IBM Education Assistance for z/OS V2R2

Item: KC in the z/OS Base
Element/Component: IBM Knowledge Center for z/OS

Agenda

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Trademarks

- See url http://www.ibm.com/legal/copytrade.shtml for a list of trademarks.

Presentation Objectives

This session is designed to provide information about a new base element of z/OS V2R2 called *IBM Knowledge Center for z/OS*. The following topics will be covered in this presentation:

- An introduction to Knowledge Centers in IBM

- A description of the IBM Knowledge Center for z/OS product and its benefits

- Using IBM Knowledge Center for z/OS

- Installing and Configuring IBM Knowledge Center for z/OS

- Provisioning content to IBM Knowledge Center for z/OS

Overview

- Problem Statement / Need Addressed
  - Many z/OS enterprises run their IT operations in a "darkroom" environment behind a firewall, without internet access. Since employees of these enterprises are unable to access IBM documentation from ibm.com, there is a need to serve these users IBM documentation from z/OS systems within their own enterprise. Other enterprises simply prefer to manage and serve IBM documentation from their own z/OS servers as is the case with Library Server for PDF collections.

- Solution
  - IBM Knowledge Center for z/OS (KC4Z) delivers a customer installable version of the Knowledge Center currently hosted on ibm.com which serves almost all of IBM's published documentation
  - The SoftCopy Librarian tool, familiar to most z/OS customers, has been enhanced to download and provision IBM content in KC format to z/OS zFS repositories, and enable its use with IBM Knowledge Center for z/OS

- Benefit / Value
  - Users can access and search z/OS product documentation from their enterprise's own z/OS system similar to as is done using Knowledge Center running on ibm.com
  - Knowledge Center content can be provisioned to z/OS repositories using tools familiar to library administrators

Usage & Invocation

Introduction to Knowledge Centers

▪ IBM Knowledge Center is IBM's strategic platform for delivering technical content

▪ There are two "flavors" of Knowledge Center:

  – KC-hosted: The outward-facing server of IBM content running on ibm.com

  – KC-CI: A "Customer Installable" version of KC-hosted packaged for product use

▪ IBM Knowledge Center for z/OS (KC4Z) is an SMP/E packaging of KC-CI 1.5.1, with no additional function added. It's a java web app deployed by the Websphere Liberty packaged with the z/OSMF base element of V2R2

▪ Starting with z/OS V2R2, KC4Z is a new base element of z/OS. All z/OS customers have access to it as part of the base operating system

Usage & Invocation

Description of the IBM Knowledge Center for z/OS (KC4Z) Product

- KC4Z serves IBM product publication content to web browser clients from the z/OS server system.
- KC4Z provides the ability to display, navigate and search content in a manner similar to the Knowledge Center on ibm.com.
- Content can be manually added to and maintained in KC4Z zFS repositories using information the in *IBM Knowledge Center for z/OS Configuration and User Guide*, SC27-6805.
- Content can be automatically added to and maintained in KC4Z zFS repositories using the enhanced SoftCopy Librarian tool.
- By adding and maintaining content, KC4Z can be made to serve product publications for many different IBM products.
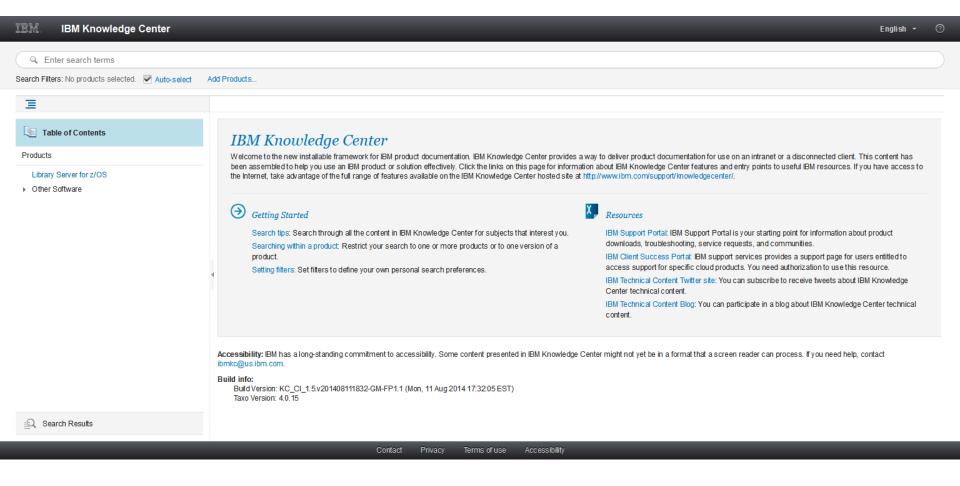
Usage & Invocation

