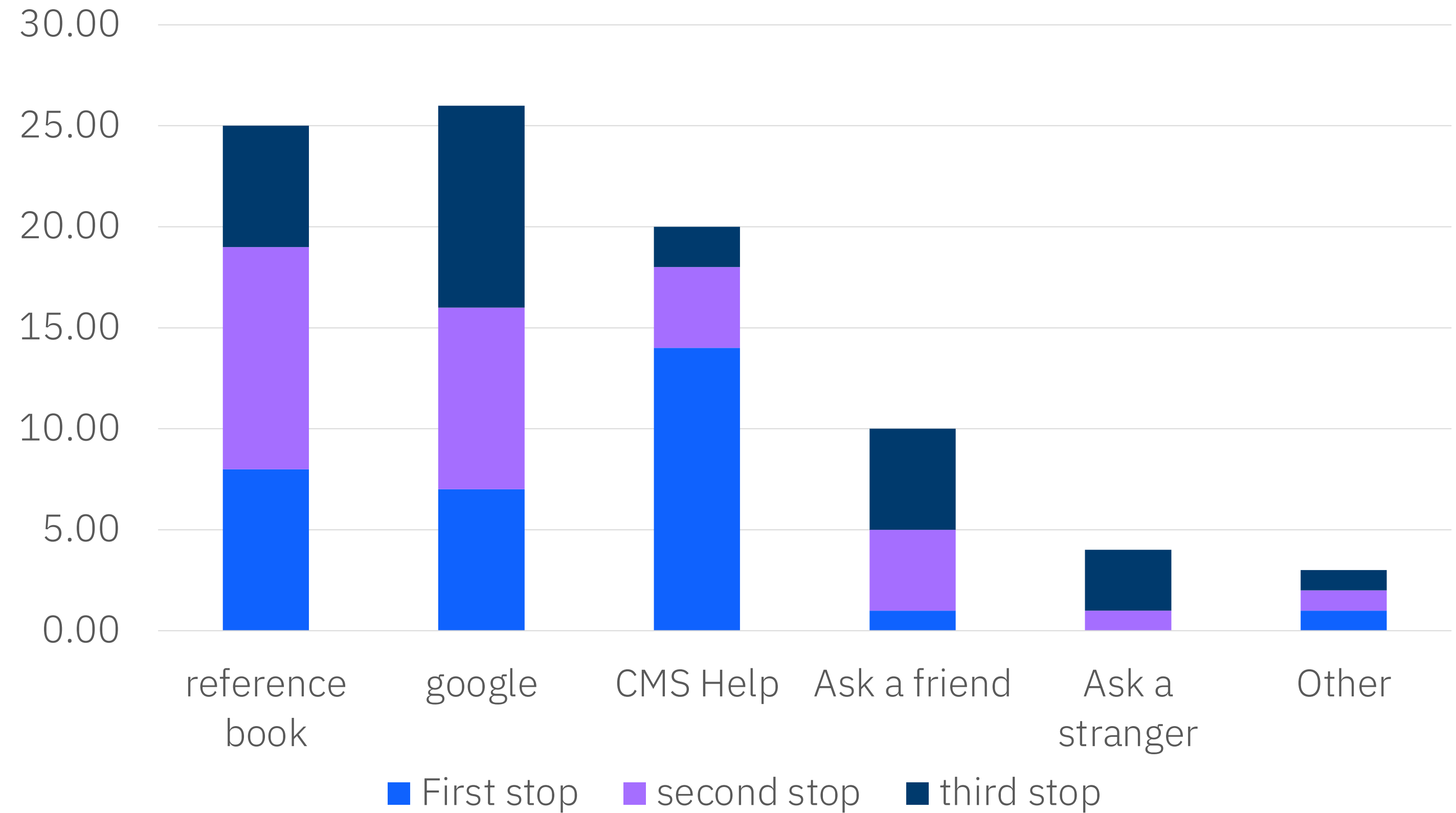
Where do YOU go
to find z/VM
information?



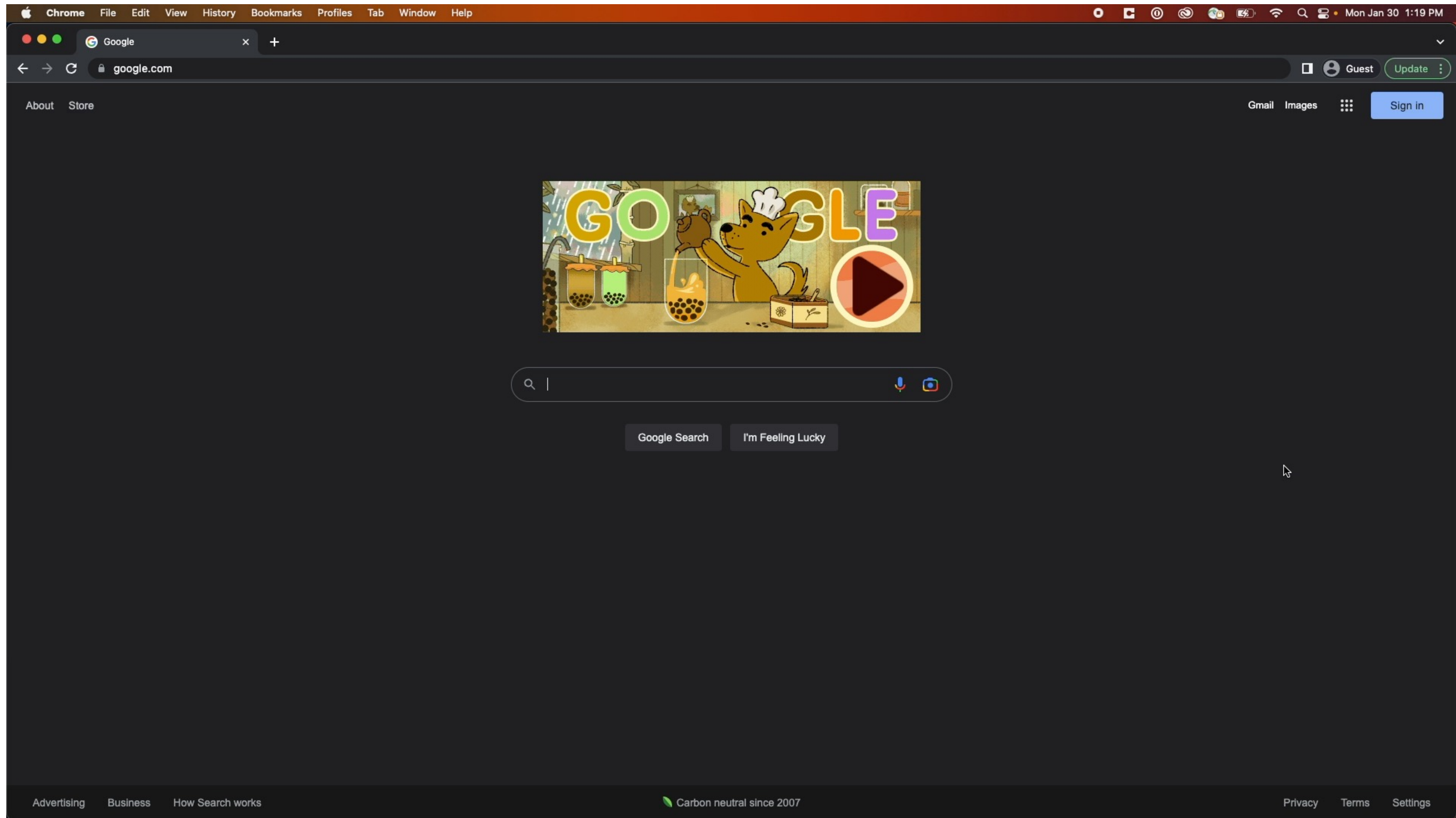
Survey Says.....

- Many folks leverage help facilities right from their terminal
- Written references are preferred, with google being one way to navigate to the proper publication
- It's preferred to consult a written doc over a human being

Where do People go for z/VM information?



