

# 13085: The Future of z/OS Documentation Delivery is here!

Thursday, February 7, 2013: 3:00 PM-4:00 PM

Franciscan B, Ballroom Level (San Francisco Hilton)

Speaker: Geoff Smith(IBM Corporation)





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Infoprint\* SYSREXX\* z/Architecture\* DFSMSdfp Language Environment\* System i\* 7/OS\* **DFSMShsm** Lotus\* z/VM\* System p\* DFSMSrmm MQSeries\* SystemPac\* z/VSE **DFSORT** OMEGAMON\* System Storage zSeries\* Domino

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### **Abstract**

### 13085: The Future of z/OS Documentation Delivery is here!

• With BookManager going away, this session will provide you with tips and techniques that will make searching information centers fast and easy. Learn how to set up private repositories for installations where security is a priority and no internet connection is allowed. This session will also introduce you to IBM's new strategic information deliverable, Knowledge Center which will provide all IBM documentation in one repository. Learn how to effectively filter and search to get the information you need fast. Future releases of our library will be electronic only. There will be no more physical DVD collection kits. Learn tips on how to leverage this new delivery and make sure you and your colleagues have the latest information. We will also discuss the future of the very popular LookAt message facility.



# Our Documentation Surveys – We listen to you

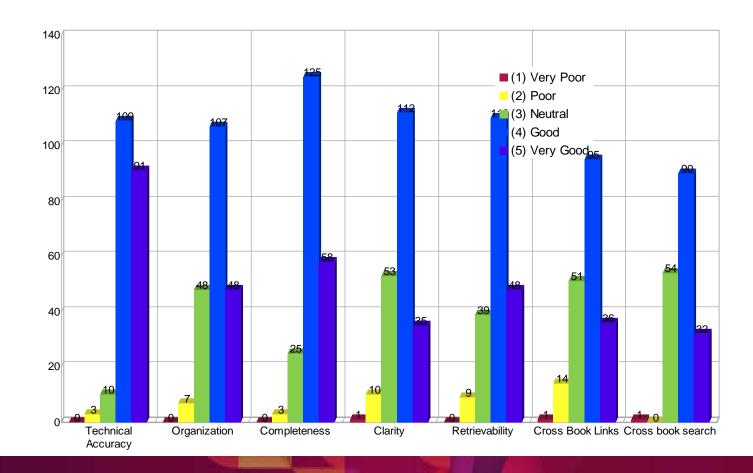




## About our z/OS Documentation Surveys

■ The surveys are distributed twice a year at SHARE. Typically we watch the trends to ensure we are always improving

#### Rate the z/OS Documentation



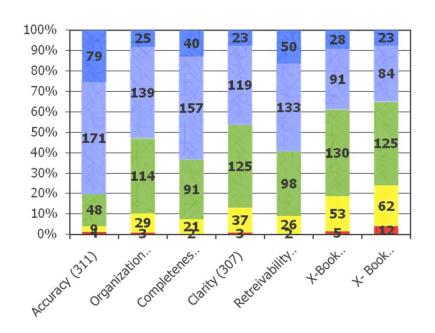


### **Our Scorecard**

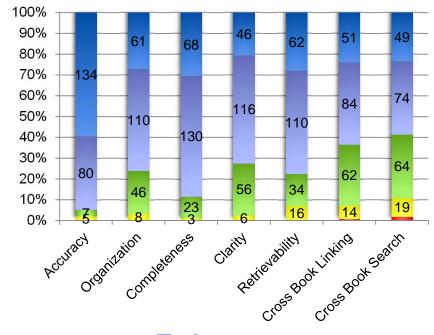
- An example of how we track our quality.
- These charts show how our customer satisfaction has improved over time.

On a scale of 1-5 where:

- 1 = Very Dissatisfied
- 2
- **3**
- **4**
- 5 = Very Satisfied



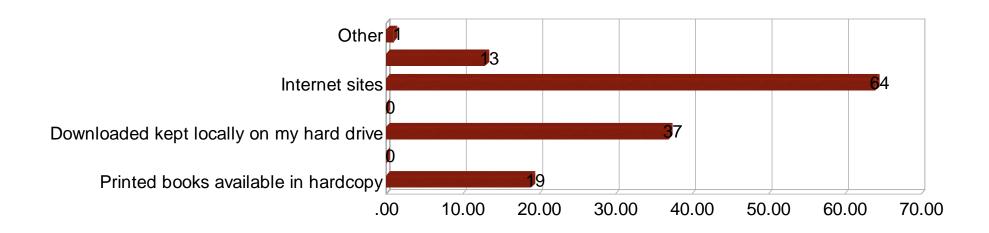




**Today** 



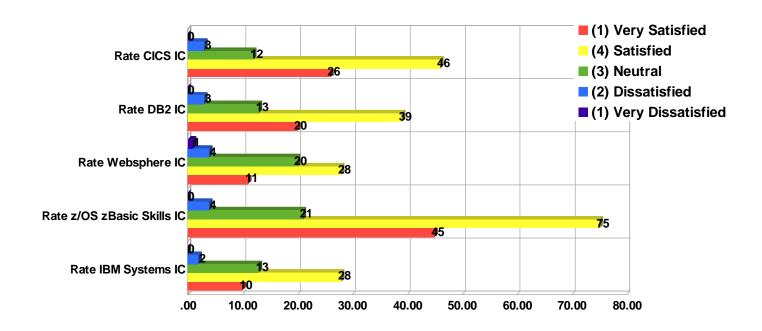
We ask questions to determine how you use our information in emergency situations to better understand your requirements





### **Rate IBM Information Centers**

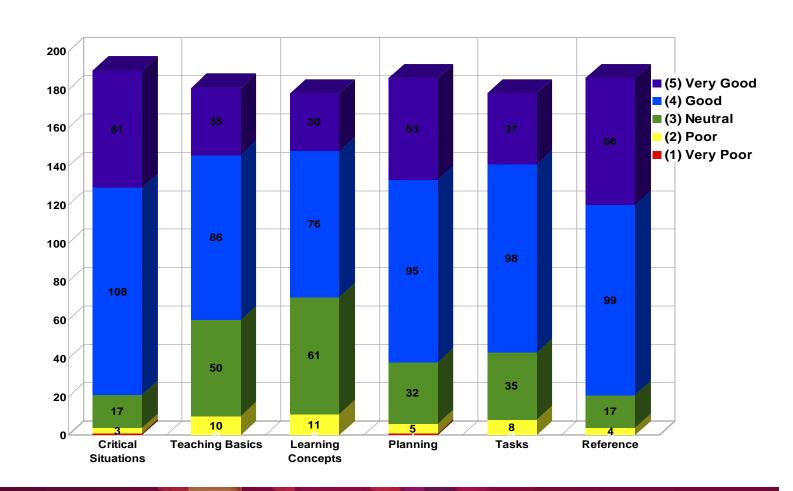
#### **Rating Various IBM Information Centers**





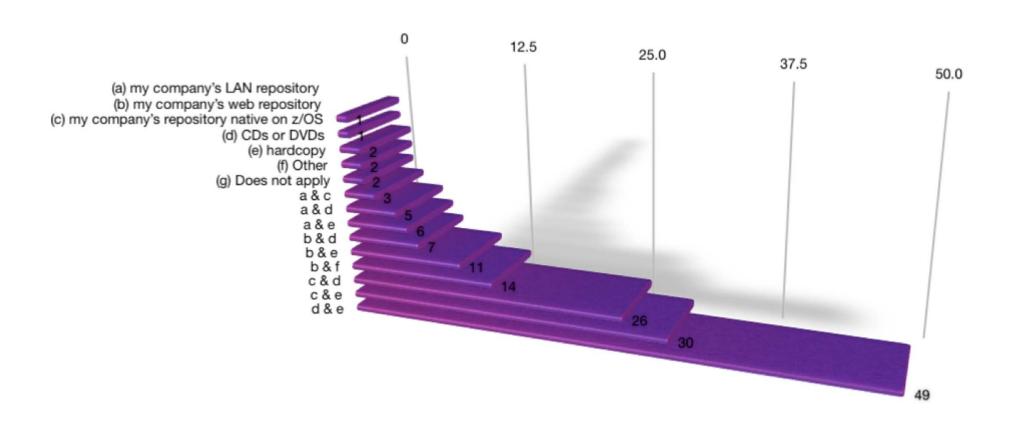
## Rate Our Documentation in the Following Situations

#### **Customer Satisfaction on Documentation for Various Situations**





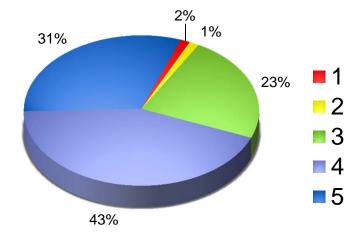
If you have an "Island" environment (a system in a room where there is no internet access), what are your top two choices for accessing z/OS documentation?





# Rate your satisfaction with BookManager's PDF search

- For a long time, customers requested a PDF search that was as robust as BookManager, so two years ago, we introduced IBM Advanced Linguistic Search for PDF, which uses BookManager indexing to improve PDF search.
- It takes time for customers to discover new offerings. (It was 5 years before LookAt was well known).
- PDF search is extra effort for ID shops and we wanted to know if it was worth the effort in continuing to produce indexed PDFs.
- This chart shows that PDF search is an overwhelming success and so we will continue to deliver it.





## Listening to the customer

### A sample of the improvements made over time as a result of SHARE feedback

z/OS Customer Requirements	Deliverables
Help me manage softcopy documentation	Softcopy librarian and DVD collections XKS support to manage PDFs
Give me access to information on the go.	Hand-held support for Library Server
Make it easy to find message information	LookAt and LookAt mobile
Faster access to command information	Command filtering in library centers
Provide a BookManager like search for PDF	The IBM Advanced Linguistic Search for PDF and z/OS base indexed PDFs
Provide a central repository for all z/OS information	z/OS Library Centers contain base, plus software products information
I want to Google z/OS information	We delivered the z/OS Information Centers indexable by Google
Free education materials for the newbie	z/OS Basic Skills Information Centers



### Examples of Improvements in plan for 2013

### Requirements

- Improve information currency
- Provide free education materials for people new to z/OS
- Enable large systems thinking at universities
- Improve search

#### **Deliverables**

- Working on implementing quarterly refreshes
- Eliminate physical DVD collections giving us more time to incorporate late changes.
- Continue to work with the skills initiative.
- Investigating doing quarterly updates.
- Participate in Knowledge Center pilots and testing search. KC brings all documentation together into one website.

