

# IBM Education Assistance for z/OS V2R2

Item: KC in the z/OS Base

Element/Component: IBM Knowledge Center for z/OS



## Agenda

- Trademarks
- Presentation Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Installation & Configuration
- Presentation Summary
- Appendix



## 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


 **IBM Knowledge Center**

English 

Enter search terms

Search Filters: No products selected. ☒ Auto-select [Add Products...](#)



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Products

[Library Server for z/OS](#)

▶ Other Software

## IBM Knowledge Center


Welcome to the new installable framework for IBM product documentation. IBM Knowledge Center provides a way to deliver product documentation for use on an intranet or a disconnected client. This content has been assembled to help you use an IBM product or solution effectively. Click the links on this page for information about IBM Knowledge Center features and entry points to useful IBM resources. If you have access to the Internet, take advantage of the full range of features available on the IBM Knowledge Center hosted site at <http://www.ibm.com/support/knowledgecenter/>.

 **Getting Started**

**Search tips:** Search through all the content in IBM Knowledge Center for subjects that interest you.

**Searching within a product:** Restrict your search to one or more products or to one version of a product.

**Setting filters:** Set filters to define your own personal search preferences.

 **Resources**

**IBM Support Portal:** IBM Support Portal is your starting point for information about product downloads, troubleshooting, service requests, and communities.


**IBM Client Success Portal:** IBM support services provides a support page for users entitled to access support for specific cloud products. You need authorization to use this resource.

**IBM Technical Content Twitter site:** You can subscribe to receive tweets about IBM Knowledge Center technical content.

**IBM Technical Content Blog:** You can participate in a blog about IBM Knowledge Center technical content.

**Accessibility:** IBM has a long-standing commitment to accessibility. Some content presented in IBM Knowledge Center might not yet be in a format that a screen reader can process. If you need help, contact [ibmko@us.ibm.com](mailto:ibmko@us.ibm.com).


**Build info:**  
Build Version: KC\_CL\_1.5.v201408111832-GM-FP1.1 (Mon, 11 Aug 2014 17:32:05 EST)  
Taxo Version: 4.0.15

 Search Results

Contact Privacy Terms of use Accessibility




# Usage and Invocation: Open “Other Software” from TOC

 IBM Knowledge Center

English ?

Enter search terms

Search Filters: [ISPF for zOS](#) x ☒ Auto-select | [Clear All](#) | [Add Products...](#)

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Products


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▼ Other Software

[ISPF for z/OS](#)

## IBM Knowledge Center

Welcome to the new installable framework for IBM product documentation. IBM Knowledge Center provides a way to deliver product documentation for use on an intranet or a disconnected client. This content has been assembled to help you use an IBM product or solution effectively. Click the links on this page for information about IBM Knowledge Center features and entry points to useful IBM resources. If you have access to the Internet, take advantage of the full range of features available on the IBM Knowledge Center hosted site at <http://www.ibm.com/support/knowledgecenter/>.




### Getting Started

**Search tips:** Search through all the content in IBM Knowledge Center for subjects that interest you.

**Searching within a product:** Restrict your search to one or more products or to one version of a product.

**Setting filters:** Set filters to define your own personal search preferences.



### Resources

**IBM Support Portal:** IBM Support Portal is your starting point for information about product downloads, troubleshooting, service requests, and communities.


**IBM Client Success Portal:** IBM support services provides a support page for users entitled to access support for specific cloud products. You need authorization to use this resource.

**IBM Technical Content Twitter site:** You can subscribe to receive tweets about IBM Knowledge Center technical content.

**IBM Technical Content Blog:** You can participate in a blog about IBM Knowledge Center technical content.

**Accessibility:** IBM has a long-standing commitment to accessibility. Some content presented in IBM Knowledge Center might not yet be in a format that a screen reader can process. If you need help, contact [ibmkc@us.ibm.com](mailto:ibmkc@us.ibm.com).

**Build info:**  
Build Version: KC\_CL\_1.5.v201408111832-GM-FP1.1 (Mon, 11 Aug 2014 17:32:05 EST)  
Taxo Version: 4.0.15

 Search Results

[Contact](#) | [Privacy](#) | [Terms of use](#) | [Accessibility](#)



# Usage and Invocation: Navigate to and display ISPF product

**IBM Knowledge Center**
English

Search Filters: ISPF for z/OS Auto-select Clear All Add Products...