A Quick Orientation



For the z/VM Tourist

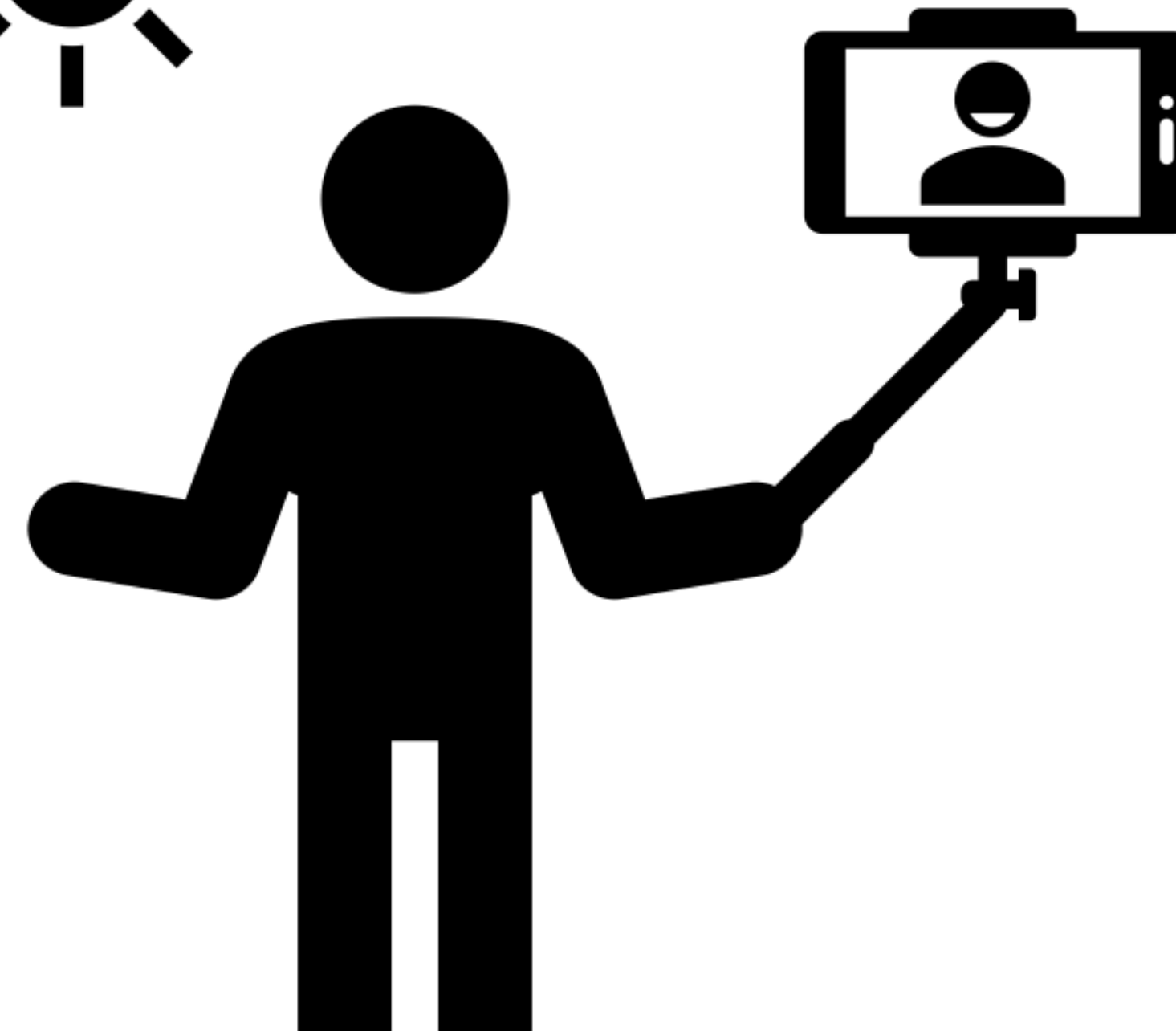
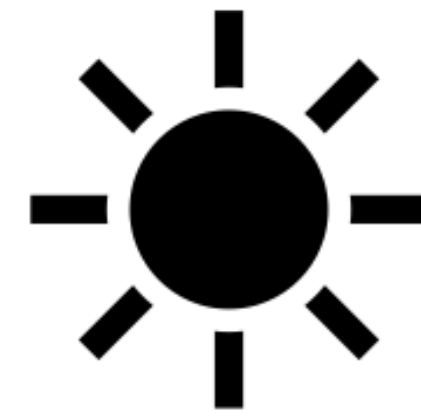


tour·ist

/ˈtoʊrɪst/

noun

1. a person who is traveling or visiting a place for pleasure.
"the pyramids have drawn tourists to Egypt"



Visit

Richmond

VA.com

UNIQUE THINGS TO DO OUTDOOR RVA EVENTS RESTAURANTS DRINK HOTELS PLAN ABOUT MEETINGS TRAVEL SAFELY

☁️ 89°



Education Resources

z/VM Education Information

<https://www.vm.ibm.com/education/>

Education content developed directly by the IBM z/VM Development organization that is intended to be used by anyone who is interested in learning more about z/VM

Navigating to Education Roadmaps

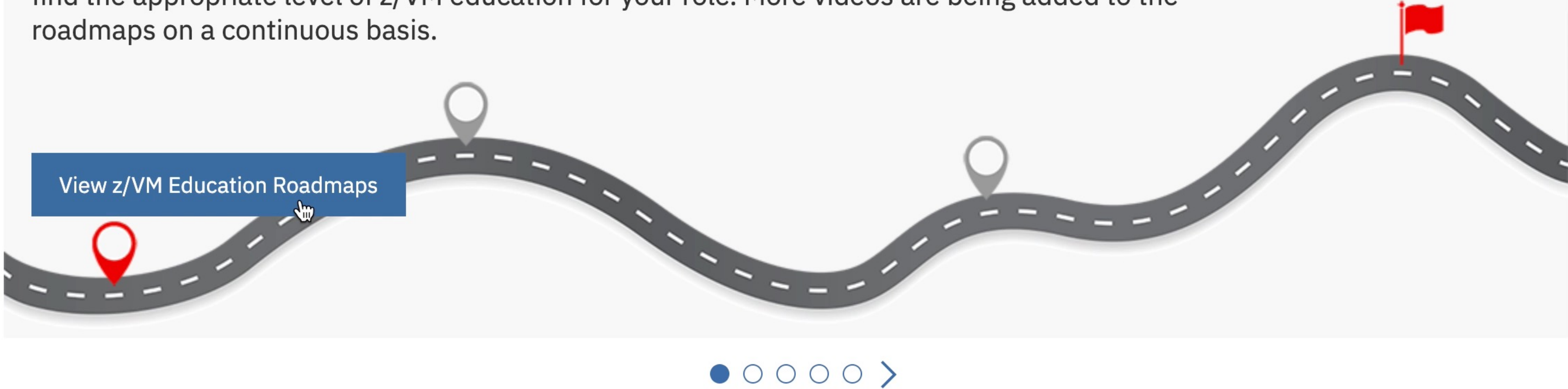
- z/VM
- News
- About z/VM
- Events calendar
- Products and features
- Downloads
- Technical resources
- Library
- How to buy
- Install
- Service
- Support
- Education**
- Site map
- Site search
- Printer-friendly
- Notify me
- Contact z/VM

Last Updated: 13 January 2022

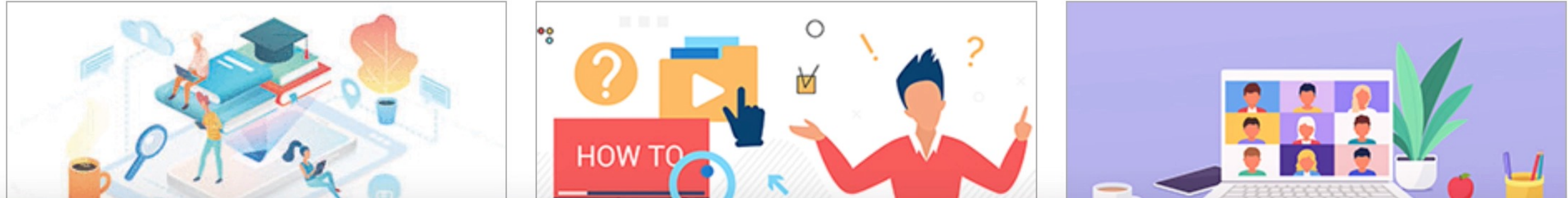
Welcome to the overview page for z/VM Education. The education content has been developed directly by the IBM z/VM Development organization, and is intended to be used by anyone that is interested in learning more about z/VM. Find a [z/VM video education roadmap](#) that delivers a custom level of instruction for your current role.

z/VM education roadmaps

New z/VM education videos are now available. These videos have been created by the IBM z/VM Development team along with others within the IBM zSystems organization. Videos range from basic introductory courses to more advanced z/VM topics. Several roadmaps have been created for you to find the appropriate level of z/VM education for your role. More videos are being added to the roadmaps on a continuous basis.