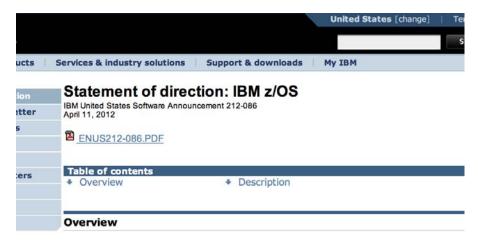


# **New Directions**





### IBM z/OS Statement of Direction - April 11th, 2012



Since its initial release in 2001, IBM® z/OS® Version 1 has delivered over 11 years of value, c IBM System z® and providing our customers with the foundation to run their most critical busin The z/OS journey continues with new efforts to drive value while reducing complexity. In supprefforts, IBM plans to introduce a new version of the z/OS operating system, z/OS Version 2, wit released in the second half of 2013 as part of a new two-year release cycle. As the System z p to deliver value for smarter computing, IBM intends that z/OS Version 2 serve as the foundatio capabilities. This is an exciting time for IBM and for you, our customers, as we prepare new ve and z/OS Management Facility (z/OSMF) to be delivered through a release schedule that is in well with your business requirements.

Going forward, IBM intends to make new z/OS and z/OSMF releases available approximately Such a schedule would be intended to provide you with sufficient time to plan for new release them for the most business value. In addition, beginning with z/OS Version 2, IBM plans to pro z/OS support, with three years of optional, fee-based extended service (5+3) as part of the new cadence. Beginning with z/OSMF Version 2, IBM also plans to provide five years of z/OSMF susimilar to z/OSMF Version 1, optional extended service is not planned to be available for z/OS

In addition, in z/OS V2.1, IBM plans to further leverage enhancements in the current IBM main and storage control units. z/OS V2.1 is planned to IPL only on System z9® and later servers. A 2 is planned to require 3990 Model 3 (3990-3), 3990 Model 6 (3990-6), and later storage cont

- With z/OS V2.1, our product documentation is planned to "go green" with electronic delivery of documentation over the Internet, replacing delivery of documentation using physical DVDs. This change is intended to result in higher quality documentation and better information currency. To meet customer requirements for easier search and access of information and to modernize our documentation delivery processes, we will focus on Information Center delivery of the z/OS product documentation and discontinue the use of BookManager® format.
- Among the many advantages of information centers are that their content can be found using search engines such as Google and often represent the most current content. For customers requiring offline access to documentation, IBM plans to provide a downloadable version of the documentation in the Information Center. For users who do not need the entire product library, IBM plans to continue to provide PDFs for individual documentation download. The local Information Center provides built-in functions to keep content up-to-date and is also planned to contain a predefined search scope for z/OS Elements and Features message information.



### **All Content is Now in DITA**

- IBMIDDOC's book structure makes information reuse difficult and makes it hard to create solutions documentation
- IBMIDDOC had no inherit structures or information types to ensure completeness
- –DITA uses information types or templates that help ensure that all the information needed to do a complete a task is present. For example, the message specialization requires that authors and development provide enough information to make diagnosis and error resolution easier.
- DITA is article based and that makes information easier to reuse and repurpose for new solutions.
- DITA is an industry standard that ISVs and business partners can use so we have information coded in a common format





### z/OS V1R13 is the Last Release we will offer BookManager Format

- z/OS V2R1 will be the last release that BookManager Build for MVS will be supported
- At this time we plan to continue to ship READ/MVS
- Softcopy Librarian and Softcopy Reader will still be available "as is"
- For customers who want to host our documentation on the platform, Library Server will continue to be enhanced with XKS search, and improved XHTML plugin support, and improved PDF indexing.



## z/OS Documentation Strategy

### z/OS V1R13

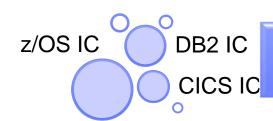
Book Manager
Information Centers
Indexed PDFs

### z/OSV2R1

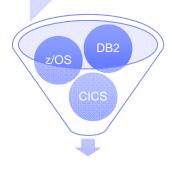
Information Centers
Indexed PDFs

# Beyond

Knowledge Center Indexed PDFs



**KC Consolidates Info Centers** 



Knowledge Center



### V1R13 thru V2R2 We will have only two output formats:

### ALS indexed PDF (PDFs that search like BookManager)

#### •HTML based Information Centers

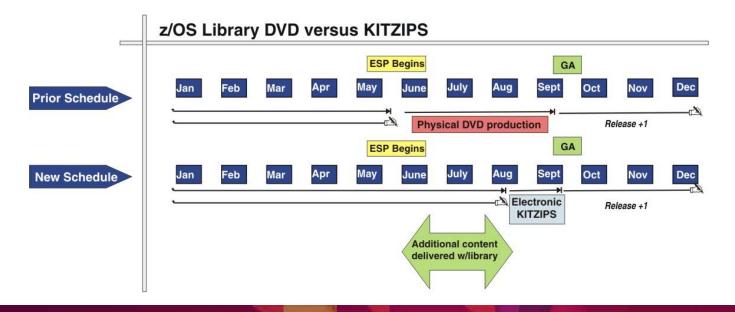
ALS Indexed PDFs are PDFs with linguistic search index built in Information Centers are based on an IBM variant of the open source Eclipse help system. All information is in HTML doc.zip files that are easily indexed by Google and similar search engines.

IBM corporate information development is investing in DITA, information centers and other emerging technologies and z/OS documentation will benefit



### We Started in September 2012 - Electronic Delivery Only

- We no longer manufacture physical DVDs
- Instead we offer KIT Zips
- Cutting out manufacturing time gives our writers and developers more time. It moves the cutoff point further out, improving accuracy and quality
- It also makes it easier to make more frequent updates.
- We are hoping to update our documentation four times a year





### September 2012 updates to the z/OS V1R13 Library

In addition to the traditional z/OS V1R13 Library refresh in April 2012, z/OS ID published 42 publications in September 2012 in support of:

- IBM zEnterprise Enterprise Class (EC12) (numerous updates throughout the library)
- RSM Enablement Offering (numerous updates throughout the library)
- IBM System z Advanced Workload Analysis (zAware) numerous updates including these examples:
  - Preparing for z/OS IBM zAware log stream client usage in z/OS MVS Setting Up a Sysplex.
  - The SETLOGR ZAI command for modifying specific system logger IXGCNFxx parmlib parameters in z/OS MVS System Commands.
  - AIZ messages in z/OS MVS System Messages, Volume 1
  - z/OS IBM zAware example usage of IXGCNFxx member in z/OS MVS Initialization and Tuning Reference.
- Numerous service items: PTFs, APARs, input from Reader Comment Forms (RCF), and fixes



### New in the z/OS Library for z/OS V2R1

#### **New publications (information units):**

- IBM System z Advanced Workload Analysis Reporter Guide: Describes IBM zAware, which is firmware that consists of an integrated set of analytic applications that monitor software running on z/OS and model normal system behavior. Pattern recognition techniques identify unexpected messages and can IT personnel correct problems before they affect system processing.
- IBM z/OS Management Facility: Programming: This new book is intended for customer programmers who use the application programming interfaces provided with z/OSMF. In V2R1, these services are:
  - z/OS Jobs REST interface services
  - In addition, new z/OSMF enhancements are designed to help you achieve more standardized management processes, automate repeatable tasks, and improve process quality. Look for a host of enhancements in z/OSMF in V2R1
- z/OS Font Collection: This book contains an overview, basic concepts, and describes the fonts in the z/OS Font Collection. This book replaces IBM AFP Fonts: Font Summary for AFP Font Collection, \$544-5633.
- IBM Infoprint XT for z/OS: Transforms line-conditioned data streams (LCDS) or meta code data streams to AFP format.
- Communications Server Glossary: Location details are still TBD. The Communications Server glossary contains all the terms necessary for a deeper understanding of TCP/IP, SNA, and networking.



### Changes to the z/OS z/OS Library in V2R1

#### **Changed information units:**

- z/OS Migration: This publication has been redesigned for usability purposes. Find N-1 and N-2 in one information unit instead of multiple volumes.
- z/OS Information Roadmap: has been completely rewritten to describe how IBM delivers information in 2013.

#### **Consolidated information units:**

z/OS MVS Product Management includes z/OS Product Registration as an appendix.

#### Removed from the library:

- DFSMS/MVS Support for the Magstar 3590 E1x Tape Drive, SC26-7316
- FFST/MVS FFST/VM Operations Guide, SC31-8604-01
- MVS Batch Local Shared Resources. GC32-0934
- z/OS HCD Reference Summary, SX33-9032
- IBM Encryption Facility for z/OS Client: Licensed Program Specifications, GA76-0405. Find it now on this website: http://www-03.ibm.com/systems/z/os/zos/encryption\_facility/

### Replaced in the library:

- IBM AFP Fonts: Font Summary for AFP Font Collection (Replaced: z/OS Font Collection)
- IBM WebSphere Application Server OEM Edition (Moved to z/OSMF Configuration Guide)
- IBM z/OS Management Facility Messages, SA38-0656 (Shipped with z/OSMF User Interface and the z/PSMF information center)