Using IBM Knowledge Center for z/OS (KC4Z)

- Point your web browser to your KC4Z landing page, such as:
  http://yourHostName:9080/zos/knowledgecenter/
- The URL for your KC4Z landing page is logged by the KC4Z server started task (HKCSVR1) in the /var/kc4z/logs/console.log file in a line similar to: "CWWKT0016I: Web application available (default_host): http://yourHostName:9080/zos/knowledgecenter/"
- KC4Z EUI is very similar to the Knowledge Center EUI hosted on ibm.com:
  https://www.ibm.com/support/knowledgecenter/
- Display, navigate and search the sample content (which is installed with KC4Z) whose TOC appears in the KC4Z Table of Contents pane
- Provision additional product or collection content, either manually or automatically via Softcopy Librarian V5, to your KC4Z data repository
- After provisioning new content, its TOC will also appear in the KC4Z Table of Contents pane
- Display, navigate and search new content (after provisioning there may be a delay before its TOC can be used due to background indexing and caching)
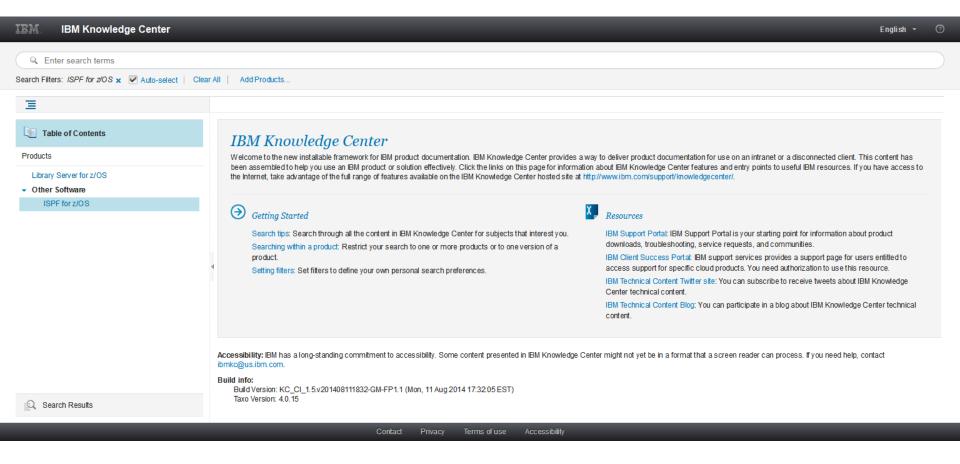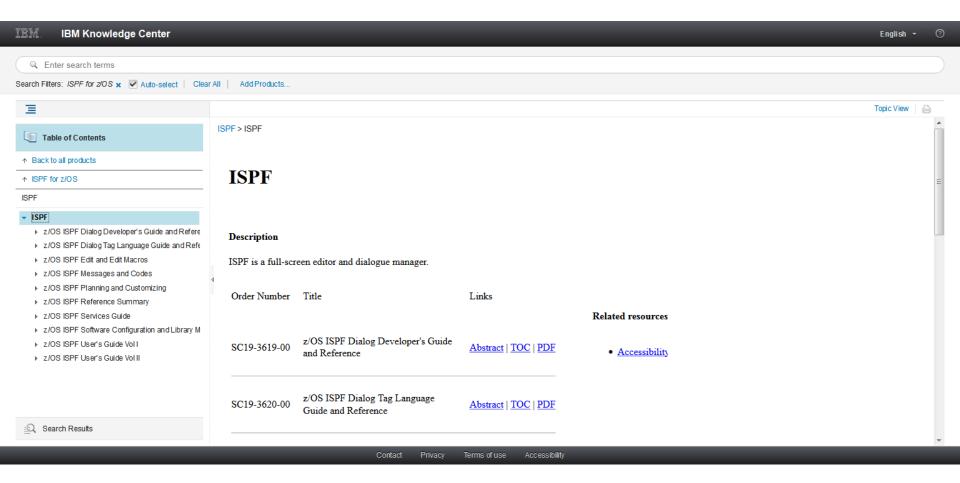
Usage and Invocation: KC4Z Welcome Page