More z/VM education resources



Education Roadmaps

1. [Basic z/VM Knowledge Roadmap](#)

- *This track assumes you have little or no experience with the IBM mainframe, and your role will only require a basic knowledge of the product. The courses in this roadmap will touch on the basics, but will not include some of the advanced courses intended for z/VM System Programmers.*

- Examples of this role may include: **Architect, Sales, Manager, General Operator**

2. [New z/VM System Programmer Roadmap](#)

- *This roadmap is intended to be followed by someone new to the IBM mainframe that needs to have a comprehensive knowledge of z/VM for their job. This education will start at fundamentals of z/VM and progress through the advanced topics. This is the longest roadmap and contains all education modules.*

- Examples of this role may include: **z/VM System Operator, z/VM System Programmer**

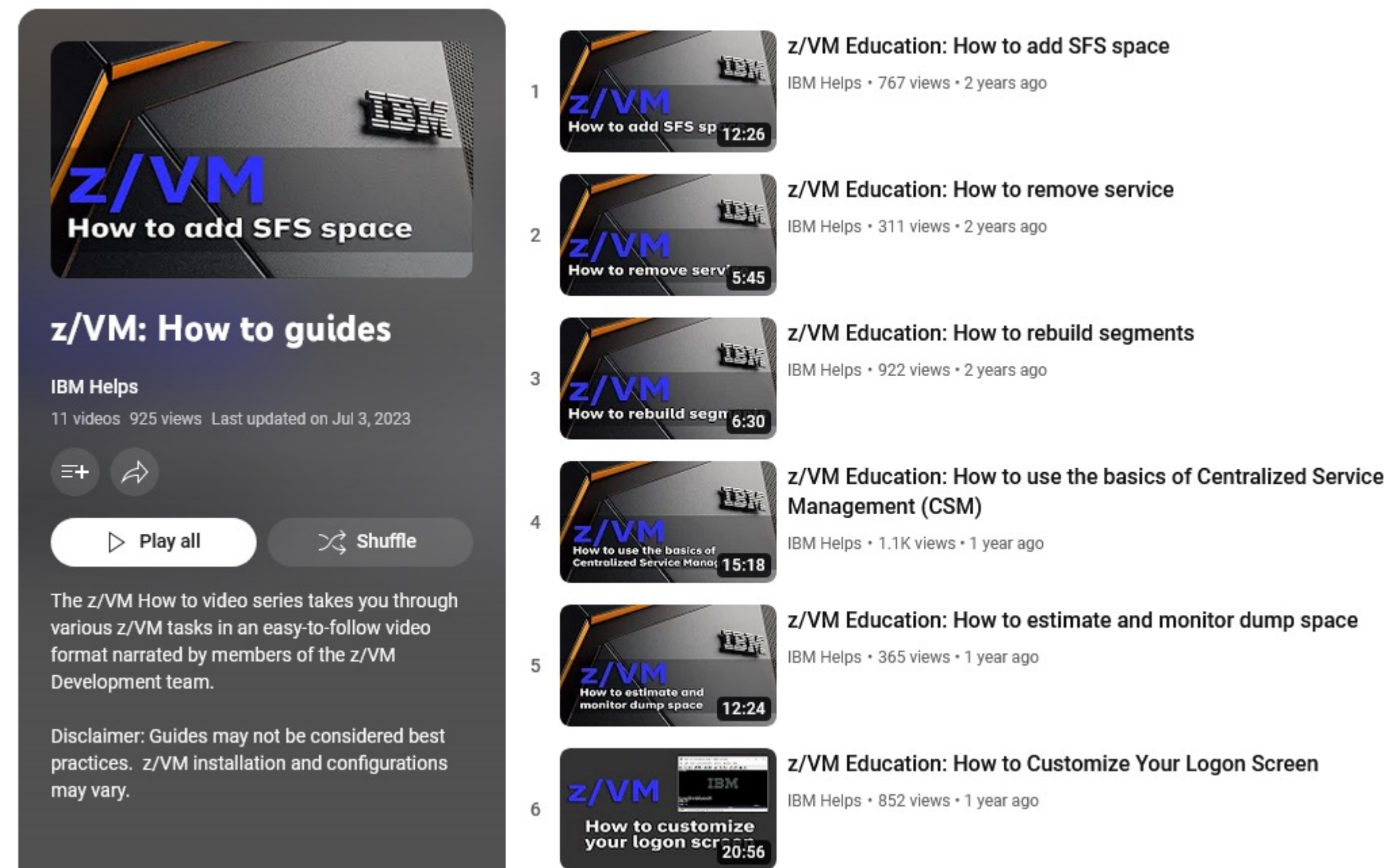
3. [Experienced z/VM System Programmer Roadmap](#)

- *The advanced roadmap assumes you have previous IBM mainframe experience. Perhaps you have a background in z/OS and would like to learn more about z/VM. The education in this track skips some of the basic education found in the other roles.*

- Examples of this role may include: **z/OS System Programmer, Current z/VM System Administrator**

Other Education

- Additional z/VM education links: <https://www.vm.ibm.com/education/links.html>
- z/VM-related live virtual classes: <https://www.ibm.com/support/pages/node/6351445>
- z/VM "How To" videos: <https://www.vm.ibm.com/education/howto.html>
 - Short videos that provide guides on different z/VM related tasks.



The image shows a YouTube playlist interface for 'z/VM: How to guides'. The main video player area displays the first video, 'z/VM Education: How to add SFS space', with a duration of 12:26. Below the player, there are controls for 'Play all' and 'Shuffle'. A description for the playlist states: 'The z/VM How to video series takes you through various z/VM tasks in an easy-to-follow video format narrated by members of the z/VM Development team. Disclaimer: Guides may not be considered best practices. z/VM installation and configurations may vary.' To the right of the main player, a list of six videos is shown, each with a thumbnail, title, and view count:

- 1 z/VM Education: How to add SFS space
IBM Helps • 767 views • 2 years ago
- 2 z/VM Education: How to remove service
IBM Helps • 311 views • 2 years ago
- 3 z/VM Education: How to rebuild segments
IBM Helps • 922 views • 2 years ago
- 4 z/VM Education: How to use the basics of Centralized Service Management (CSM)
IBM Helps • 1.1K views • 1 year ago
- 5 z/VM Education: How to estimate and monitor dump space
IBM Helps • 365 views • 1 year ago
- 6 z/VM Education: How to Customize Your Logon Screen
IBM Helps • 852 views • 1 year ago

z/VM Education from Other Vendors

- Other vendors besides IBM offer education resources
- VM Solution Developer and Service Provider links can be found at the following link:

<https://www.vm.ibm.com/vendor/>

- z/VM Independent Software Vendors can request to be added to the page using a form (linked on the page)

VM Solution Developer and Service Provider Links

- [Ascent Solutions, Inc.](#)
- [BMC Software Inc.](#)
- [Broadcom, Inc. \(formerly CA Technologies\)](#)
- [Compute \(Bridgend\) Ltd](#)
- [Compuware, Inc. \(formerly FDR Innovation Data Processing\)](#)
- [CorVu Corporation](#)
- [Data Direct Technologies](#)
- [Dignus, LLC](#)
- [Fischer International Systems Corp](#)
- [Independent Systems Integrators](#)
- [Information Builders, Inc.](#)
- [Information Technology Systems, Inc.](#)
- [L-Soft international, Inc.](#)
- [Macro 4](#)
- [Merrill Consultant's MXG Software](#)
- [Rocket Software](#)
- [SAS Institute](#)
- [Select Business Solutions \(formerly Aonix\)](#)
- [Sine Nomine Associates](#)
- [Software Diversified Services](#)
- [Stonesoft Corporation](#)
- [Syncsort, Inc.](#)
- [TPF Software Inc.](#)
- [Velocity Software, Inc.](#)
- [Virtual Software System, Inc. \(VSSI\)](#)
- [VM Resources LTD.](#)

For the z/VM User



us·er

/ˈyoozər/

noun

1. a person who uses or operates something, especially a computer or other machine.
"the user should press return and a message will be displayed"



Reference Sources

CMS HELP Command

- Tasks
- Commands and subcommands
 - **help cmsset filepool**
 - **help cpset share**
- Messages and wait states
 - **help dms069e**
 - **help hcp003e**
 - **help hcp1670w**
- System configuration statements
- etc.

```
HELP TASKS                               Task Help Information                               line 1 of 39
(c) Copyright IBM Corporation 1990, 2022

z/VM HELP, main panel

The help panels listed below provide information about various
z/VM functions, topics, and tasks.
To view a help panel, move the cursor to any character of the name
or description and press the ENTER key or the PF1 key.

HELP      - z/VM HELP Facility topics
MENUS     - z/VM help menus
TASKS     - Basic z/VM tasks
AVS       - AVS commands
CMS       - CMS commands
CP        - CP commands
DIRECTORY - CP Directory Statements
DIRMAINT  - DirMaint commands
DIRMAINT  - DirMaint topics
DUMPS     - Dump commands, subcommands, and utilities
DYNIO     - Dynamic I/O tasks
LE        - Language Environment commands
MACROS    - CMS assembler macros (menu)
MACROS    - Assembler macros and functions (types)
MESSAGES  - Messages and codes
OPEN      - OpenExtensions services and APIs
PERFKIT   - Performance Toolkit topics
PIPE      - CMS Pipelines built-in programs and cmds
QUERYSET  - QUERY and SET commands and subcommands
ROUTINES  - CMS callable services (menu)
ROUTINES  - CMS routines (types)
RSCS     - RSCS Networking commands and link parms
STATEMTS  - REXX, EXEC 2, and EXEC statements
SUBCMDS   - Subcommand groups, such as XEDIT
SYSCONFIG - CP System Configuration Statements
TCPIP     - TCP/IP commands
TCPIP     - TCP/IP tasks
PF1= Help      2= Top      3= Quit      4= Return      5= Clocate      6= ?
PF7= Backward  8= Forward  9= PFkeys  10=           11=           12= Cursor

====> _
```