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[ISPF for z/OS](#)

**ISPF**

- z/OS ISPF Dialog Developer's Guide and Refere
- z/OS ISPF Dialog Tag Language Guide and Refe
- z/OS ISPF Edit and Edit Macros
- z/OS ISPF Messages and Codes
- z/OS ISPF Planning and Customizing
- z/OS ISPF Reference Summary
- z/OS ISPF Services Guide
- z/OS ISPF Software Configuration and Library M
- z/OS ISPF User's Guide Vol I
- z/OS ISPF User's Guide Vol II

ISPF > ISPF

## ISPF

**Description**

ISPF is a full-screen editor and dialogue manager.

Order Number	Title	Links	Related resources
SC19-3619-00	z/OS ISPF Dialog Developer's Guide and Reference	<a href="#">Abstract</a>   <a href="#">TOC</a>   <a href="#">PDF</a>	<ul style="list-style-type: none"> <li><a href="#">Accessibility</a></li> </ul>
SC19-3620-00	z/OS ISPF Dialog Tag Language Guide and Reference	<a href="#">Abstract</a>   <a href="#">TOC</a>   <a href="#">PDF</a>	


Search Results


[Contact](#)
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[Accessibility](#)


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# 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](#)



# Usage and Invocation: Search ISPF product for “dialog”


 IBM Knowledge Center

English ?

Search Filters: *ISPF for z/OS* x ☒ Auto-select | [Clear All](#) | [Add Products...](#)

☰

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 Search Results

**Date Range**  
[Past Week](#) | [Past Month](#) | [Past Year](#)  
[Custom Range](#) | [Any Time](#)

**Tasks** +  
[Any Task](#)


**Operating Systems** +  
[Any Operating System](#)


You did not enter any search terms. Add search terms and search again.


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# Usage and Invocation: View search results


**IBM Knowledge Center**


English 


Search Filters: [ISPF for z/OS](#)  ☒ [Auto-select](#) | [Clear All](#) | [Add Products...](#)


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[Past Week](#) | [Past Month](#) | [Past Year](#)  
[Custom Range](#) | [Any Time](#)

**Tasks**   
[Any Task](#)

**Operating Systems**   
[Any Operating System](#)

1 - 20 items
 

20 [Next 20 results](#)

**Terminating a dialog**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**Dialog variables**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**Dialog variables**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**Dialog elements**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**What is a dialog?**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**Developing a dialog**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

**The dialog test environment**  
 Date: February 2, 2015 | Found in: [ISPF for z/OS](#)

[Contact](#) | [Privacy](#) | [Terms of use](#) | [Accessibility](#)





# Usage and Invocation: Open “Dialog Elements” topic from search hits



The screenshot shows the IBM Knowledge Center interface. At the top, the search bar contains the text 'dialog'. Below the search bar, the search filters are displayed: 'ISPF for z/OS' (selected), 'Auto-select' (checked), 'Clear All', and 'Add Products...'. The left sidebar shows the navigation menu with 'Table of Contents' and 'Back to all products'. The main content area displays the search results for 'dialog', showing the path: ISPF > ISPF > z/OS ISPF Dialog Tag Language Guide and Reference > Guide to the Dialog Tag Language (DTL) > Introduction to the Dialog Tag Language (DTL) > Dialog elements. The topic title is 'z/OS ISPF Dialog Tag Language Guide and Reference' with a 'zOS' tag. Below the title are links for 'Previous topic', 'Next topic', 'Contents', 'Contact z/OS', 'Library', and 'PDF'. The main heading is 'Dialog elements'. Below this, the topic identifier 'z/OS ISPF Dialog Tag Language Guide and Reference SC19-3620-00' is shown. The text states: 'This topic provides a descriptive overview of the dialog elements you can create for an ISPF application.' Below this, it says 'These elements include:' followed by a list of links: 'Application panels', 'Help panels', 'Messages', 'Application command table', and 'Key mapping lists'. The footer contains links for 'Contact', 'Privacy', 'Terms of use', and 'Accessibility'.

IBM Knowledge Center

English

dialog

Search Filters: ISPF for z/OS x Auto-select Clear All Add Products...