### New element-specific problem determination in z/OS Problem Management

### **New problem determination information**

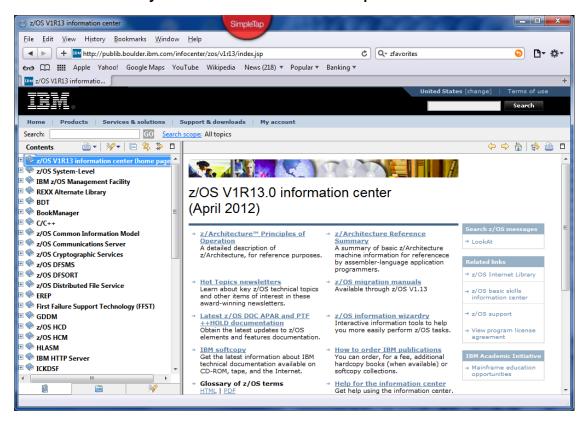
- z/OS Problem Management now contains new and improved component-specific problem determination information in addition to Predictive Failure Analysis and Runtime Diagnostics.
  - Check out the new RRS-specific material in the September 2012 version.
  - Look for more component-specific information in V2R1 such as XCF-XES, JES3, z/OS UNIX System Services (as much as we can get into the book before GA).
- To find z/OS Problem Management easier, look for it on the system level and MVS book shelves and information center categories:
  - http://www-03.ibm.com/systems/z/os/zos/bkserv/r13pdf/#IEA
  - http://www-03.ibm.com/systems/z/os/zos/bkserv/r13pdf/#E0Z
  - http://publib.boulder.ibm.com/infocenter/zos/v1r13/index.jsp
- Please send Jodi Everdon your feedback about these improvements or any topics you wan to see covered: <a href="mailto:mhvrcfs@us.ibm.com">mhvrcfs@us.ibm.com</a> or jeverdon@us.ibm.com





### **Information Centers**

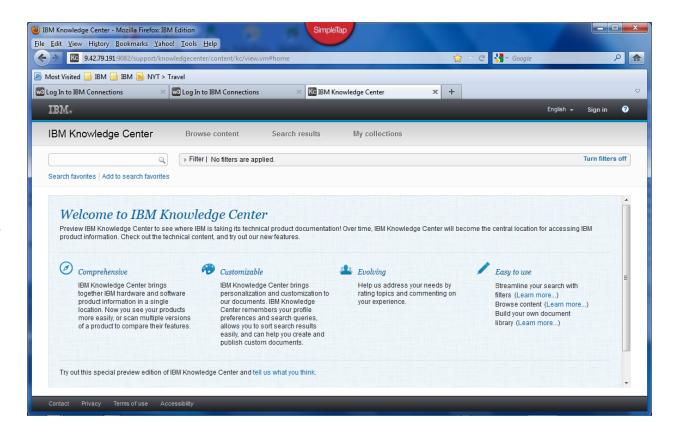
- Can be indexed by Google and other search engines
- Have flexible search scopes that you can save and re-use
- HTML plug-ins can be downloaded to easily create customized repositories
- Easy to update
- Next step...





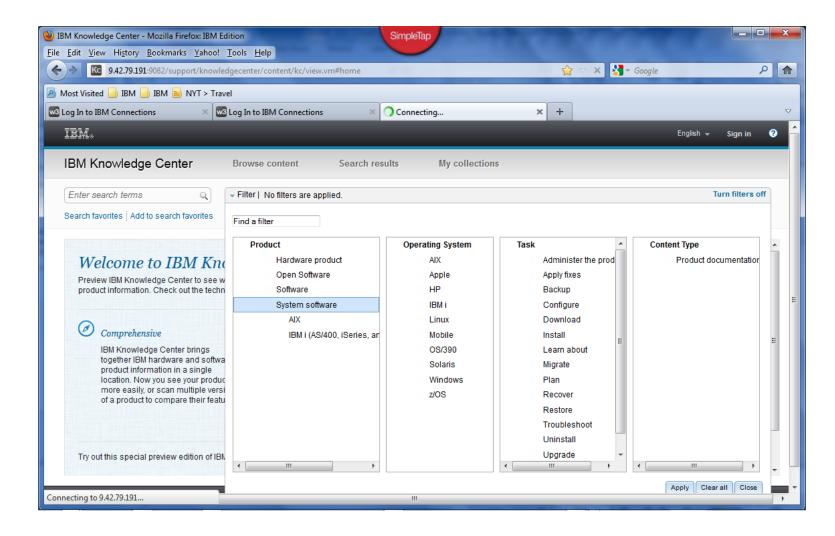
### **IBM Knowledge Center**

- Corporate direction
- Initially all IBM documentation in one repository
  - z/OS base
  - Software Products
  - Multiple releases
  - Replace Information Centers
- Filter and search by platform, product, release, information type
- Scoped search will replace LookAt
- Goal is to eventually integrate
  - Redbooks
  - Support
  - One stop shopping





### **Knowledge Center Filters**



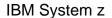




### z/OS Hot Topics Newsletter

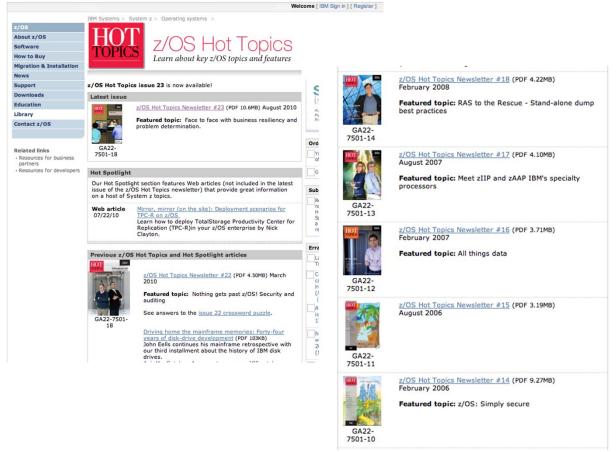
- Easy-to-use, hands-on, technical information not often found in standard z/OS product references.
- Articles by z/OS designers, testers, developers and service.
- Emphasis on presenting technical information in a lively, informal manner.
- Published semi-annually to coincide with the SHARE user conference.
- Latest issue: GA22-7501-21, issue 25 Learn about how z/OS is making a smarter planet.
- Announcement: Starting this year, Hot Topics will produce one issue annually







undreds of articles online at the Hot Topics website



http://www.ibm.com/systems/z/os/zos/bkserv/hot\_topics.html

29

Need to replace with updated Web site for Hot Topics IBM\_USER, 2/16/2011 JJG1





# Your feedback is important to us

- Do you have a favorite z/OS function or product that you want to learn more about?
- Have you found any recent articles to be especially helpful?
- Would you like to see more articles about System z hardware, such as specialty engines and storage devices?
- Are there other themes that you'd like us to devote an issue to?

Drop us a line and let us know at newsletr@us.ibm.com

(the e-mail address is posted inside the front cover of every issue)



# z/OS Documentation Strategy Update





### Why Are We Discontinuing BookManager Format?

- When BookManager was prominent and everything was in BookManager format, have it was easy to platform wide repositories that you could easily search across.
- With the advent of the internet the IBM corporate information strategy has been to move away from books and optimized documentation for article-based, internet friendly Information Centers.
- IBM devised a new XML based markup language called Darwin Information Typing Architecture (DITA) to better facilitate article based writing. Although developed internally by IBM, DITA has been adopted externally as a standard markup language for technical documentation. That widespread adoption make it easy for ISVs and other vendors to develop documentation that integrates better with IBM content.
- In addition to it's article based structure, DITA reinforces writing better technical content through its use of specializations for various types of information. These specializations are similar to templates that reinforce consistency and completeness. Articles also make it easier to reuse and recombine information which is helpful in documenting new solutions.
- While authoring in DITA and delivering content as articles has become easier over time, authoring and producing BookManager format has become more difficult. Software products that run on z/OS have nearly all moved from BookManager to DITA and Information Centers. There is no longer an easy way to produce BookManager format on a workstation.



Books to Article based information centers







To learn more about DITA see <a href="http://en.wikipedia.org/wiki/Darwin\_Information\_Typing\_Architecture">http://en.wikipedia.org/wiki/Darwin\_Information\_Typing\_Architecture</a>.



### Accessing z/OS Information Offline

• If you have an island or isolated system, where for security or other reasons, no internet connection is allowed, you have two choices for standalone information:

IBM Library Server, formerly known as IBM BookServer ships with z/OS. It indexes BookManager books, well structured PDFs and Eclipse helps system HTML.ZIP plug-ins. Customers can use Library Server to host a central repository of documentation native on z/OS. This is useful for disaster recovery and in situations where no outside connections the z/OS are allowed.

IBM Eclipse Help System (IEHS), is the current strategic framework for delivering online help, and Information Centers. The content is typically in HTML format, so you can think of IEHS as a mini website. Standalone versions are available for the windows platform and can be ordered or in many cases, downloaded from the IBM Publications Center, and installed on a laptop or workstation inside the secure environment. A single information center can be accessed by anyone inside who has access to the secure area network.



... z/OS V1R9 LibraryCente

(April 2012)



Downloadable Information Center

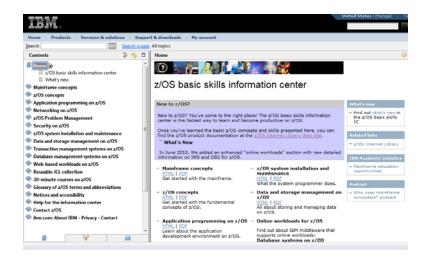


### Key Advantages of Information Center Delivery

#### Information centers are:

- Are Internet friendly (easily indexed by Google and other search engines)
- Are non-proprietary (HTML and XML) makes it easier for ISV integration
- Have extensible function due to plug-in architecture
- Can take advantage of ever evolving internet technologies such as:
  - The Semantic Web
  - Collaboration, RSS, Social media
- Can easily incorporate interactive elements such as, wizards, calculators, dynamic tables, and multimedia
- Modular, article-based information rather than books will make it easier to create solution-oriented information
- Easier and faster updates to improve content quality and correct errors
- Have a built in update function so when updates are available it make it easy to download and install them.







### The Benefits of The Changes

#### The move to DITA will improve information quality over time:

- IBMIDDOC's book structure makes information reuse difficult and makes it hard to create solutions documentation
- IBMIDDOC had no inherit structures or information types to ensure completeness
- DITA uses information types or templates that help ensure that all the information needed to do a complete a task is present. For example, the message specialization requires that authors and development provide enough information to make diagnosis and error resolution easier.
- DITA is article based and that makes information easier to reuse and repurpose for new solutions.
- DITA is an industry standard that ISVs and business partners can use so we have information coded in a common format

#### ■Two output formats: ALS indexed PDF and HTML based Information Centers

- ALS Indexed PDFs are PDFs with linguistic search index built in
- Information Centers are based on an IBM variant of the open source Eclipse help system. All
  information is in HTML doc.zip files that are easily indexed by Google and similar search engines.
- IBM corporate information development is investing in DITA, information centers and other emerging technologies and z/OS documentation will benefit

#### •Electronic delivery (only):

- Because we do not have a physical manufacturing process for DVDs, we have more time and can work on improvements to technical content (6 week weeks from GA instead of our current 6 months).
- Electronic only makes it easier to update our information and improve information currency.