CMS HELP Command:

CP SET SHARE

help cpset share

```
CPSET SHARE                               All Help Information                               line 1 of 310
(c) Copyright IBM Corporation 1990, 2022

SET SHARE

>>-Set--SHARE--userid----->
      .-TYPE--ALL-----
      '-TYPE--+-ALL--+'
            +-CP--+
            +-ZIIP--+
            +-IFL--+
            '-ICF--'

>--+-INITial-----.-NOLimit-----+--><
+-+--ABSolute--nnn%--+--+-----+
|  '-RELative--nnnnn-' | +-LIMITSoft--+ | | |
|                       | '-LIMITHard-' | |
|                       |               | |
|               +-+-----+--mmm%--+ | |
|               '-ABSolute-' | '-LIMITHard-' | |
|               |               | '-LIMITSoft-' | |
|               +-+-----+--mmmm--+ | |
|               '-RELative-' | '-LIMITHard-' | |
|                               |               | |
+-+--NOLimit---+-----+
+-LIMITSoft--+
'-LIMITHard-'

Authorization

Privilege Class: A

Purpose

Use SET SHARE to change the system-resource-access priority for users.

Operands
PF1=                2= Top          3= Quit          4= Return          5= Clocate          6= ?
PF7= Backward      8= Forward       9= PFkeys       10=                11=                12= Cursor

====>
```

Library Websites

"IBM Documentation" pages

- PDFs for all publications by release
- Individual documents or search by topic/task

"z/VM Library" pages

- PDFs for all publications by release
- Indexed PDFs
 - » Search offline by topic/task
- Current presentations

IBM Documentation

CP SET SHARE Command

<https://www.ibm.com/docs/en/zvm/7.3>

Note: Make sure you go to the page that matches the release that you are running.

The screenshot shows the IBM Documentation website for z/VM 7.3. The page is titled "z/VM 7.3" and includes a navigation menu on the left. The menu items are:

- z/VM 7.3 PDFs
- z/VM 7.3 help file updates
- z/VM videos
- About the z/VM 7.3 documentation
- What's in the z/VM 7.3 documentation
- System Overview
- Installation, Migration, and Service
- Planning and Administration
- Customization and Tuning
- Operation and Use
- Application Programming
- Diagnosis
- Data Facility Storage Management System for z/VM
- Directory Maintenance Facility for z/VM

The main content area displays "z/VM 7.3" and a "Trending documentation" section with three blue tiles:

- System Overview
- Installation, Migration, and Service
- Planning and Administration

IBM Documentation

CP SET SHARE Command

The screenshot shows the IBM Documentation website with a search for "set share". The search results are displayed in a list format. The left sidebar contains navigation links for "Technical documentation" and "IBM.com". The main content area shows four search results, each with a document icon, a title, a version number, a brief description, and a reading time.

IBM | Documentation | "set share" | Search | Close | User

80 results for ""set share"" in z/VM 7.3. Repeat this search in [all of IBM Documentation](#).

Setting SHARES ^
z/VM / 7.3
There are three ways to **set** a virtual machine's **SHARE**: Accept the default value CP assigns Use the SHARE directory statement to specify a value in the virtual machine's directory entry Use the **SET SHARE** command to **set** a value.,To reset a virtual machine's **share**, use the **SET SHARE** command. A share...
🕒 3 Minutes

SET SHARED ^
z/VM / 7.3
Set SHARED ON OFF FOR rdev rdev1-rdev2 Authorization Privilege Class: B Purpose Use **SET SHARED** to control whether a full-pack minidisk is to be shared by the users of many real and virtual systems.,HCP2004E **Shared** not **set** for type rdev; does not support reserve/release. HCP2006E **Shared** not **set** for DASD...
🕒 2 Minutes

SET SHARE ^
z/VM / 7.3
Set SHARE userid TYPE ALL TYPE ALL CP ZIIP IFL ICF INITial ABSolute nnn% RELative nnnnn NOLimit LIMITSoft LIMITHard ABSolute mmm % LIMITSoft LIMITHard RELative mmmmm LIMITSoft LIMITHard NOLimit LIMITSoft LIMITHard Authorization Privilege Class: A Purpose Use **SET SHARE** to change the system-resource-access,For example, if you **SET**...
🕒 11 Minutes

SET SHARE Command ^
z/VM / 7.3
The **SET SHARE** command and the SHARE directory statement allow you to control the percentage of processor time a user receives. With z/VM®, a virtual machine receives its proportion of processor time according to its **SHARE setting**.,Both the normal **share** and the maximum **share** can be **set**. Normal **share**—The...
🕒 2 Minutes

Site feedback

IBM z/VM Library Pages

CP SET SHARE Command

<https://www.vm.ibm.com/library/pdfzip.htm>

To search the library offline:

1. Download zip file and extract to a folder
2. Open .PDX file in extracted folder

IBM Let's Create Products & Solutions Consulting & Services Learn & Support Explore more

z/VM > Library >

Indexed PDF collections

Overview z/VM 6.x PDFs z/VM 7.1 PDFs z/VM 7.2 PDFs z/VM 7.3 PDFs z/VM Related PDFs **Indexed PDFs** Presentations

z/VM

Last Updated: 21 May 2023

The table below contains collections of IBM z/VM documentation in Adobe Acrobat indexed PDF format. Once you download and extract one of the collection ZIP files, you will have an offline way to search the z/VM Library.

The ZIP files contain PDF files for all publications in the z/VM Library for the selected quarter or release. The 6.4 and greater collections also contain an HTML index file which lists the publication titles, and an Adobe Acrobat full text search index for the entire collection (PDX file). By using the PDX file you can perform a comprehensive search across all the PDFs within the collection.

New Indexed PDF collections will be provided on a quarterly basis when z/VM New Function APARs drive changes to publications.


Note: Starting with the 2019 April Refresh Collection the z/VM Related PDFs will no longer be included. Please see earlier collections or see the [Related PDFs](#) page.

+ Instructions on how to use the indexed PDF collection

Filename	Description	Size (MB)	Latest Content
2023 May zVM730 Collection.zip	z/VM 7.3 2023 May PDF collection - View more information below for APARs in this collection. + More information	263	7.3 - 2023 2Q NFA
2022 September zVM730 GA Collection.zip	z/VM 7.3 2022 September PDF collection - View more information below for APARs in this collection. + More information	253	7.3 - 2022 3Q GA
2022 May zVM720 Collection.zip	z/VM 7.2 2022 May PDF collection - View more information below for APARs in this collection. + More information	257	7.2 - 2022 2Q NFA
2021 December zVM720 Collection.zip	z/VM 7.2 2021 December PDF collection - View more information below for APARs in this collection. + More information	256	7.2 - 2021 4Q NFA
2021 September zVM720 Collection.zip	z/VM 7.2 2021 September PDF collection - View more information below for APARs in this collection. + More information	254	7.2 - 2021 3Q NFA
2021 August zVM720 Collection.zip	z/VM 7.2 2021 August PDF collection - View more information below for APARs in this collection.	255	7.2 - 2021 2Q NFA

IBM z/VM Library Pages

CP SET SHARE Command

 Search

Arrange Windows

Where would you like to search?

In the current document

All PDF Documents in

In the index named INDEX_for_zVM3.1PDF-Collection-3Q2022.pdx

What word or phrase would you like to search for?


Whole words only

Case-Sensitive

Include Bookmarks

Include Comments

Search

 Search








Arrange Windows

Looking For:
set share in the index named INDEX_for_zVM3.1PDF-Collection-3Q2022.pdx

Results:
19 document(s) with 181 instance(s)

New Search

Results:

- >  z/VM: 7.3 Performance
- >  z/VM: 7.3 CP Commands and Utilities Reference
- >  z/VM: 7.3 CP Planning and Administration
- >  z/VM: 7.3 System Operation
- >  z/VM: 7.3 CP Messages and Codes
- >  z/VM: 7.3 Running Guest Operating Systems
- >  z/VM: 7.3 Getting Started with Linux on IBM Z