Table of Contents

Back to all products

ISPF for z/OS

ISPF

ISPF

z/OS ISPF Dialog Developer's Guide and Reference

z/OS ISPF Dialog Tag Language Guide and Reference

First Edition (September 2013)

Abstract for ISPF Dialog Tag Language Guide and Reference

Where to find more information

Guide to the Dialog Tag Language (DTL)

Introduction to the Dialog Tag Language (DTL)

Why the Dialog Tag Language (DTL)

What is the Dialog Tag Language?

Dialog elements

Variables and variable classes

What is the ISPF conversion utility

How to use the Dialog Tag Language

Getting started: designing application

Search Results

Topic View

ISPF > ISPF > z/OS ISPF Dialog Tag Language Guide and Reference > Guide to the Dialog Tag Language (DTL) > Introduction to the Dialog Tag Language (DTL) > Dialog elements

**z/OS ISPF Dialog Tag Language Guide and Reference**

[Previous topic](#) | [Next topic](#) | [Contents](#) | [Contact z/OS](#) | [Library](#) | [PDF](#)

## Dialog elements

z/OS ISPF Dialog Tag Language Guide and Reference  
SC19-3620-00

This topic provides a descriptive overview of the dialog elements you can create for an ISPF application.

These elements include:

- [Application panels](#)
- [Help panels](#)
- [Messages](#)
- [Application command table](#)
- [Key mapping lists](#)

[Application panels](#)

[Help panels](#)

[Messages](#)

[Application command table](#)

[Key mapping lists](#)

[Contact](#) | [Privacy](#) | [Terms of use](#) | [Accessibility](#)