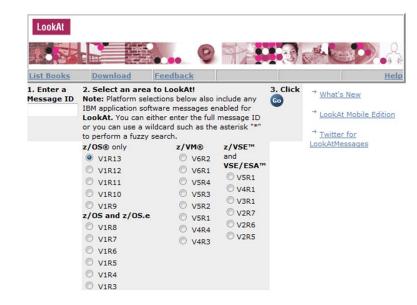
#### What is an ALS Indexed PDF?

- Advanced Linguistic Search was developed by IBM as a result of SHARE feedback where customers wanted a PDF with it's superior print capabilities that searched like BookManager (Instead of a simple find).
- ALS was developed by the BookManager team and it essentially infers the structure of the document from the table of contents, and uses this information to weight the search results. A word that is in a chapter title and index will be ranked higher when you view the search results. So the index created is essentially a BookManager index that gets tucked inside the PDF so the index travels with the PDF where ever it goes (unlike other PDF indexing which store the index in a file system).
- Over time we have refined the indexing. The ALS indexing function is part of IBM Library Server. PDFs must have a Table of Contents to be indexed and it helps if the source was a well structured tag based document. (DITA)
- All PDFs in the z/OS base library have been indexed using the IBM Advanced Linguistic Search technology.
- To use it, you download and install the ALS plug-in to the appropriate Adobe Acrobat reader
- Using newer XKS shelves you will be able to search across collections of PDFs similar to BookManager shelves. In z/OS V2, IBM Library Server is being enhanced to provide cross PDF search using XKS shelves.



#### What About LookAt?

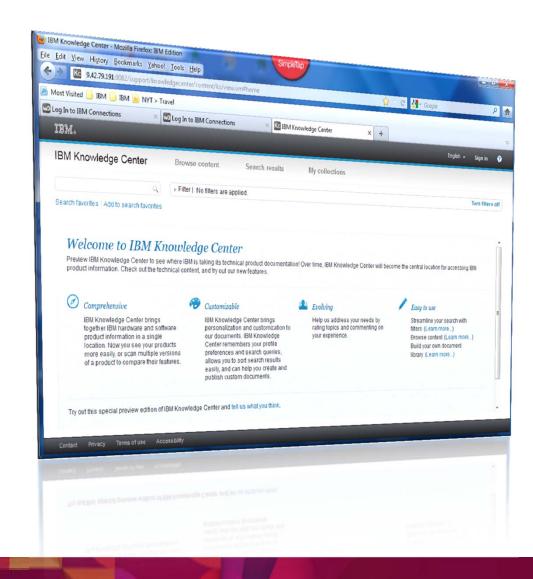
- Since LookAt is BookManager based, we are looking at newer technologies to replace it.
- We will continue to host lookat for the releases that are already out there.
- For newer releases, we will have a replacement based on newer technology
- IBM software products have gradually stopped producing BookManager format, so the integrity of it's search was degraded.
- We are experimenting with pre-defined "message search scopes" in information centers.
- We are also investigating using a new corporate deliverable called Knowledge Center





#### IBM Knowledge Center - Better Search

- Knowledge Center will have all IBM Content in one repository
- One stop shopping for all IBM documentation
- Possibly even incorporating service information
- Users will use filters to select the scope of information they are interested in
- Define search scope
  - Platform=z/OS
  - and
  - Type=Message
- Other search scopes:
  - Commands
  - Tasks
    - Diagnosis
    - Migration
    - Installation
    - And so on





#### **Related Links**

- zFavorites A collection of links all things "z" (Just google zFavorites to find it)
- http://www-03.ibm.com/systems/z/os/zos/zfavorites/index.html
- z/OS V1R13 information center
- http://publib.boulder.ibm.com/infocenter/zos/v1r13/index.jsp
- z/OS Basic Skills information center
- http://publib.boulder.ibm.com/infocenter/zos/basics/index.jsp
- IBM Library Server Support
- http://www.ibm.com/support/entry/portal/Overview/Software/Other\_Software/Library\_Server
   for z~OS
- IBM LookAt
- http://www-03.ibm.com/systems/z/os/zos/bkserv/lookat/index.html
- IBM Advanced Linguistic Search Plug-in for IBM ALS indexed PDFs
- http://www-01.ibm.com/support/docview.wss?uid=swg27018852



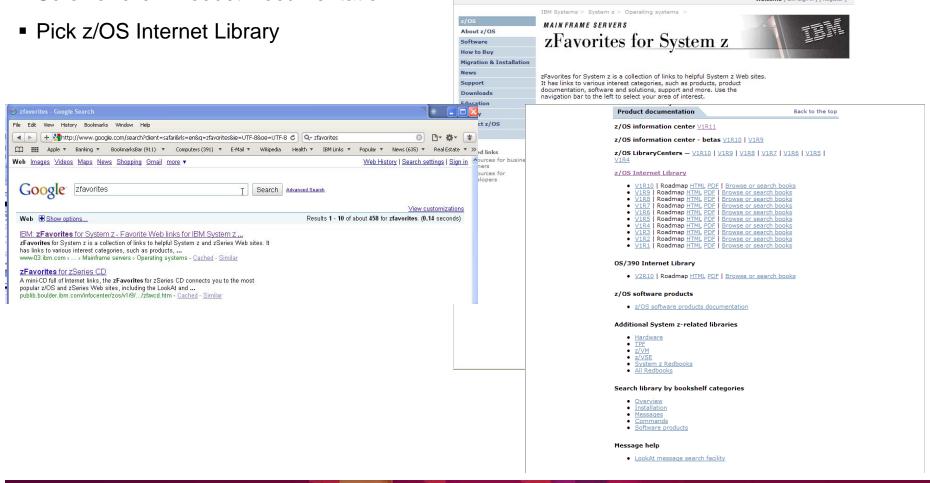
# Searching for z/OS Documentation





#### First, How to Find the z/OS Internet Library

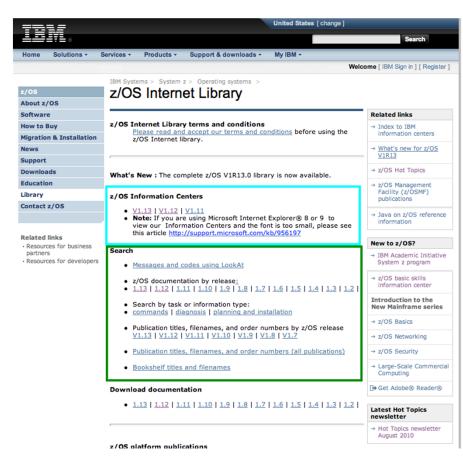
- Google "zFavorites" and pick the top hit
- Scroll or click Product Documentation





#### Searching the z/OS Internet Library

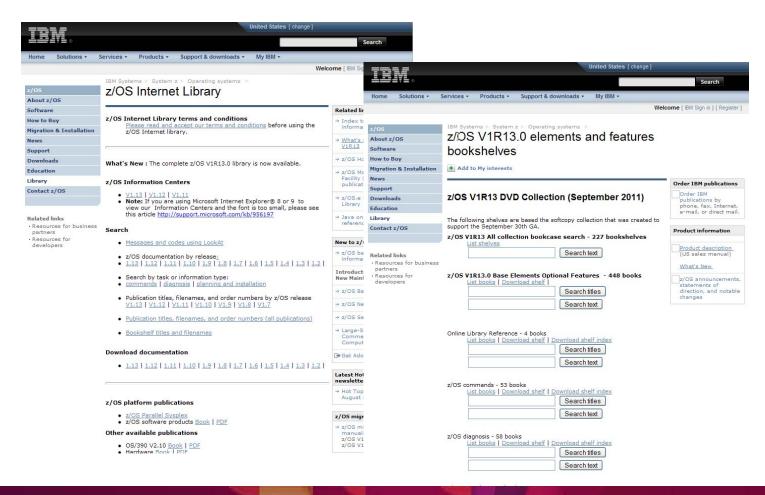
- The z/OS Internet Library features both Information Centers and Library Centers. The Information centers are eclipse based, the Library Centers are driven by IBM's Library Server
- Currently, Information Centers have content on just the base or typically a single product.
- Library Centers have both the base and software products
- Google does a great job pulling the content together today, but we are working on ways to broaden and customize the content for our customers.
- The top search boxes highlighted in turquoise use Information Center search to locate information
- The bottom section shown in green, uses BookManager technology





# z/OS Information Today

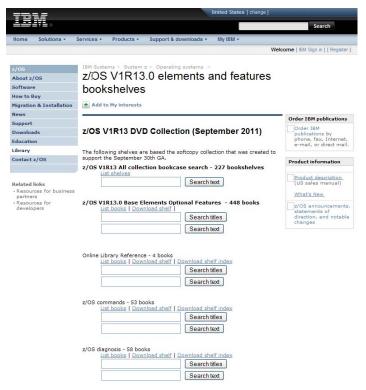
- The Internet library mirrors the z/OS collection kits using IBM Library Server
- We offer both Information Centers (our strategic format) and BookManager via Library Server





# Faceted Search with BookManager

- Bookshelves provide a way to filter and search our large library
- We produce many of these and expose them all which complicates the current library interface







#### **z/OS V2R1**

- Stop producing BookManager format
- The corporate direction has long been HTML based Information Centers
- Almost all software products have already stopped producing BookManager format.
- It's becoming increasingly difficult to produce BookManager format
- Corporate investment has been in DITA XML authoring and Information Center delivery.
- Information centers have many advantages

   the best example is they are indexed by
   Google and other Internet search engines
   making it easier to find information
- Dropping BookManager will naturally change the face of our internet library.





# Various Search Scopes Offered Today Using BookManager

- Search by Element/Feature: provides a shelf for every element. Lets you search just the books in an element library such as all the books in JES2, or MVS, or Comm Server
- Search by reference category: Lets you search by command or message
- Search by task: Lets you search against all the installation/migration books, or problem diagnosis and so on
- Search by form number: If you are familiar enough with the library, some people do a search by form number (minus the suffix lets you see what level is most current.