Web Search

CP SET SHARE Command

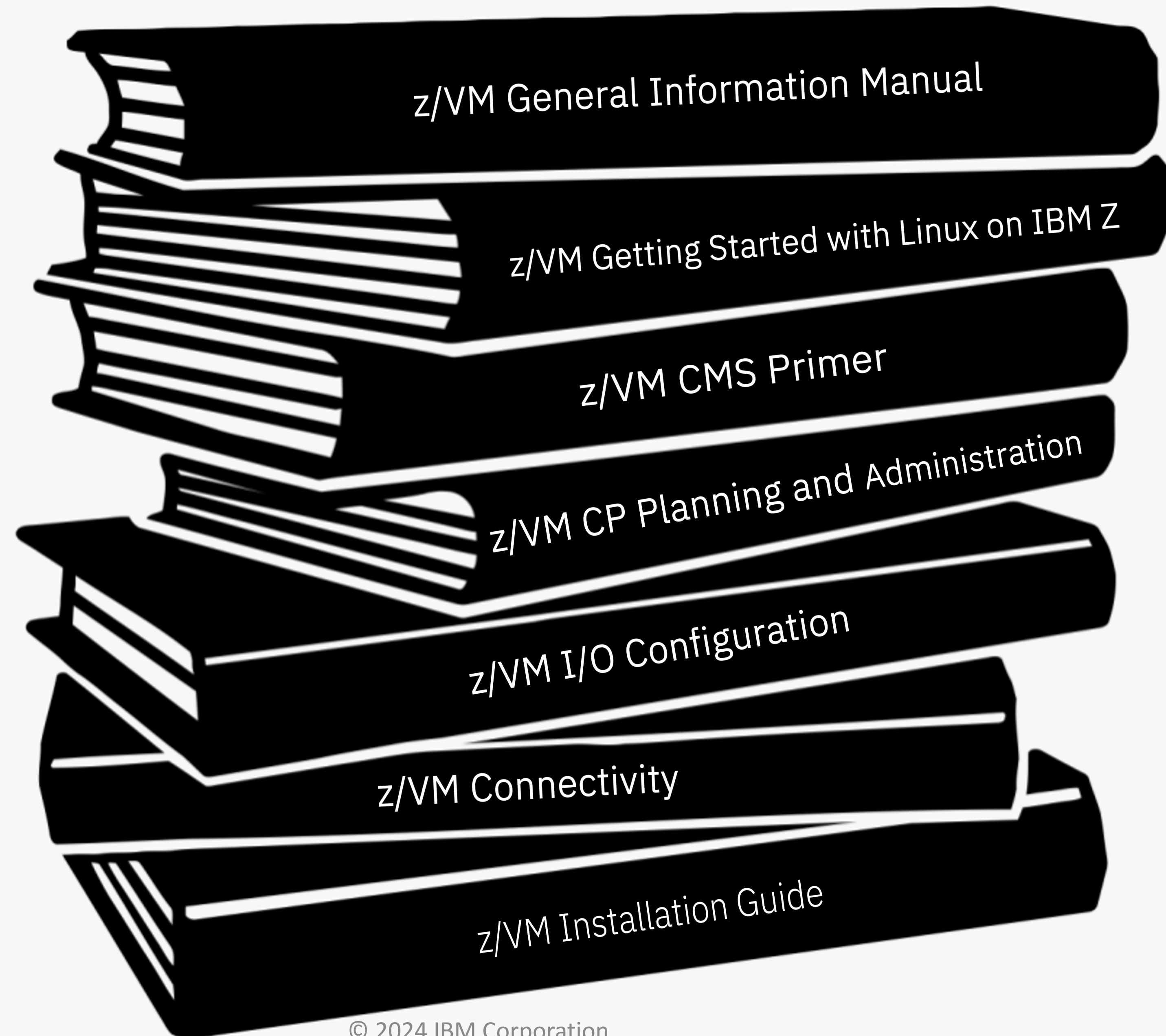
The screenshot shows a Google search for "set share command". The search bar contains the query, and the results page displays three entries:

- IBM**: <https://www.ibm.com/docs/com.ibm.zvm.v710.hcpb8>
SET SHARE Command - IBM
- IBM**: <https://www.ibm.com/docs/zvm>
Setting SHARES
Use the **SET SHARE command** to set a value. This section tells you how to set shares using the **SET SHARE command**. If the SHARE directory statement has not been ...
- Oracle**: <https://docs.oracle.com/html/gayne>
Sharing and Unsharing ZFS File Systems
The new zfs **set share command** is used to share a ZFS file system over the NFS or SMB protocols. The share is not published until the sharenfs set property ...

Additional search results from Oracle are partially visible at the bottom of the page.

Some Key Books

if you are new to z/VM



z/VM General Information Manual

GC24-6286

Often referred to as the “GIM”

One of the first books updated and made available for a new release or enhancements in service stream

Key Content:

- *Overview of z/VM and value (a little marketing)*
- *What has changed in the most current release*
- *Requirements*
- *Appendices on Support Levels*
 - *IBM servers supported by z/VM*
 - *IBM operating systems supported as guests of z/VM*
 - *IBM devices supported*

Getting Started with Linux on IBM Z

SC24-6287

Sometimes abbreviated “GSWL”

More about z/VM than about Linux, but written with Linux as the primary workload for z/VM

Meant as a bridge between the simple installation process and many books in the library with pointers to other books for more details

Key Content:

- *Planning for Linux usage*
- *Configuring DirMaint (Directory Maintenance Feature)*
- *Configuring TCP/IP*
- *Cloning of Linux guests*

z/VM CMS Primer

SC24-6265

Walks through getting started with CMS

Key Content:

- *Logging on and off z/VM*
- *CMS minidisk file system and SFS (Shared File System) background*
- *Editing files using XEDIT*
- *Managing files and related several productivity aids included in CMS*
 - *Like other platforms, there is often more than one way to do things*

Content you can probably skip when you read for first time:

- *Printing from CMS*
- *NAMES files*

z/VM CP Planning and Administration

SC24-6271

Also known as “CP P&A” or “Planning and Admin”

- There are separate planning and administration books for other components

Not just a book for first time install/configuration

- z/VM systems are dynamic and may grow – revisit for paging space and other considerations

Key Content:

- *Details behind planning and configuring a z/VM system*
- *Formulae for:*
 - *Memory required*
 - *Disk page space*
 - *Dump space*
- *Details behind User Directory (where virtual machines are defined)*

z/VM I/O Configuration

SC24-6291

Explains planning, defining, and managing your I/O configuration

Key content:

- *How to generate dynamic I/O configuration changes from z/VM*
- *How to enable z/VM to respond to dynamic I/O configuration changes*
- *Hardware Configuration Definition (HCD)*
- *Dynamic I/O configuration commands*

NOTE:

- *Does not include information about using Dynamic Partition Manager (DPM)*

z/VM Connectivity

SC24-6267

Connectivity book is good book and often overlooked

Introduction/Overview of z/VM Connectivity

All about z/VM virtual networks

- Virtual switches
- Guest LANs

Other communication protocols or functions in z/VM

- Advanced Program-to-Program Communications (APPC)
- Inter-System Facility for Communications (ISFC) – backbone of SSI clustering

z/VM Installation Guide

GC24-6292

Often known simply as the “Install Guide”

Hints

- Read through entirely before starting to install z/VM
- Watch for common looking tables

Key Content:

- *Step by step details on installation of z/VM*
- *Various installation techniques*
 - *Traditional*
 - *Upgrade*
- *Information about preinstalled licensed products and features*
 - *Performance Toolkit, DirMaint, etc.*

Redbooks

<https://www.redbooks.ibm.com/>

<https://www.vm.ibm.com/pubs/redbooks/>

Result of collaborative residency work with IBMers and others

<https://www.redbooks.ibm.com/residence>

Great source of information

- Practical
- Hands on
- Combines different products
- Usage based instead of reference based

Use some caution

- Some Redbooks have not been updated in a long time
 - Information is still relevant, but details might be different on recent releases
- Show a specific solution, but might not be the best option for all scenarios



Product and Service Information

Product Alerts and Status Information

The following webpages/resources contain key information to keep you up-to-date with all you need to know to upgrade, service, and maintain your z/VM systems.

Pages to Subscribe to:

- Continuous Delivery page: <https://www.vm.ibm.com/newfunction/index.html>
- New Function Variable page: <https://www.vm.ibm.com/newfunction/varlist.html>
- Latest RSU information: <https://www.vm.ibm.com/service/RSU/RSUPLAN.HTML>
- Red Alert page: <https://www.vm.ibm.com/service/redalert/>
- PTF Support pages: <https://www.ibm.com/support/pages/apar/VM66265>
- NOTE: You need to subscribe to each component individually (eg. Dirmaint vs. CP)

Product Alerts and Status Information (continued)

The following webpages/resources contain key information to keep you up-to-date with all you need to know to upgrade, service, and maintain your z/VM systems.