## 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 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



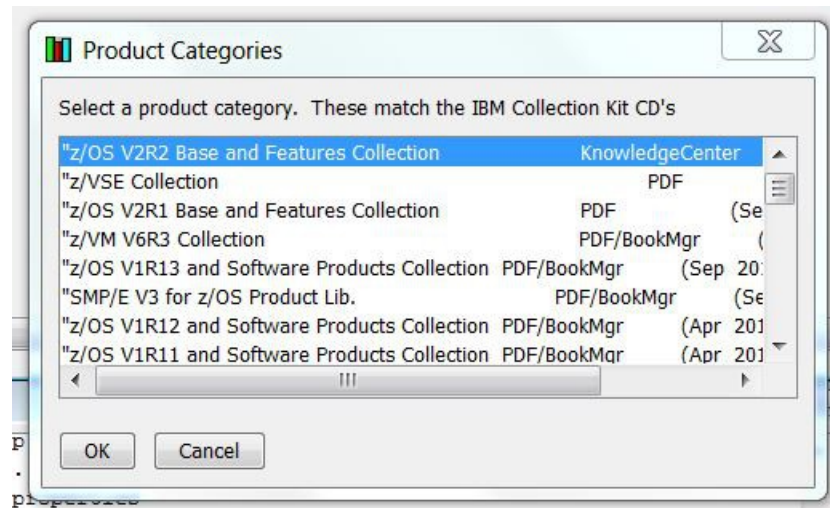
## Usage & Invocation

### 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



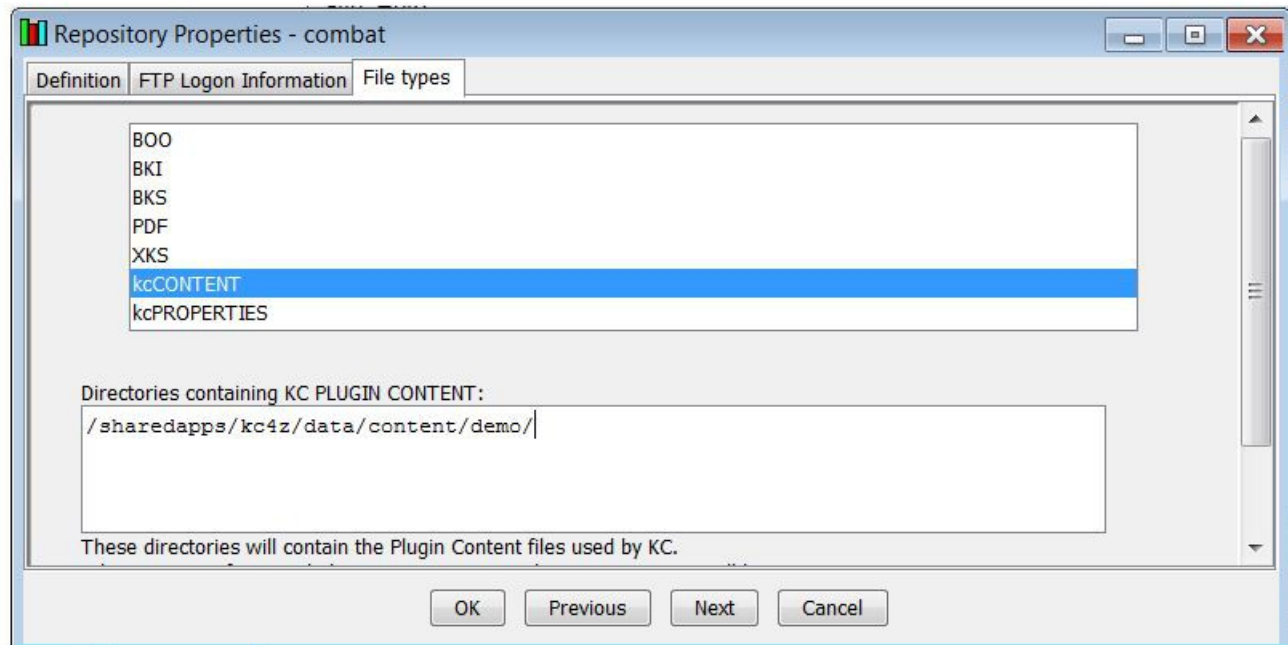


# Usage and Invocation: Display KC plug-ins within selected Collection

Internet - z/OS V2R2 Base and Features Collection KnowledgeCenter (Sep 2015)					
File Edit Options Help					
Title	Status	Filename	Date	Size	Files
z/OS V2R2 Knowledge Center	New	c2747470.zip	Oct 20, 2014	1.73	52
Total no. of objects : 1					