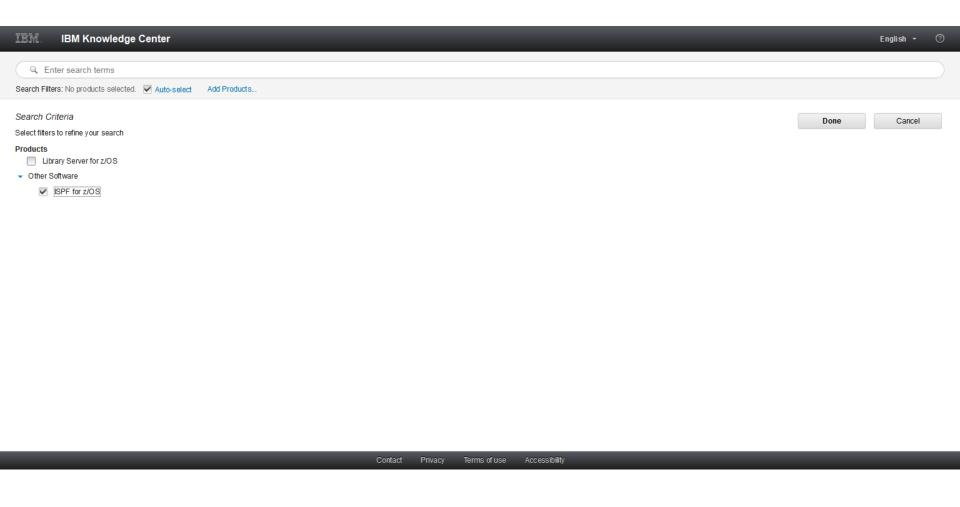# Usage and Invocation: Open "Other Software" from TOC

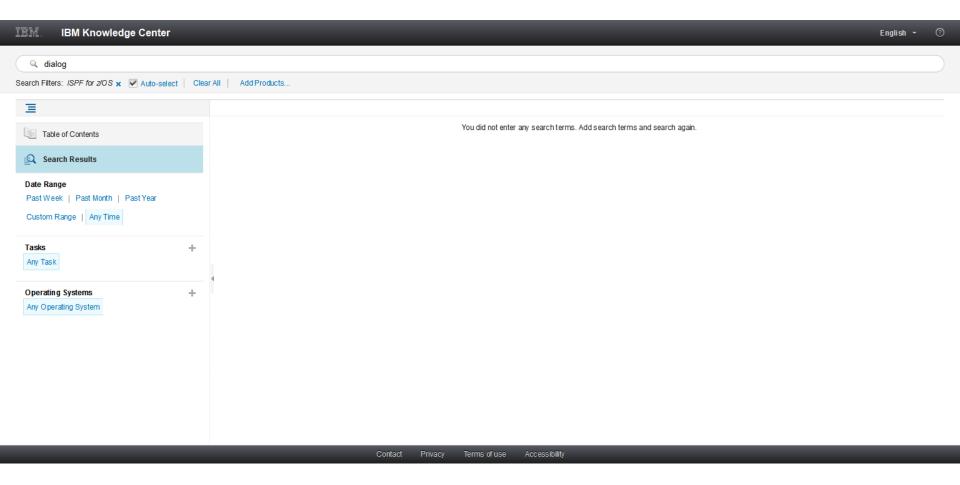# Usage and Invocation: Navigate to and display ISPF product