Key pages to bookmark/reference:

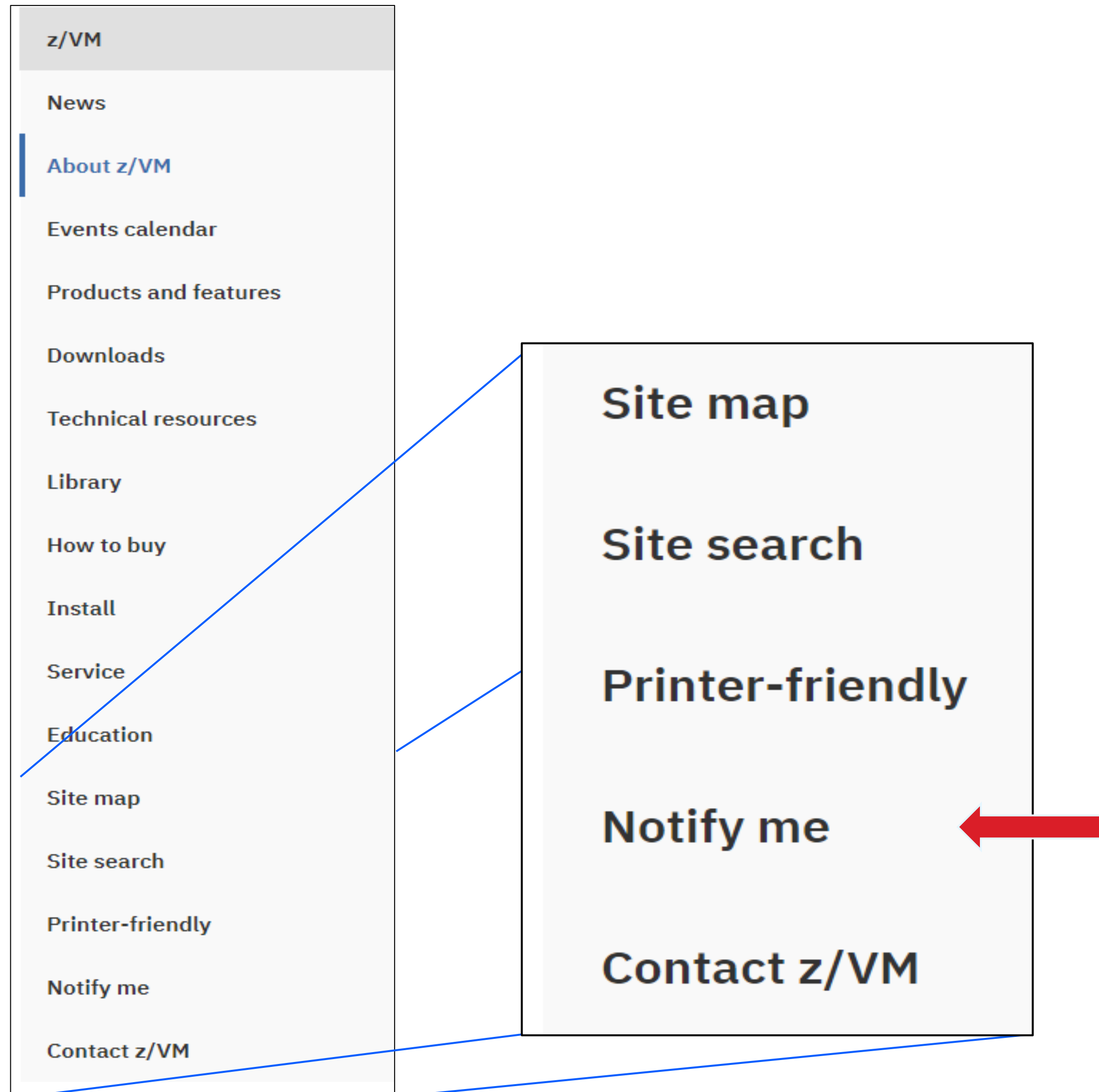
- Technical Resources: <https://www.vm.ibm.com/techinfo/>
- z/VM Downloads page: <https://www.vm.ibm.com/download/>
- z/VM Service news: <https://www.vm.ibm.com/service/>
- z/VM Support pages: <https://www.vm.ibm.com/support/>

z/VM Linear Service

z/VM 7.3 is the last z/VM release planned to support the ability to apply service in a selective fashion. Previously, PTFs within the same component could be applied without requiring all previous service to also be applied, based on requisite rules. All future z/VM releases will implement a linear service model whereby applying one PTF will require all previous service for the same component to be installed.

Note: This satisfies the Statement of Direction that was announced with z/VM 7.3. Subscribe to these pages so you are notified about changes.

How to Subscribe to z/VM Pages



- From any vm.ibm.com site, click “Notify Me” on side panel.

How to Subscribe to z/VM Pages

The fields indicated with an asterisk (*) are required to complete this transaction; other fields are optional. If you do not want to provide us with the required information, please use the "Back" button on your browser to return to the previous page, or close the window or browser session that is displaying this page.

* Action: (choose one)	<input checked="" type="radio"/> Enroll <input type="radio"/> Unenroll <input type="radio"/> Query
* Your e-mail address: (for example, you@yourcompany.com)	<input type="text"/>
* File: (for example, /service /rsu/rsu_eso.html) (required for enroll and unenroll) (ignored for query)	<input type="text" value="/service/redalert/index.html"/>

IBM does not use the information you provide here to keep you informed through other ways. The information you provide here is used only for the purpose articulated on this form.

By clicking "Submit", you agree that IBM may process your data in the manner indicated above and as described in our Privacy policy.

- File is filled in automatically.
- Query is great for seeing what you've already subscribed too.

Querying existing subscriptions

Query Response

User jpgagnon@us.ibm.com is enrolled for change notices for the following files on our site:

File	Action
/service/rsu/index.html	Unenroll
/service/redalert/index.html	Unenroll
/service/rsu/rsuplan.html	Unenroll
/newfunction/index.html	Unenroll
/newfunction/varlist.html	Unenroll

[Return](#) to the notification menu.

Thanks,

The VM Team

z/VM Continuous Delivery Webpage

- <http://www.vm.ibm.com/newfunction/>
- Provides information on new function that is being considered
 - Description
 - Status
 - Effect
 - Compatibility
- Allows an early insight into future enhancements and for those where there is interest, a client can contact IBM to be involved with the item as a ‘sponsor user’.
- Recommend you get on the notify list for this page.

New function in progress	Target date	Last updated
Active Drain for PAGE Volumes	TBD	August 4, 2022
CPU Measurement Facility Host Sampler Exploitation	TBD	September 28, 2022
Greater than 1TB Guest Support	September 2023	August 10, 2023
Large Guest LOGOFF Reset Time Mitigation	September 2023	August 10, 2023
Performance Data Pump	August 2023	August 10, 2023
REXX Sockets Enhancements	TBD	September 28, 2022
SCSI IPL Alternate Path Support	TBD	July 6, 2023
Support Larger NVMe EDEVICE Page Space Allocations	August 2023	May 17, 2023
System SSL 2.5 Uplift	TBD	November 18, 2022
Thin Stack Adapter Interrupt Support	August 2023	August 10, 2023
Timing Enhancements *	TBD	February 4, 2021
VM Pass-Through ESA Support	TBD	July 6, 2023
Warning Track Interruption Facility	4Q 2023	August 10, 2023

* Denotes the z/VM team is seeking Sponsor Users. See New Function APAR for more information.

Available new function	Date released	Last updated
Automatic STANDBY Memory for Guests	March 3, 2021	March 4, 2021
Centralized Service Management	September 18, 2020	September 24, 2020
CP New Feature Interrogation API	October 15, 2020	March 31, 2021
CP Query Devices	December 8, 2020	March 31, 2021
Crypto Stateless-Command Filtering	May 12, 2023	May 12, 2023
CSM Fixpack	September 16, 2022	September 16, 2022
Direct to Host Service Transfer	August 31, 2021	March 10, 2022
DIRMAINT Automatic Sensing of Disk Volume Sizes	September 16, 2022	October 24, 2022
DirMaint Health Checker	December 11, 2020	March 4, 2021
DirMaint Performance Enhancements	March 16, 2022	March 21, 2022
Dynamic Memory Downgrade	August 6, 2021	August 12, 2021
EDEVICE Path Management	August 31, 2021	September 1, 2021
ESM Control of DEFINE MDISK Command	September 16, 2022	September 16, 2022
Fast z/VM Dump Distiller	March 1, 2021	March 10, 2022

New Function Variable Webpage

- <http://www.vm.ibm.com/newfunction/varlist.html>
- Provides a list of variables which are programmatically introduced with CP New Function in the service stream.
- Can be used to augment automation.
- Can be used to conveniently see the list of functional capabilities on your running system.
- Recommend you get on the notify list for this page.

Filter:

Release	APAR	APAR name	Environment variable name	Data type	Variable value	Variable value description
7.3	N/A	SSI 8-Member Clusters	CP.LIMIT.SSI.MEMBERS + More information	decimal integer	8	The variable is a decimal integer with a value of 8. This means that the level of CP code on the system supports up to eight members in an SSI cluster when it is properly enabled. Prior to the existence of this variable, four members were supported.
7.2	VM66271	Dynamic Memory Downgrade	CP.LIMIT.MEMORY.RECONFIG + More information	decimal integer	50	Value indicates the maximum percentage of a system's real memory can be reconfigured. 0 = No reconfigurable memory. 50 = 50% of memory is designated as reconfigurable.
7.2	VM66173	Dynamic Memory Downgrade	CP.LIMIT.MEMORY.RECONFIG + More information	decimal integer	0	VM66173 introduces the new function variable. The variable value is initially fenced at 0 which means no reconfigurable memory. APAR

Latest RSU Information

- <https://www.vm.ibm.com/service/RSU/RSUPLAN.HTML>
- Provides notification for the “next RSU” (Recommended Service Upgrade)
- Helps you stay current on the latest service
- Provides details on the content of an RSU (helpful for verification and planning)

RSU Plans

We receive many inquiries about the timing of the "next RSU". As a result, we are providing information here about potential RSU deliveries.