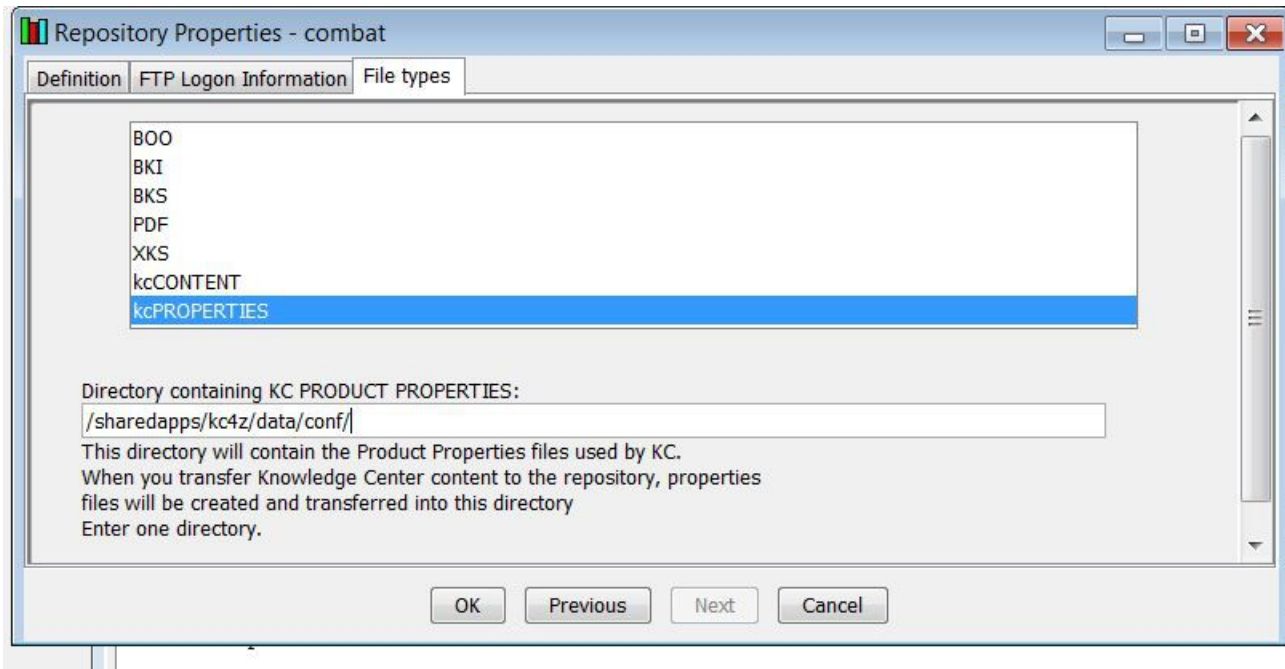


## Usage and Invocation: Configure KC Content target for z/OS Repository

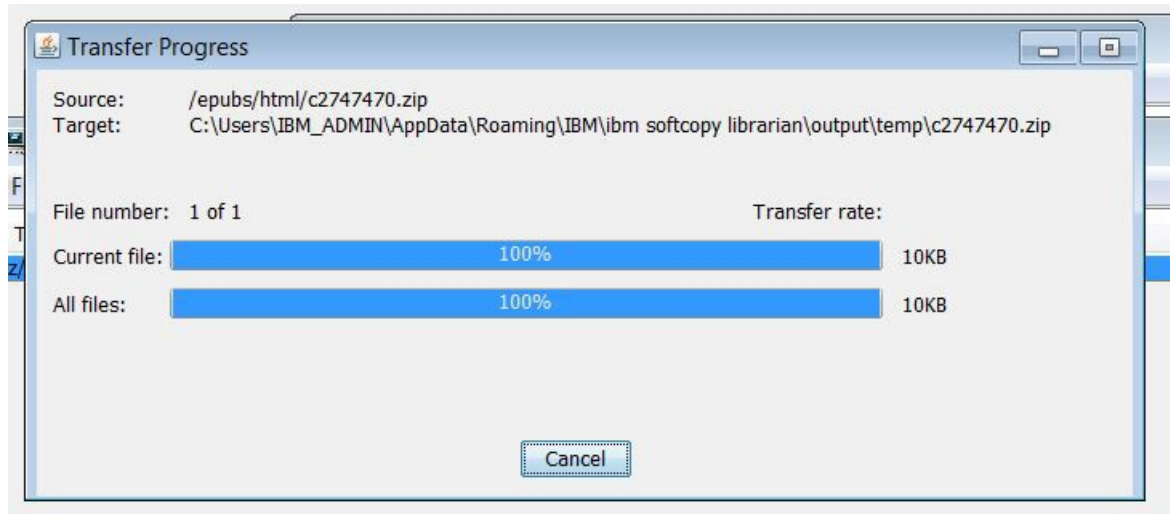




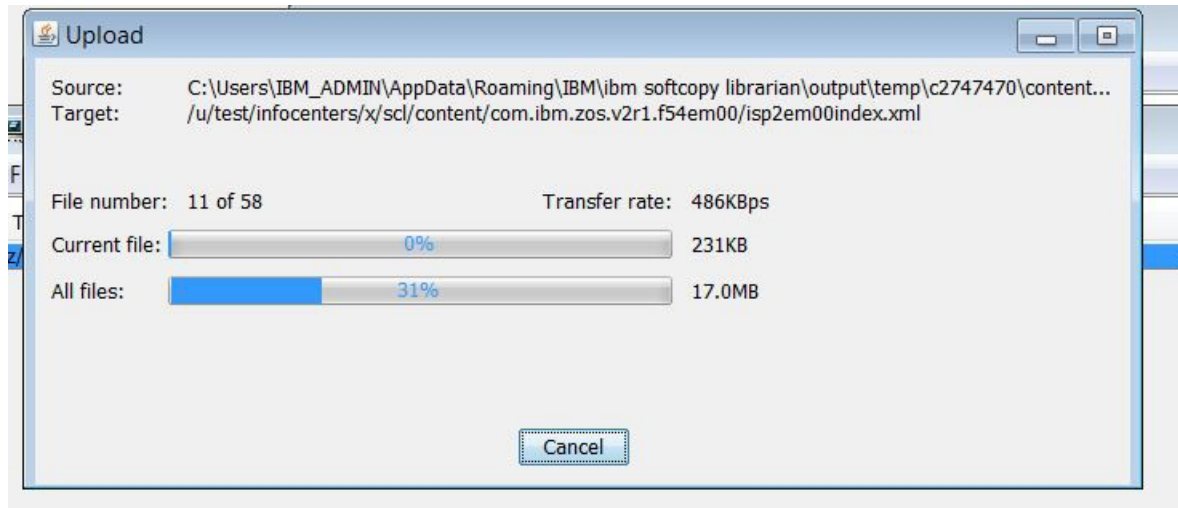
## Usage and Invocation: Configure KC Properties target for z/OS Repository



## 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



## 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/>