- Search publication titles: Lets you search by words in titles provides a list of all the books with "install" in the title
- Search by bookshelf title: Lets you search for specific bookshelves
- Search by filename: If you happen to know the filename of the book, this search might be handy
- We have come to SHARE to get your opinion. What search scopes do you use? What search scopes do you want us to preserve?



# What Search Scopes Do You Use Today?

What you use today Helps us determine what we need to offer tomorrow.

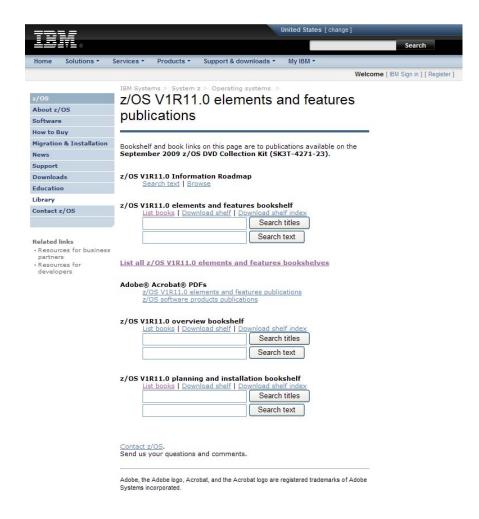
Input from your surveys will help us determine what predefined search scopes will be needed for Knowledge Center

	1=No	t In	nport	ant,				
Type of Search or search by	5=Very important							
	?=Do	not	kno	W				
z/OS Release (V1R12)		1	2	3	4	5	?	
Book Filename		1	2	3	4	5	?	
Form Number		1	2	3	4	5	?	
Book Title		1	2	3	4	5	?	
Bookshelf title		1	2	3	4	5	?	
By Element or Feature (MVS)		1	2	3	4	5	?	
By Message		1	2	3	4	5	?	
By Command		1	2	3	4	5	?	
By Tasks (ex. Installation)		1	2	3	4	5	?	
By Date		1	2	3	4	5	?	
By APAR		1	2	3	4	5	?	
Other:		1	2	3	4	5	?	
Other:		1	2	3	4	5	?	
Other:		1	2	3	4	5	?	
Other:		1	2	3	4	5	?	



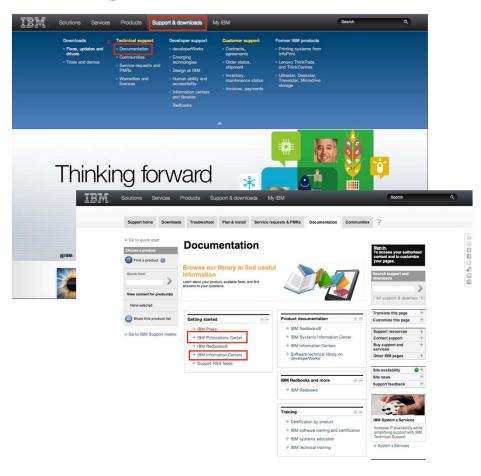
#### **BookManager Shelves**

- The internet library is based on our collection kits. There are 50 + bookshelves to help you narrow your search. There are task oriented shelves such as installation and migration.
- The library is also filtered by z/OS release, so you can pick the release or releases you're running.
- There are specialized searches for messages using our LookAt message lookup facility.
- There is a special shelf for APARS or both z/OS and OS/390
- If you know the title or form number of your book, you can use it to go directly to the book.





#### Finding IBM Documentation



- To find all IBM information centers:
- For online access, go to www.ibm.com, pick support and downloads, documentation, click on continue to get to the main documentation page
- Once on the "Documentation" page click on information centers an scroll to find the IC of interest.
- For local access you can obtain information center DVDs. Go to the IBM Publication Center (you can Google it). Select your language, then search on "Information Center" (not plural) then refine the search by looking for the product name (z/OS, WebSphere and so on)



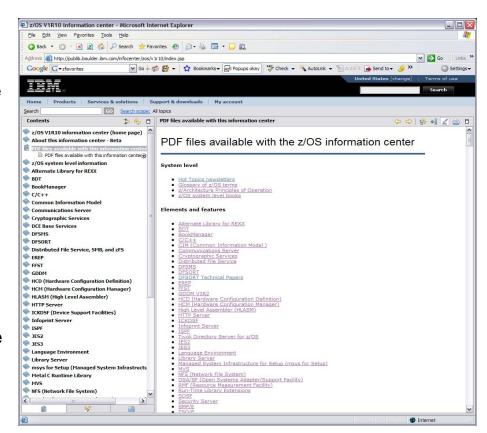
# Information Roadmap to Documentation and Information Centers for System z

Product	URL
All Products	http://www.ibm.com/support/publications/us/library/
CICS Server	http://publib.boulder.ibm.com/infocenter/cicsts/v4r1/index.jsp
CICS Gateway	http://publib.boulder.ibm.com/infocenter/cicstgzo/v7r2/index.jsp
DB2 / IMS	http://publib.boulder.ibm.com/infocenter/dzichelp/v2r2/index.jsp
Lotus	http://www-01.ibm.com/software/lotus/support/information-centers/
Rational Developer	http://www-01.ibm.com/software/awdtools/rdz/library/index.html
Tivoli (Index)	http://www.ibm.com/developerworks/wikis/display/tivolidoccentral/Home
Lotus Notes	http://www.ibm.com/developerworks/lotus/documentation/notes/?S_TACT=105AGX13&S_CMP=LP
WebSphere	http://www-01.ibm.com/software/webservers/appserv/was/library/v70/was-zos/
z/OS V1R11	http://publib.boulder.ibm.com/infocenter/zos/v1r11/index.jsp
z/OS Internet Library	http://www-03.ibm.com/systems/z/os/zos/bkserv/
z/VM	http://publib.boulder.ibm.com/infocenter/zvm/v5r4/index.jsp



# The Basics: Using the z/OS Base Library Information Centers

- All information centers have a listing of all PDFs for all the books
- All of the PDFs in the z/OS Base Library are indexed and searchable using the IBM Advance Linguistic Search
- This search was developed by BookManager and was requested on many surveys. Customers liked the visual presentation that PDFs offered, but wanted the robust search that BookManager format offered.
- Note: z/OS Library Server can be used to index well structured PDFs that have a table of contents.
- Library Server also has the ability to index eclipse information plug-ins.

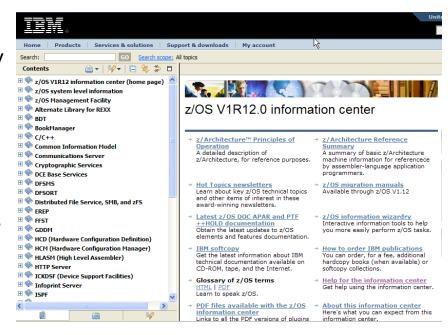


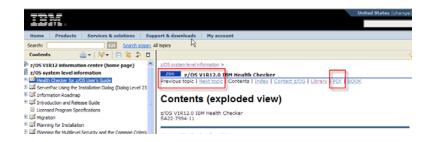
http://www-01.ibm.com/support/docview.wss?uid=swg24024554



#### Navigating the z/OS Information Centers

- Much like the BookManager based Library Centers, we architected our Information Center to be structured by element or feature.
  - This helps users who are familiar with the z/OS library.
  - The arrangement by element and feature makes it easy to do scoped searches that correspond to BookManager shelf search by element.
  - Each "plug-in" includes all the information for that element arranged by their corresponding book titles for familiar navigation.
  - Familiar and popular BookManager
     Library Server functions such as page
     forward and backward, PDF download
     from the menu bar have been added to
     the z/OS information center to make
     the transition to Information centers
     easier

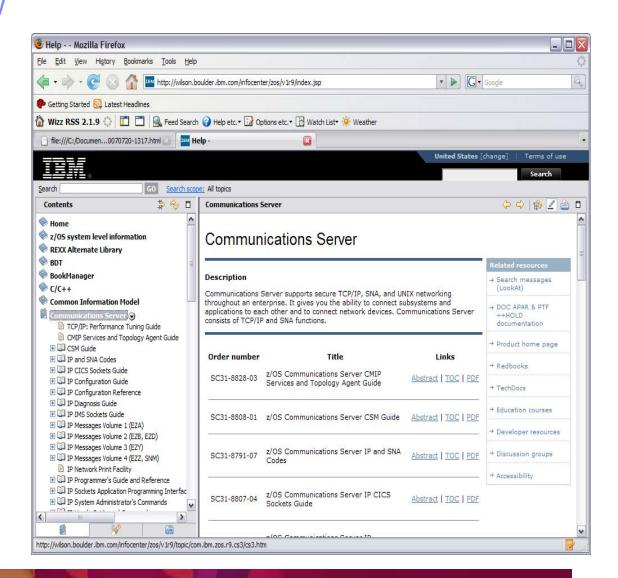






#### Element/Shelf Level View

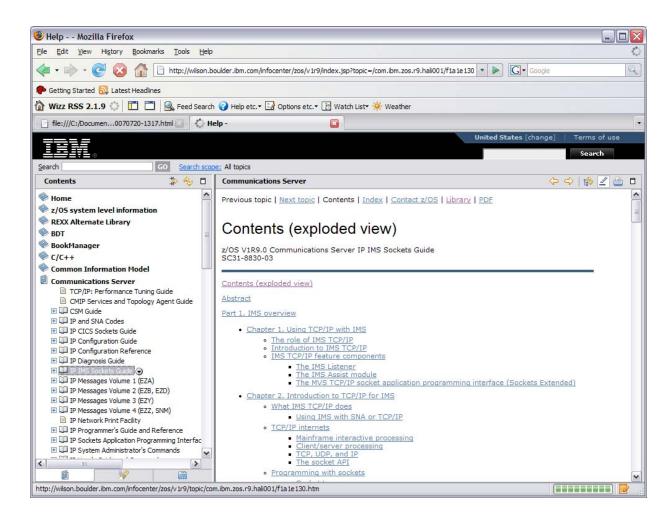
- Each element page has a welcome page listing:
  - A description
  - A list of all the publications and each publication has a link to
    - An Abstract
    - Book table of contents
    - A link to the corresponding PDF to make it easy to download.