Because schedules may change for various reasons, we might need to deliver something sooner or later than anticipated.

To be notified when changes occur please [subscribe](#) to this page.

Note:

An order for PSP Bucket information can be placed separately or added when you order an RSU. As of December 2023, web pages are no longer automatically created for those PSP Buckets. If any information is required it will be on the page linked from the RSU Level column shown below as 7r0nRSU (r=release, n=rsu number).

z/VM RSU Planned and Actual Delivery Dates (mm/dd/yyyy)			
z/VM Release	RSU Level	RSU (mm/dd/yyyy)	Comments
2024 Plans			
7.2.0	7207RSU	4Q 2024	
7.3.0	7304RSU	04/04/2024	
2023			
7.3.0	7303RSU	10/12/2023	
7.2.0	7206RSU	07/25/2023	
7.2.0	7205RSU	05/23/2023	Issue with this RSU, replace with 7206RSU
7.3.0	7302RSU	03/15/2023	
2022			
7.1.0	7106RSU	12/13/2022	Last RSU prior to end of service
7.3.0	7301RSU	09/16/2022	7.3.0 GA RSU
7.2.0	7204RSU	03/29/2022	
2021			

z/VM Service : Red Alerts

- <https://www.vm.ibm.com/service/redalert/>
- This page documents critical service information, examples:
 - APARs that are important though the abstract might not be obvious as to why you would need it.
 - Problems related to different factors (e.g. millicode change and unrelated z/VM feature)
 - Potential high-impact problems where APAR or PTF may not be available yet.
- Low number of red alerts, ~ 1 to 3 per year
- Highly recommend you subscribe for notification of changes to this page.

z/VM Service: Red Alerts

This page is intended to provide information about potential high-impact items and in some cases prior to the opening of an APAR. Note that when a release level reaches the [end of service](#), we intend to remove the item from the list.

Date	Description
20 June 2023	Change in package format prevents application of z/VM V7 service ordered through IBM Support (updated 24 June 2023)
14 April 2023	GskNoCiphers errors may occur in z/VM SSL connections including CMS Pipelines and GetShopz.
19 September 2022	The z/VM 7.3 RAMDISK system will configure less storage than specified in the LPAR activation profile during a first level z/VM installation.
01 July 2021	APAR VM66173 (PTF UM35834) for 4TB REAL MEMORY SUPPORT is in error
29 June 2021	VMSES/E PTF is now available for issue involving VM66173 from 22 March 2021
22 March 2021	RACF users applying VM66173 (PTF UM35834) will encounter VMSES/E errors - Fixing PTF now available
22 July 2020	Linux server fails after Live Guest Relocation (LGR) Contact IBM Service to install the appropriate bundle.
30 March 2020	APAR VM66219 (PTF UM35465) for VSwitch Priority Queuing is in error. Apply PTF for APAR VM66363.
20 July 2018	Upcoming required changes to uploading documentation for z/VM problems due to GDPR compliance
30 Mar 2018	APAR VM65943 is in error (PTF UM35187). Apply PTF for APAR VM66140.
13 Dec 2017	Avoid IPL Failures - Reminder to update the Stand Alone Program Loader (SAPL) for z14 (updated 10 April 2018)
10 July 2017	APAR VM66026 is in error. Apply PTF for APAR VM66036.

IBM Support: PTF Information

- <https://www.ibm.com/support/pages/apar/VM66560> (example)
- Provides information on specific PTFs
- Can subscribe to get:
 - Updates on individual fixes
 - Updates for ALL APARS for the applicable component.
- NOTE: you must subscribe to each component individually. (eg. CP vs. DirMaint, etc)

IBM | Support Downloads Documentation Forums Cases Monitoring Manage support account

VM66560: PRESERVE PARTIAL DUMP ACROSS INITIAL PROGRAM LOAD

A fix is available
[Obtain the fix for this APAR.](#)

APAR status
Closed as new function.

Error description
This APAR changes CP to preserve a partial dump if a partition is re-IPLed before an abend dump completes. Currently, the dump process is terminated by a re-IPL and none of the dump is preserved.

Local fix
N/A

Problem summary

* USERS AFFECTED: All users of z/VM CP Abend dumps *

* PROBLEM DESCRIPTION: *

* RECOMMENDATION: APPLY PTF *

Document Information
Software version: 720
Operating system(s): z Systems
Document number: 6483945
Modified date: 09 January 2023

Subscribe
You can track all active APARs for this component.
[Notify me when an APAR for](#)

z/VM Service

- <https://www.vm.ibm.com/service/>
- Important service news
- Links to program directories and other important information
 - “Program Directories” are documents intended for the system programmer responsible for program installation, covering such topics as: Support, Installation, and Service.
- Links to other IBM service-related pages
 - PSP (Preventive Service Planning) Buckets: contain information about important PTFs
 - IBM Support Portal
- Details on GetShopz – Direct-to-Host Service Download

IBM Let's Create Products & Solutions Consulting & Services Learn & Support Explore more

z/VM

Query Service Centralized Service Preventive Service Corrective Service GetShopz Utility Tips Resources News

Service for a z/VM System

You are encouraged to keep your z/VM system at a healthy service level. To do this, it is recommended that you stay on a supported z/VM release and service level. z/VM offers two releases in service from which to choose. The most current release (z/VM 7.2) offers new function that is delivered on a continuous basis, through its service stream. The previous release (z/VM 7.1) will be functionally stabilized, but will continue to receive the latest service.

To learn about enhancements provided through continuous delivery, visit the [Continuous Delivery](#) page.

To stay informed about the latest hardware service, service changes, and related information, visit the [Service News](#) page.

z/VM 7.3 now available

- The [z/VM 7.3 APAR page](#) is available to identify what CP and CMS service is shipped and available at GA (General Availability date).
- Enhancements made to [z/VM Centralized Service Management](#), see the [z/VM: Service Guide](#)

z/VM 7.2

- The [z/VM 7.2 APAR page](#) is available to identify what CP and CMS service is shipped and available at GA (General Availability date).
- [z/VM Centralized Service Management](#), new with z/VM 7.2, provides the capability to manage distinct levels of service for a specific group of traditional z/VM systems, locally or remotely, from one central system.

Installing Service

Installation instructions for electronically delivered service are available via these links:

- [Version 7](#) service
- [Version 6](#) service (for previous versions)

For additional information please refer to [ordering and installing service](#)

Direct to host service utility

New [Direct to host service utility](#) - GetShopz is now available as APAR VM66540 with z/VM 7.2.

Types of service

1. [Preventive Service](#) provides fixes for multiple and varied problems that already are known and resolved. To avoid known problems from affecting your system, apply RSU (Recommended Service Upgrade) service on a regular basis. To identify the latest RSU service available for your system, visit the [RSU Content page](#).
2. [Corrective Service](#) provides relief for a specific problem that is encountered (which has been reported to IBM, and for which a fix is available).

z/VM Support

- <https://www.vm.ibm.com/support/>
- Set of pages geared towards preventing customer problems where possible.
 - Best practices
 - Set-up activities
 - Ongoing activities
- Information on what to do when a problem arises
 - Must Gather Information to reduce mean-time to resolution
- Instructions on how to send various types of data to IBM for analysis.

The screenshot shows the IBM website's navigation bar with the logo and links for 'Let's Create', 'Products & Solutions', 'Consulting & Services', 'Learn & Support', and 'Explore more'. A search icon, user profile icon, and menu icon are on the right. Below the navigation bar is a dark blue header with the text 'z/VM Support Overview'. Underneath is a light grey navigation bar with tabs for 'Overview', 'Preparation', 'Troubleshooting', 'Must Gather', and 'Sending Data'. The 'Overview' tab is selected. The main content area has a left sidebar with a table of contents: z/VM, News, About z/VM, Events calendar, Products and features, Downloads, Technical resources, Library, How to buy, Install, Service, Support (highlighted), Education, Site map, and Site search. The main content area shows the 'z/VM' section, last updated on 2 December 2020. It includes a welcome message and three main sections with blue arrows pointing to links: 'Perform preparation and best practices activities', 'Troubleshoot problems', and 'Send the data to z/VM Support'. The 'Support' section explains that the information covers multiple product components and features, and that users should review the Preparation and Troubleshooting sections. It also mentions a Diagnosis Guide available in the z/VM Library.