Usage and Invocation: Scope search to ISPF via "Add Products" link

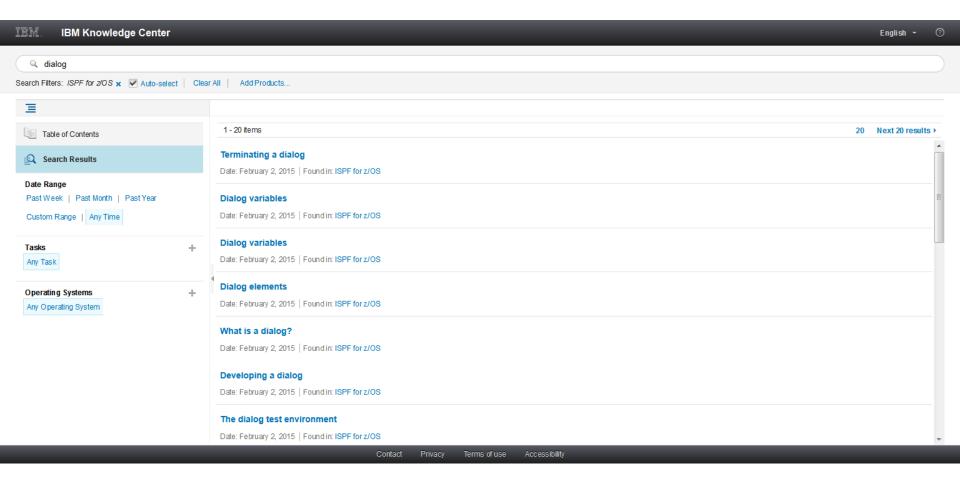IBM Knowledge Center   English ▾   ⊙

🔍 Enter search terms

Search Filters: No products selected. ☑ Auto-select   Add Products...

Search Criteria   Done   Cancel
Select filters to refine your search

Products

☐ Library Server for z/OS

▾ Other Software

  ☑ ISPF for z/OS

Contact   Privacy   Terms of use   Accessibility

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Usage and Invocation: Search ISPF product for "dialog"

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Usage and Invocation: View search results

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Usage and Invocation: Open "Dialog Elements" topic from search hits

Usage & Invocation

How IBM Knowledge Center for z/OS (KC4Z) differs from KC-hosted

- Although the KC4Z EUI and content display and navigation is very similar to that of KC-hosted on ibm.com, there are several notable differences:
  - The underlying search engine for KC-hosted is Google Search Services, while KC4Z uses the open source Lucene indexing engine
  - KC-hosted acquires its content from IBM GSA space, while KC4Z requires that content resides the locally on your z/OS system
  - KC-hosted has sign-in and built in content entitlement features, and KC4Z does not
  - KC-hosted supports personal collections, saved searches, PDF generation and user commenting/feedback, and KC4Z does not
  - KC4Z has a customizable layer for headers, footers, and home pages

Usage & Invocation

Provisioning Content to IBM Knowledge Center for z/OS

- Upon KC4Z installation, the only content available is for the KC4Z product itself

- Content for other products (e.g. CICS) or collections (e.g. z/OS Base and Features) can be provisioned for use on KC4Z by a Library Administrator, either
    - Manually, as described in "*IBM Knowledge Center for z/OS: Configuration and User Guide*" (SC27-6805)
    - Or automatically, by using the Windows-based Softcopy Librarian V5 tool as described in the "*IBM Softcopy Librarian V5 User Guide*" (GC23-3414-17)
        - Softcopy Librarian has been enhanced to support Knowledge Center plugin content, in addition to PDFs and PDF Shelves
        - Much like for PDF Collections, Softcopy Librarian V5 will list the available Knowledge Center format products and collections available on the Publib Server "Internet Source"
        - When a Knowledge Center format product or collection is selected, Softcopy Librarian V5 will determine what parts are new or updated, compared to what exists on the target z/OS repository, download those parts from Publib temporarily to Windows, then upload them to z/OS
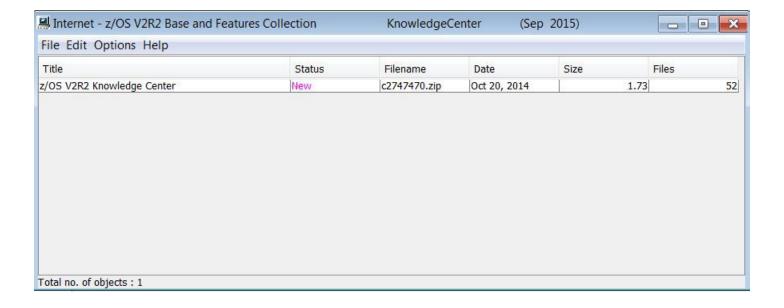
Usage and Invocation: Using Softcopy Librarian (SCL) to select a Knowledge Center Collection from the Master Collection List

Usage and Invocation: Display KC plug-ins within selected Collection

Title	Status	Filename	Date	Size	Files
z/OS V2R2 Knowledge Center	New	c2747470.zip	Oct 20, 2014	1.73	52

Internet - z/OS V2R2 Base and Features Collection   KnowledgeCenter   (Sep 2015)

File Edit Options Help

Total no. of objects : 1

Usage and Invocation: Configure KC Content target for z/OS Repository

Usage and Invocation: Configure KC Properties target for z/OS Repository

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Usage and Invocation: SCL Download KC Collection from Publib to client machine in progress