# Navigating the Plug-ins

- Navigation provided along the top
- The contents pane is automatic synchronized with the table of contents pane so you always know where you are.
- Page URL clearly displayed at the bottom of each page makes it easy to book mark or e-mail the exact location in the Information Center

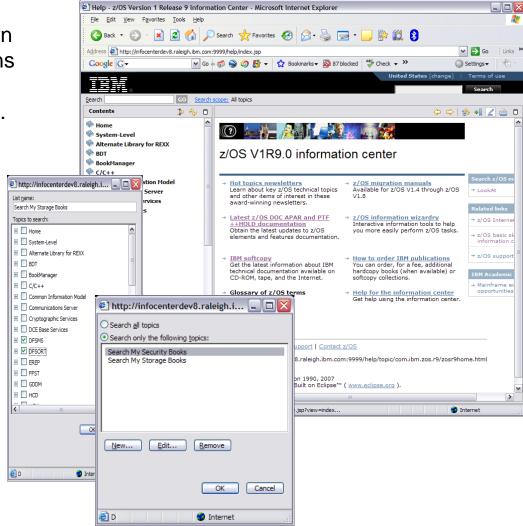




# Re-usable search scopes to help you find things faster

You can think of search scopes as your own personal bookshelves. They are collections of plug-ins that can be composed of individual books or whole libraries of books.

Search scopes are easily created and you can easily modify them.



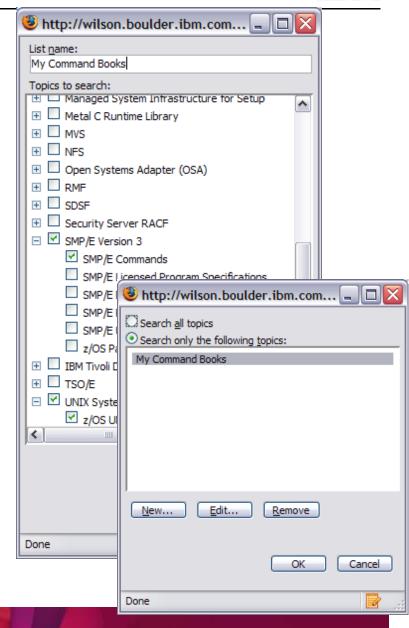


### Create re-usable search scopes

These can be created on the fly and saved for future use. They are similar to BookManager bookshelf searches.

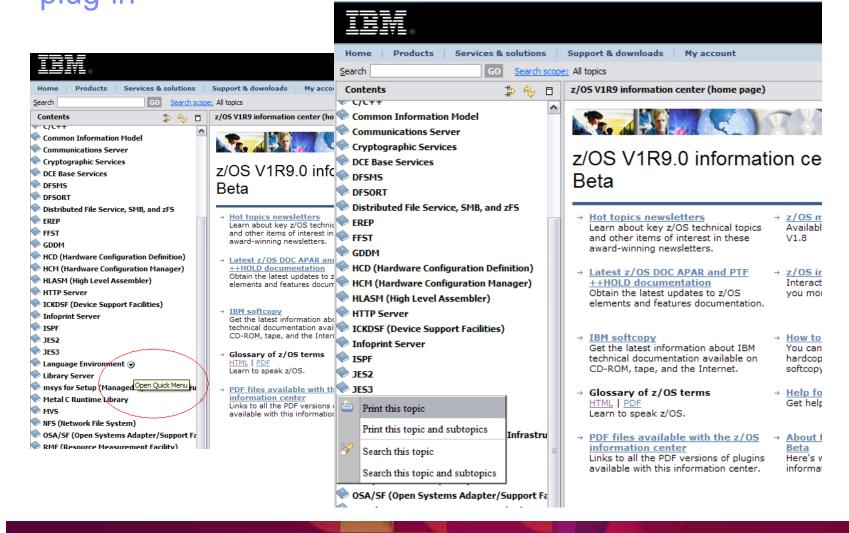
- 1. Click on search scope
- 2. Click on "new"
- 3. Name your search to make it easy to remember "My Command Books"
- 4. Use the check boxes to select the plug-ins/shelves. Or click on the plus signs to drill down to individual books.
- 5. Click OK when to close the selection box.
- Click OK again to return to the Information center and notice that beside search scope it now the name of the search scope you defined (My Commands)
- 7. Enter your search term in the search dialog and click go.

You can create as many search scopes as you wish. Delete them when you don't need them anymore.





Use the quick menus to search or review and print just one plug-in





#### How Do You Access Information "On The Go"

Mobile computing has become pervasive, almost everyone has some mobile device that they use to access content on the go.

- Smartphone
- Tablet
- Laptop
- e-Readers(Kindle, Nook)

Do you use them to access z/OS documentation?

- Quick search with WiFi/Cellular?
- Do you download for offline reading?











#### Collection Kits Have Gone Green

- In future releases of z/OS, we plant to eliminate the manufacture of physical collection kits.
- Instead we will provide downloadable zip files of z/OS documentation.
- This is designed to reduce cost, but more importantly, improve information quality (with out the time required to manufacture physical DVDs, we have more time to enter late technical changes) and improve information currency.
- We are also considering more frequent refreshes of documentation – quarterly on service boundaries.









# **Creating Custom Libraries**



February 2010 update



#### Overview

- Most people have their own private "stash" of documentation for various reasons.
  - There are company or department local area libraries or LALs
  - Many people have their own personal area library or PALs
  - They help:
  - Filter the content to information you need so you can access it faster
  - Local hard drive or flash drive copies are handy for occasions when there is no network or internet access.
  - We will discuss tips for three types of local custom repositories
  - File system based using simple PDF repositories (LAN, intranet or local)
  - Library Server based
    - Easily installed and maintained native on z/OS
    - However, BookManager format is no longer a strategic format
    - Updates are done via softcopy librarian
  - Information Center based
    - Typically installed on a windows workstation
    - It is the current strategic means for information delivery
    - Updates capability is built into the IC framework



#### PDF repositories

- A set of PDF files in a subdirectory (probably the most popular actually) Two tips here:
  - The z/OS base library has indexed all the PDFs on our collection kits to use the IBM Advanced Linguistic search. Included in each PDF is it's own search index To use it you will need to add the IBM ALS plug-in to your acrobat reader. For more information see <a href="http://www-01.ibm.com/support/docview.wss?uid=swg24024554">http://www-01.ibm.com/support/docview.wss?uid=swg24024554</a>
  - The z/OS PDF files on our collection kits have metadata for book titles included.
     Change your view options for directories to turn on titles and you will be able to see the title of the PDF rather than just the filename.



#### Steps to Setting Your Own Repository

#### Library Server

- Note: It's highly recommended that you start to use Information Centers when you create a repository because they are the strategic direction.
- Get a copy of the appropriate level of the z/OS softcopy collection. The softcopy collection includes all the base plus software products.
- 2. Install IBM Library Server on z/OS according to instructions in the program directory.
- 3. How you set up your file system is up to you. Typically, you'd have these directories
  - 1. Books
  - 2. PDFs
  - 3. Shelves
  - 4. Cases
- 4. Copy the files from the DVD to your file system
- 5. Run Catalog to re-catalog the add the new BookManager and PDF files. See LS Demo 1.
- 6. If you want to add IC plug-ins to your repository see the IBM Library Server User's Guide (on your DVD for this session)

#### Information Centers (Recommended)

- Note: Nearly all software products publish only PDF and Information Center format, so it's best to begin to use Information Centers to become familiar with them.
  - If you are going to be working with z/OS, get a copy of the z/OS IC DVD for the level of z/OS you are running. See "How to get content for Information Centers"
  - Install the base per instructions on either your own workstation or a department server. The DVDs all use the Windows version of the IC code.
  - If you want to add other software products to this instance, use "How to get content for Information Centers"
  - 4. See the Appendix article on editing topic maps
  - 5. There is no catalog or indexing step, The first search will invoke an indexing of the materials.

Note: If you need or want to run your information center native on



# **Customizing Your Local Repository**

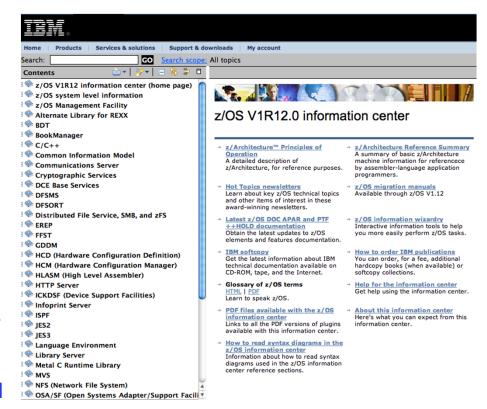
- Library Server
- With a Library Server instance adding new content to a repository is as easy as coping the files and re-cataloging it.
- If you are using IBM Library Server, refer to the IBM Library Server getting started guide to customize your content. Library Server lets you incorporate Information Center plug-ins too.
- IBM Library Server Getting Started
- Note:
- Most people use the internet to look up information, but there are still many z/OS shops rely on a central corporate repository of documentation as backup
- Library Server runs on z/OS and many systems programmers want whatever they depend on to be on the z/OS platform.

- Information Centers
- If you decide to use Information Center technology for your repository. You may decide to create one master repository of just the content you need. Information plug-ins can be take from any information center and using topic maps, arranged in any order you desire.
- Once in place, you don't have to create search indexes. The first time you invoke a search it gets built for you. For information on incorporating other plug-ins see the appendix: Editing Information Centers.



# Information on Running Information Centers from z/OS

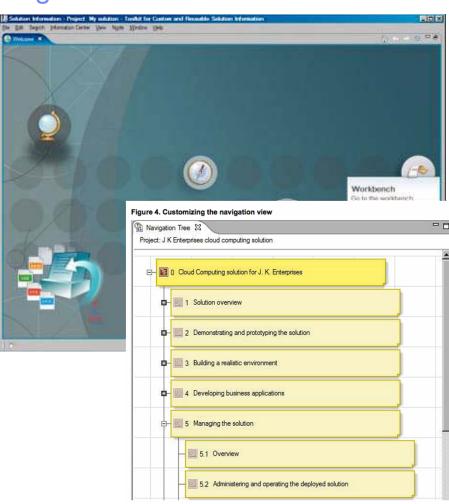
- Tip for the z/OS Centric
- The CICS information center DVD SK4T-2578 contains a distribution of Information Center framework that runs on z/OS. It's not the most current version, but it can probably be used to seed a z/OS based Information Center.
- You can then add z/OS Information Center plug-ins from other information center distributions. To create a consolidated Information Center that is running on z/OS.
- Question: Would you like to see a standard distribution of the Information Center framework that runs native on z/OS?