IBM Z Security Portal

IBM Z Security policy **prohibits general disclosure of vulnerability analyses (negative or positive)**

- Policy of responsible disclosure
- Mindful of client patch policies and speeds

To stay current, **your company** can register with the IBM Z Security Portal

- Manually vetted and verified process for enrollment
- Separation of access and notifications by products licensed
- Receive up to date lists regarding APAR/PTF information and CVSS scoring for SEC/INT service as it becomes available.
- Security Bulletins regarding high-profile security issues, notifications and possible warnings

Portal Login: <https://www.ibm.com/support/resourcelink/security-portal/resources>

Request Access Here: <https://www-50.ibm.com/systems/campaignmail/z/capabilities/system-integrity/register-zsecurity-portal>

z/VM Community Resources

z/VM Downloads

- <https://www.vm.ibm.com/download/>
- This page contains a repository of z/VM tools, documentation, and gadgets for z/VM system programmers.
- Download packages from IBM and non-IBMers
- Instructions for how to upload and download content

VM Download Packages

Read the [license agreement](#) before downloading, and if you need instructions on how to unpack what you download, visit the [download page](#).

On this page is the **Entire Library** view of the library. If the list appears truncated or corrupted, flush your browser's memory and disk caches and then reload this page.

Toggle among views by clicking on:

[Entire library](#) | [Monthly favorites](#) | [All-time favorites](#)

To download from here, follow these easy instructions:

To download the package's...Click on...

VMARC archive	The v- link
ZIP archive	The z- link
TAR archive	The t- link
Description	The (+)

Note that the link also tells you the size of the file in KB.

List of Entire Library (502 total)

Name	Types	Date	Abstract	More...
SFCOUNTR	v-7K	2023-03-29	SFCOUNTR makes a list of users with more than a requested number of spool files.	(+)
FCXTREND	v-12K z-102K	2023-03-06	Pruning aid for IBM Performance Toolkit's FCXTREND files	(+)
SFLIST	v-49K	2022-11-07	z/VM tool to manipulate (view, receive, purge, transfer) spool files.	(+)
CP3KVMXT	v-600K	2022-10-31	v2.9d Create an input file for zPCR or zCP3000 from monitor data.	(+)
CP1STLVL	v-30K	2022-10-17	CP exit allowing 2nd-level user to invoke 1st-level commands	(+)
CHKAPARS	v-40K	2022-09-12	CHKAPARS EXEC - Evaluates system APAR data for a selected z/VM component or all such components	(+)
R4MON	v-20K	2022-08-29	Report on VM66095 EDEV FCP chpid and device records.	(+)
DR_DRCT	v-66K	2022-07-12	Directory fix-it tools: Move/expand DRCT area; find CMS minidisks; more.	(+)
MONWATCH	v-7K	2022-07-08	Feed CP Monitor records to a user-written Pipelines stage	(+)
CPUMF	v-41K	2022-06-28	Report on D5 R13 MRPRCMFC CPU Measurement Facility counters.	(+)
CALCENT	v-16K	2022-05-25	Calculate LPAR entitlement table from a MONWRITE file	(+)
DOR16TOP	v-13K	2022-05-23	Draws machine topology from a MONWRITE File	(+)
LISTSG	v-92K	2022-05-23	A series of FILELIST-like tools V1.8	(+)
INSTPROD	v-49K z-103K	2022-05-11	Automated install of IBM products for z/VM including Operations Manager, Backup and Restore Manager, Tape Manager, zSecure, and OMEGAMON VE	(+)

Events and Local User Groups

- z/VM Events: <https://www.vm.ibm.com/events/>
- Local User Groups around the world: <https://www.vm.ibm.com/events/usergrps.html>

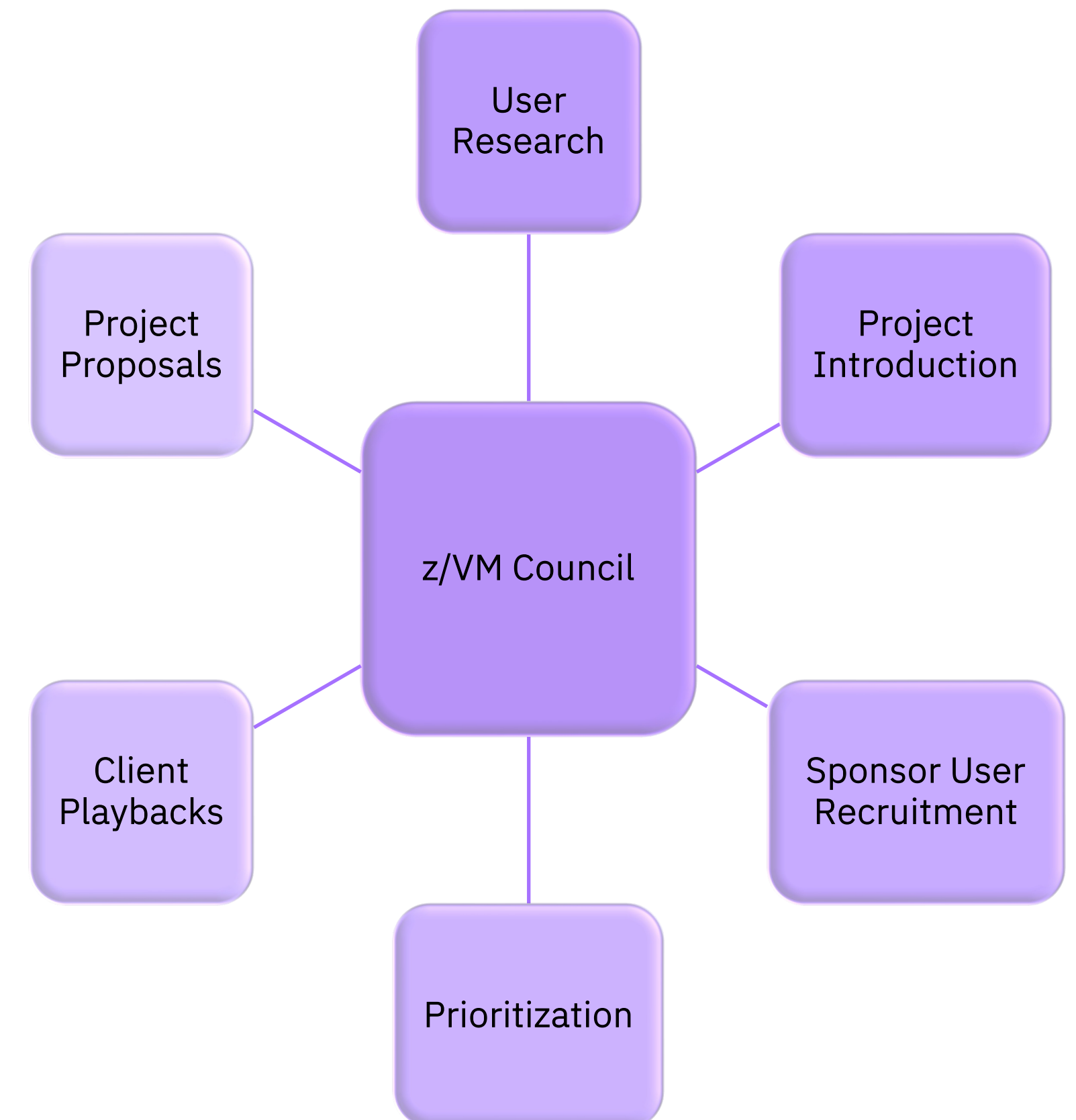


Mailing Lists

- There are two very helpful mailing lists: <https://www.vm.ibm.com/techinfo/listserv.html>
 - IBMVM
 - LINUX-390
- Experts available 24 x 365
- Can subscribe to get each message as an email or daily digest form
- Recommend subscribing even if you don't have a question!
- People all over the world available to help answer questions

z/VM Council : Client Communication and Collaboration

- z/VM-centric community started in June 2018
 - Meeting about once a month via telephone and web conferencing
 - Other collaboration done via membership website
- Membership Requirements
 - IBM Z Feedback Program Agreement (FPA)
 - Regular participation
 - Sponsor User for at least one project per year
 - Homework assignments
- Additional details:
 - https://www.vm.ibm.com/sponsor_user/zvm_council.html
 - Contact: Kerry Wilson – kerryw@us.ibm.com



Summary

- There are many sources and types of z/VM information
 - Education
 - Reference
 - Community
- Depth and quantity of information you need depends on your interest or role
 - "Tourist"
 - User
- Subscribing to the recommended web pages will keep you current and informed
- Take advantage of the experience and camaraderie of the z/VM Community

Resource	z/VM Tourist	z/VM User
Education Roadmaps	✓	✓
z/VM Education Links	✓	✓
z/VM How-To Videos	✓	✓
z/VM-related Live Virtual Classes		✓
Online Help		✓
z/VM Documentation		✓
Key Books		✓
Product Alerts & Status Information Webpages		✓
Community Resources		✓