Usage and Invocation: SCL upload KC Collection from client machine to z/OS Repository in progress

Interactions & Dependencies

KC4Z Server Software Dependencies:

- A Java Runtime Environment using IBM 64-bit SDK for z/OS, Java Technology Edition, V7.1 (minimum Java level declared for V2R2)
- Websphere Liberty Profile 8.5.5.3 (packaged with the z/OSMF base element of V2R2). By default the KC4Z server started task (HKCSVR1) specifies "/usr/lpp/zosmf" as the root directory of the wlp/ directory tree

- KC4Z Client Web Browsers supported, and recommended for best results:
    - Internet Explorer 9+
    - Mozilla Firefox 17+
    - Chrome 20+
    - Safari 5+

- Hardware Dependencies
    - None

- Exploiters
    - None

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Installation and Configuration

- The following KC4Z **Installation** considerations apply to CBPDO orders only:

  – As a base element of z/OS, the KC4Z FMID (HKCZ100) will be received, with all other new or changed base element FMIDs, by the RCVPDO job
  – KC4Z will be installed as part of Wave 1F, as described in V2R2 Program Directory, using the applicable FMIDSET during apply and accept steps
  – KC4Z installs into the root file system under /usr/lpp/kc4z/
  – The KC4Z sample installation jobs applicable to the above steps are:
    • HKC00ALC: Allocate the SMP/E AHKCKC4Z distribution library dataset
    • HKC00DDF: Create SMP/E DDDEF entries for the target and distribution libraries
    • HKCISMKD: Create the installation target directories, including the /usr/lpp/kc4z/IBM/ SHKCKC4Z target library
  – No PARMLIB statements or members are required during installation, however, as referenced on the following slide, in order for the KC4Z file systems to be mounted, and for the KC4Z server started task to be launched, at system IPL, the BPXPRMxx and COMMNDxx members must be properly configured

Installation and Configuration

- The following KC4Z **Installation** considerations apply to both CBPDO and ServerPac orders:

    – No APARs or PTFs are needed for enablement
    – No special hardware requirements or configuration is needed
    – No system defaults are changed during installation
    – Softcopy Librarian V5 which is used for automated content provisioning is not part of the KC4Z installation package. Instead it will be available for free download from ibm.com at: http://www.ibm.com/support/docview.wss?uid=swg27018846

Installation and Configuration

- Following is a summary of the KC4Z post-installation **configuration** actions. Please refer to *"IBM Knowledge Center for z/OS: Configuration and User Guide"* (SC27-6805) for details:
    -
    - Create space for KC4Z server configuration, data repository and log files
        - Create mountpoint directories for these three filesystems
        - Create and temporarily mount these three filesystems
        - Configure these three filesystems to be mounted when system is IPL'd
    - Perform initial default configuration
        - Create KC4Z userid and admin group, via RACF, authorized to run KC4Z server
        - Create target runtime directories on mounted filesystems; permit them to be used by KC4Z server
        - Copy sample config files from KC4Z installation files to target runtime directories
        - Perform Installation Verification Procedure
        - Customize KC4Z started task (HKCSVR1); configure to launch upon system IPL
    - Perform additional configuration and override defaults
        - Connect additional administrators to KC4Z server admin group via RACF
        - Optionally override KC4Z server configuration defaults

- Note that for ServerPac orders some of the above configuration actions are already complete or are performed automatically. Please refer to *"ServerPac: Installing Your Order"* for details.

Presentation Summary

- In summary, after viewing this presentation you should:

    - Have a basic understanding of Knowledge Centers, what KC4Z does, and how KC4Z relates to KC-hosted on ibm.com
    - Know how to use KC4Z to display, navigate and search content
    - Know how to provision content to KC4Z
    - Know what the server and client dependencies are for KC4Z
    - Understand the KC4Z installation considerations
    - Understand the KC4Z post-installation configuration actions

Appendix

- Publications
    - IBM Softcopy Librarian V5 User Guide (GC23-3414-17)
    - Z/OS V2R2 Program Directory (GI11-9848-01)
    - IBM Knowledge Center for z/OS Customization and User Guide (SC27-6805)

- Websites
    - Download site on ibm.com for Softcopy Librarian:
      http://www.ibm.com/support/docview.wss?uid=swg27018846
    - Knowledge Center site hosted on ibm.com:
      https://www.ibm.com/support/knowledgecenter/

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