# "How To" Information on Customizing Information Centers

- Documenting your project using the Eclipse help system: Build easy-to-use and searchable help documentation.
  - <a href="http://www.ibm.com/developerworks/op">http://www.ibm.com/developerworks/op</a> ensource/library/os-echelp/
  - This article teaches you the basics
- Document IT solutions with custom Eclipse information centers, Part 1: Create your first information center
  - http://www.ibm.com/developerworks/op ensource/library/os-eclipseinfocenter1/index.html
  - Shows you how to create your own IC using the GUI Tool kit. (the link is included in the article and the tool is on the handout DVD).





# Appendix A. Update Education and Skills Material





#### Resources for people on the job

- Customers told us they needed help with people they have in their enterprise today
  - Lack of introductory material on z/OS and the mainframe
  - New hires do not have z/OS or mainframe skills
  - Retraining people for retiring main framers is difficult because there is little self-study material available.
- Your Requirements
  - Provide basic foundations for z/OS and Mainframe
  - Provide materials that allow people to learn on the job
  - Must be free!
- Our Solution:
  - z/OS basic skills information center









#### z/OS basic skills information center

- Provides introductory information:
  - -z/OS Basics
  - -Application Development Basics
  - -Systems Programmer Basics
  - -Networking Basics
  - -Security Basics
  - –Reusable JCL Samples (New)
  - -Currently working on
    - Software maintenance
    - Expanding Security Basics
- Interactive tutorials for JCL and ISPF



#### **Now Available:**



- New enhanced information on DB2 and IMS
- New revised section on z/OS Networking

http://publib.boulder.ibm.com/infocenter/zos/basics/index.jsp



#### The IBM Academic Initiative



Membership in the IBM Academic Initiative is free and open to individual faculty members.



A skills initiative – An IBM program that partners with academic institutions worldwide to build a pipeline of skilled students for the IT jobs of tomorrow and skills for a smarter planet.

ibm.com/university/systemz



# IBM System z Academic Initiative External Claims

- 1,082 Schools in 67 countries Participating Schools
- 59,000+ students from 33 countries in mainframe contests Master the Mainframe on facebook
- 3,877 students from 40 countries completed z/OS Entry Level Mastery Test FAQs
- 4,000 students and professionals using SystemzJobs.com job board <u>2 minute video on YouTube</u>
- Resources at no charge for the mainframe community Free resources
- Case Studies (schools teaching z, clients hiring)
   Detailed case studies of 8 schools
- YouTube Videos (click in screen show mode)
   <u>Building Next Generation IT Skills</u>
   The next generation of enterprise systems experts



**Enterprise Computing Education** 



# The Academic Initiative provides resources for...



**Educators** 



**Students** 

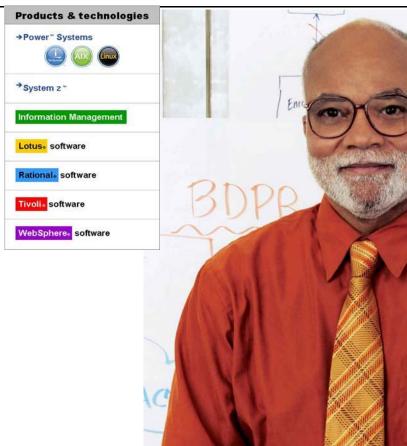


**Professionals** 



## **Resources for Educators**

- Program membership
  - 10 minutes (<u>ibm.com/university/systemz</u>)
- Remote access to IBM Mainframe systems
  - Full software stack available on hub systems
  - WW coverage and support
  - System customization according to skills
- Thousands of software products available for download
- Access to course materials
  - Modules to full semester
  - Foundational to advanced topics
  - Applicable to multiple computing disciplines
  - Presentations, textbooks, labs, exams
  - Teach as is or integrate into existing curricula
- Ongoing Faculty skills development
  - Seminars and workshops
  - Calendar of events
- Connections with the community
  - Roundtable
  - Participating schools



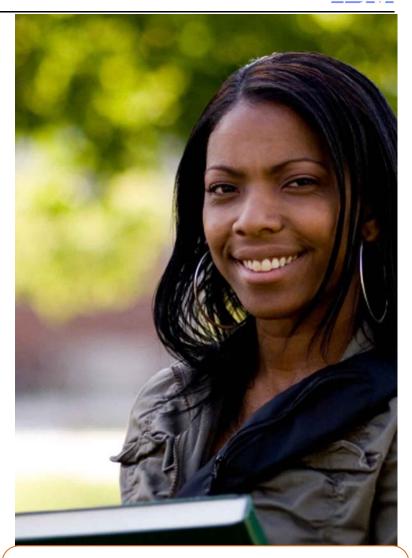
The Academic Initiative is NOT a predefined program.

It is designed for flexibility.

Use what you want when you want it.

# **Resources for Students**

- Participate in IBM sponsored contests
  - <u>ibm.com/university/students/contes</u> ts/
  - Master the Mainframe (No experience necessary)
- Launch your career
  - -Job Board <u>SystemzJobs.com</u>
  - -IBM jobs: ibm.com/university/students/jobs/
- Validate your skills and get recognized
  - System z Mastery test
- Scholarships and awards
  - -IBM Destination z
  - SHARE Academic Excellence Award



Membership is <u>NOT</u> required for students.



P Computer Science 2011

# **IBM Master the Mainframe Contest**



- Runs in the fall semester
- Hands-on contest for university and High school students
- No experience necessary
- Remote logon from dorms, apartments, lak
- Increasing difficulty, increasing prize level
  - Part 1: 1-2 hours to complete, win a T-shirt
  - Part 2: 10-20 hours to complete, win IBM Prize Pack
  - Part 3: Weeks to months to complete, win a tablet computer and a trip to an IBM mainframe lab

Worldwide totals: 8 years, 33 countries, 59,000+ students!





# IBM Destination z Enterprise Computing Scholarship

#### Congratulations to our 2013 winners!

- 1. Chris Richardson, University of South Carolina
- 2. Subashree Ramachandran, Northern Illinois University
- 3. James Ewell, West Texas A&M University
- 4. Ronesha Sharma, University of Arkansas
- 5. Joseph Lodin, Rochester Institute of Technology
- 6. Theodore Huntley, Illinois State University
- 7. Jenna-Shae Banks, North Carolina A&T University
- 8. Dontrell Harris, North Carolina A&T University
- 9. Jie Hou, Northern Illinois University
- 10. Shane Hale, Rochester Institute of Technology

#### **Sponsors:**



















#### 2013 SHARE Academic Award for Excellence

Recognizing the next generation of enterprise technology professionals.

Open to students and recent graduates enrolled full-time in high school, undergraduate or graduate university program focused on Information Systems, Enterprise Computing, Computer Science, Information Technology or a related concentration.



Students should submit an academic-related enterprise project that could add value to an organization's overall IT goals and mission.

The Grand Prize winner will be recognized at the 2013 SHARE summer conference in Boston

Visit the SHARE web site for additional information:

- Award Criteria and Requirements
- Prizes
- Rules, Regulations and Eligibility

Questions? Contact Karen Zader kzader@share.org.





# Resources for **Industry professionals**

#### Use the Academic Initiative to build and locate skills

- Locate schools teaching enterprise systems to recruit new talent School List
- Partner with IBM to build new skills for your business zskills@us.ibm.com
- Advertise job opportunities to students and experienced professionals systemzjobs.com
- Use resources to assist with building internal employee skills <u>Training Materials</u>
- Build credentials through Mastery Test
   Mastery Test
- Stay connected with through communities and social media

Facebook



# Locate schools teaching Enterprise Systems

http://www-03.ibm.com/systems/z/education/academic/schools\_na.html



Educators from all over the world are currently investigating or actively teaching mainframe technologies. This is a partial listing of the most active schools in the United States and Canada. The schools are listed alphabetically by state or province.

If you are interested in locating and recruiting new talent for internship and job opportunities, reach out to the educator listed as the school contact

For general inquires about the IBM Academic Initiative program or if you're an educator that would like to be included in this list, contact the System z Academic Initiative team at <a href="mailto:zskills@us.ibm.com">zskills@us.ibm.com</a>.

#### States and provinces with participating schools

↓ Minnesota

1 883----

↓ Multiple U.S. ↓ Illinois locations ↓ Indiana
 ↓ Alabama ↓ Iowa
 ↓ Arkansas ↓ Louisiana
 ↓ Colorado ↓ Maryland
 ↓ Delaware

↓ Florida

↓ North Carolina
 ↓ Ohio

↓ New York

- ↓ Pennsylvania↓ South Carolina↓ South Dakota
- ↓ Texas



# Partner with IBM to build new skills for your business

IBM will assist and enable a school of your choice to teach enterprise systems Follow these steps:

- 1. Identify a school of your choice and ask yourself these questions:
  - Where does your company recruit new talent today?
  - Do you have an existing relationship with someone at a college or university?
  - Don't limit your thinking to Computer Science.
     Consider IT, MIS, IS, CSE and Business majors.
     IBM has courses and modules that can be included in various majors to expose students to enterprise systems thinking
- 2. Contact IBM at <u>zSkills@us.ibm.com</u>.

## Use IBM's Job Board - SystemzJobs.com

Lets employers post detailed job requirements for job seekers of all experience levels to review and apply

Global pool of talent specializing in mainframe technology, including both students and experienced professionals

#### **Benefits of using SystemzJobs.com**

- Free, secure, and easy to use
- Fast access to mainframe jobs and talent
- Global

# IBM

#### **Getting started**

Follow these steps at SystemzJobs.com to get started:

- 1. Create a secure account
- 2. Post or Search for jobs
- 3. Connects students and industry

Sponsored by the IBM Academic Initiative, System z

Visit: ibm.com/university/systemz

Questions? Contact zSkills@us.ibm.com



## **Internal Training Resources**

http://www-03.ibm.com/systems/z/education/skills\_coursematerials.html

# IBM System z Course Materials for the Community

- ↓ Introduction to the COBOL Language
- → An Introduction to the Mainframe: Large Scale Commercial Computing
- ↓ An Introduction to the Mainframe: Networking
- ↓ An Introduction to the Mainframe: z/OS
  Basics
- An Introduction to the Mainframe: Security
- ↓ e-business with WebSphere Application Server for z/OS
- ↓ z/OS Basic Interfaces: ISPF

- ↓ Enterprise Server Transaction Management
- ↓ Enterprise Server Data Management
- ↓ Enterprise Server Intro to Programming

   Assembler
- ↓ Enterprise Server Intro to Programming
   JCL
- ↓ Enterprise Server Intro to Programming— VSAM
- ↓ Linux on System z
- → The UNIX System Services component of z/OS
- ↓ Introduction to z/VM



# Building credentials – Take the IBM System z Mastery Exam

- Entry level z/OS Proficiency exam
  - Audience Students studying enterprise systems and industry professionals new to the platform
  - Available at 5,000+ Prometric locations
  - Avenue for students to validate z/OS knowledge and distinguish themselves from other job candidates
  - Industry feedback: Valuable measurement of 'Entry Level Criteria'
  - Analyst input: Key indicator of available skills
  - Cost: \$75. No cost offering to faculty and students
  - 3,877 students from 40 countries

#### Resources

- Based on the <u>Introduction to Mainframes:</u>
   z/OS Basics
- Learn more at
  - ibm.com/developerworks/university/systemz/masterytest/
  - ibm.com/certify/mastery\_tests/ovrZ05.shtml



TAKE THE MASTERY EXAM AT SHARE Boston FOR FREE



# Stay connected

- Academic Initiative System z on Facebook
   Connect with mainframe enthusiasts on our Facebook page.
- Destination z (destinationz.org)
   Online mainframe community. Contains blogs, twitter feed, and mainframe related social media and online content.

Schools can become a Destination z member school, qualifying them to apply for the <u>Destination z Enterprise</u> <u>Computing Scholarship</u>.

- SHARE (share.org)
   Largest mainframe user group is an independent, volunteer-run association that provides enterprise technology professionals and educators with training, professional networking, and industry influence.
- zNextGen (znextgen.org)
   A user-driven community for new and emerging mainframe professionals.
- Enterprise Computing Community (ecc.marist.edu)

The mission of the ECC is to improve undergraduate education of large systems and graduate a new generation of talent that will provide industries with the ability to secure, sustain, and grow their operations. The community is open to educators, students, and industry professionals.

GUIDE SHARE EUROPE (GSE) (www.gse.org) A non-profit association of companies, organizations and individuals who are involved in Information and Communication Technology (ICT) solutions based GSE is an independent organization led by volunteers. Provides an opportunity to share ideas and solutions with industry colleagues, both on a regional and international level in Europe.

Students can apply for the GSE Academic Award for Excellence.



## Success Stories - Global Case studies

- Success stories of schools teaching the mainframe and clients hiring students
- https://www.ibm.com/developerworks/university/systemz/casestudies.html



Canada - Cegep de Thetford Expands Mainframe Offerings to Address Industry Needs

The results are there. To date, Cegep de Thetford has a 100 percent placement record of mainframe interns with outside organizations—a mix of government agencies, insurance and finance companies. "One hundred percent of our z/OS and COBOL students receive job offers." said Pare. "The organizations participating with us have been very satisfied."

- Ireland Letterkenny Institute of Technology: A Lesson in Enterprise Education Agility
- Germany Universities Deliver Research and Skills Training for System z
- USA
  - Syracuse Expands Technology Education to Meet the Rising Needs of Enterprises
  - University of Arkansas Technology Education: Large Databases, ERP and Enterprise Readiness
     UMES Developing Critical Thinkers --- The Key to Retaining American Industry Competitiveness
- China -Tongji University Assumes a Leading Role in System z Enterprise Education
- Brazil UNISUL and Uniao Latino Americana de Technologia



# **Use the Marist College Certificate Program**

#### Features and Benefits

- 100% Instructor Led online
- Systems programming and Application programming Tracks
  - 7 Certificate programs
  - 17 unique courses
- Cost effective
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- Comprehensive curricula
- Instructors with extensive industry experience
- Active learning include labs, virtual classroom discussion, and projects
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#### Systems Programming Track

z/OS Associate Certificate Introduction to z/OS and Major Subsystems z/OS Networking z/OS Security

z/OS Professional Certificate
z/OS Advanced Topics
z/OS Reliability, Availability, Serviceability and Problem
Determination (RAS and PD)
z/OS Emerging Technologies

z/OS Expert Certificate
z/OS Installation
DB2 Fundamentals
z/OS Performance Fundamentals

#### **Application Programming Track**

COBOL Certificate
Introduction to z/OS and Major Subsystems
Basic COBOL Programming
Advanced COBOL Programming

IMS Certificate
Introduction to z/OS and Major Subsystems
IMS Fundamentals
IMS Application Programming

Assembler Certificate
Introduction to z/OS and Major Subsystems
Basic Assembler Language Programming
Advanced Assembler Language Programming

DB2 Certificate
Introduction to z/OS and Major Subsystems
DB2 Fundamentals
DB2 Application Programming



# Participating Enterprises (all)

Accenture S.A.

**ABSA Bank** 

ACG - Auto Club Group

ADP

Aegon USA

Aetna, Inc.

Aformatik Trng. & Consulting GmbH & Co.

**Archer Daniels Midland** 

ASR Nederland N.V.

Alcan Global ATI- North America

Ameritech

**Atlantic & Pacific Tea Company** 

**Auto Zone** 

Bank of America

Bank of Tokyo

**BMC Software** 

**Boston University** 

Central Hudson Gas & Electric

CIGNA Healthcare

Citiaroup

Commonwealth Office of Technology,

State of KY

ConvergEx Group

**Computer Sciences Corporation** 

**Credit Suisse** 

Deere & Company (John Deere)

Department of Veterans Affairs

**Depository Trust & Clearing Corporation** 

(DTCC)

**Desert Sands Unified School District** 

**Donovan Data Systems** 

**DW Installations** 

**EMC** 

**Emirates Airlines** 

**Everis Outsourcing** 

Fidelity Investments

Great Lakes Higher Education Guaranty Corp.

**Great West Life Assurance Company** 

Handelsbanken

**IBM** 

Insurance Services Offices (ISO)

Internal Revenue Service

JP Morgan Chase

Kansas City Life Ins.

KG

Kawasaki Motors Corp. USA

Kimline Propane

**Liberty Mutual Insurance Company** 

LexisNexis

Louisiana Housing Fin Ag / Baton Rouge

M & T Bank

Marist College

**Marriott Corporation** 

MassMutual Financial Group

Merlin International - Veterans Affairs

Metavante

Mitchell Martin

Mortgage Guaranty Insurance Company

Nationwide Insurance Company

**New York University** 

Norfolk Southern Corporation

Northrup Grumman

NYCE Payments Network LLC

NYS Dept of Tax & FinOCIT, Sacramento Cty.

Outsourcing deTecnica deSistemas

- Hardware

Ohio Public Employees Retirement

System

Partsearch Technologies

**Progressive Insurance** 

PSC Electrical Contracting

**Referrential Systems** 

Rutgers University - Office of IT

Safenet Security, Inc.

SAIC

Scotia Bank

**Sears Holdings Corporation** 

Secura Insurance Company

Self Employed Consultant

State Farm Insurance

Systemware, Inc. T. Rowe Price

TAG

Tata Consulting

Thomson Financial-Transaction

Services

Tjornin Consulting Pty, Ltd.

University of Maryland Eastern

Shores (UMES)

**Unum Group** 

**USDA** 

**US Treasury** 

Verizon

Wachovia Bank

Washington State Department of

\_ Transportation

Wells Fargo



# The IBM System z Academic Initiative



The IBM System z
Academic Initiative
has helped over a
thousand schools
globally with
mainframe access,
course content,
and student
projects.

25 schools in North America have taken mainframe education to the next level by including System z in multiple courses, certificate programs, minors, or concentrations. These are the richer, deeper mainframe education programs where you

should recruit IT talent from to run your enterprise systems.

Binghamton University NY	merwyn@binghamton.edu
California State at Dominquez Hills CA	mbeheshti@csudh.edu
Cegep De Thetford Quebec	flahaye@cegepth.qc.ca
Columbus State U, GA	rogers neal@colstate.edu
DeVry University	ageist@devry.com
Eastern Illinois University	vahampton@eiu.edu
Fairleigh Dickinson University, NJ	lowy@fdu.edu
Fairmont State University, WV	Richard.Harvey@fairmontstate.edu
Illinois State University	cjong@ilstu.edu
Marist College, NY	learnzos@marist.edu
North Carolina A&T University	cwseay@ncat.edu
Northern Illinois University	rrannie@cs.niu.edu
Pace University NY	hwinkler@pace.edu
Redlands University, CA	eric blum@redlands.edu
Robert Morris University, PA	turchek@rmu.edu
Rochester Institute of Technology, NY	lwhfac@rit.edu
Ryerson University Toronto	jshuster@ryerson.ca
Stevens Institute NY	dduggan@cs.stevens.edu
Syracuse University, NY	ddischia@syr.edu
University of Arkansas	DDouglas@walton.uark.edu
University of MD Eastern Shore	bcmitchell@umes.edu
University of North Texas	Steve.Guynes@unt.edu
University of South Carolina	pattenk@sc.edu
West Texas A&M University	H.Paul.Haiduk@cs.wtamu.edu
Widener University PA	syoon@mail.widener.edu





IBM can assist you with Enterprise Systems Skills

Contact us at zskills@us.ibm.com



#### zNextGen

- SHARE's community for new mainframe professionals.
- Mission:
- To serve as the gateway for newcomers, to leverage the experience of mainframe veterans and to expedite their professional development in this crucial segment of the IT workforce.
- zNextGen is geared especially around the needs of two professional segments:
  - Students just embarking on their careers in enterprise technology
  - Established IT professionals expanding their responsibilities to include support and administration of mainframe systems
- Why zNextGen?
- To give new mainframers a forum for networking
- To enhance the experience of newer SHARE attendees
- To provide feedback to SHARE about existing and potential technical sessions
- To attract new users to SHARE