Session Z46
The Point-and-Shoot Method and Other Fine Points of Report Distribution
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Presentation Outline

- Introducing IBM Output Manager for z/OS
- Product Overview
- Enhancements in V2.1
- Migration Considerations
- Summary, Q&A
IBM Output Manager (OM)

- Product Number  5655-J20
- Announced on  November 26, 2002 (#202-324)
- Product GA on  December 6, 2002
- Home page  ibm.com/software/sysmgmt/outputmanager/

- Requirements
  - Any supported release of z/OS™ or OS/390®
  - Any supported version of TSO/E
  - ISPF Version 4 or later
  - DB2® Version 6.1 or later

OM: Product Goals

- Provide Report Capture, Archive, Online Viewing, and Report Distribution in a single product
- Exploit existing z/OS facilities whenever possible
- Implement end user and administrator tasks in a familiar, intuitive way
- Deliver a strong and cost-effective alternative to existing product(s)
IBM Output Manager: Design Criteria

- Exploit existing z/OS facilities whenever possible

<table>
<thead>
<tr>
<th>Instead of…</th>
<th>…IBM Output Manager uses</th>
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<tbody>
<tr>
<td>Proprietary Viewer</td>
<td>ISPF Browse or View, as appropriate</td>
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<tr>
<td>Proprietary database for object</td>
<td>DB2 Tables</td>
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<tr>
<td>definitions</td>
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<tr>
<td>Proprietary database to store</td>
<td>SMS-managed sequential data sets</td>
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<tr>
<td>reports</td>
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<tr>
<td>Proprietary mechanism to archive</td>
<td>Function of HSM</td>
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<td>reports to disk, tape, tape</td>
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<td>duplexing</td>
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<td>Proprietary retention definitions</td>
<td>Function of SMS</td>
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<tr>
<td>Internal security used to</td>
<td>Function of system security product</td>
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<tr>
<td>determine access to reports</td>
<td></td>
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OM: High-level Architectural Overview

- Sysout capture
  - Post-spool (Application 1)
  - Pre-spool (Application 2)

- Archived Reports
  - Stored as sequential data sets
  - Location, retention, security – all functions of existing policies

- Report Distribution
  - Custom Reports, Banner pages
  - Spooled for printing, local or remote

- Online Viewing
  - TSO/ISPF Browse and View

- Metrics recorded in existing DB2 instance
  - Job name, number
  - Date, time, pages, etc.
  - Exception codes
Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things?
2. What do you want me to capture?
3. Where do control breaks occur within a report?
4. Which part goes to the Boston office?
5. Which jobs produce the Marketing reports?

- Archive Attributes
- Sysout Selection Rules
- Report Layout
- Custom Reports
- Report Selection Rules

Step 1: Define an Archive Attribute

- Archive Attributes are objects used to specify the naming conventions and allocation attributes for the MVS data sets that will be used to store output

- You can have any number of Archive Attributes: different ones for different reasons
  - The Archive data set name Mask specified by Report Administrators ultimately determines “who” is authorized to view “which” reports (based upon existing system security product specifications)
    - Secured at the data set level
    - Storage charges to the owner

PRIVATE:**
PUBLIC:**
etc...
Step 2: Define Sysout Selection Rules

- Sysout Selection Rules are used to identify the characteristics of system output that you want to capture
  - Interceptors = Pre-spool
  - Selectors = Post-spool

- Rules are mapped to Archive Attributes (i.e., “here’s what to look for, here’s where to put it”)

- “Enable” the rule. Jobs producing output which match the Selection Rule will be captured and stored in data sets specified by the associated Archive Attribute

Steps 1 and 2…

Step 1: Archive Attributes

Step 2: Sysout Selection Rules

Report is now available for online viewing!
That's It…

- All Done! Any questions?
- In order to scan the spool and process reports, Steps 1 & 2 are all that are needed
- Custom reports involve three more steps…

Step 3: Specify Report Layouts

- Report Layouts are named objects that describe the layout of data within a report and are used to identify control breaks within a report.
Step 4: Define Custom Reports

- A Custom Report is a named object that identifies a logical subset of the original output produced by a job.
- Layouts are used to determine the contents of a Custom Report (i.e., if the DEPT field contains the string “SALES” then this goes in the SALES REPORT, “MARKETING” to MARKETING, etc.)

Step 5: Define Report Selection Rules

- Report Selection Rules are used to identify which jobs produce the output that is to be processed as Custom Reports.
- This can be a many to one relationship – the weekly, monthly and quarterly jobs may all produce the same output format and are all processed by the SALES REPORT Custom Report definition.
Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things?
2. What do you want me to capture?
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Archive Attributes

Step 1
Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things? ✓ Done
2. What do you want me to capture?
3. Where do control breaks occur within a report?
4. Which part goes to the Boston office?
5. Which jobs produce the Marketing reports?

Sysout Selection Rules

Step 2

IBM Global Services
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Sysout Selection Rules (anything known to JES)

Step 2

Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things?  
   ✔ Done

2. What do you want me to capture?  
   ✔ Done

3. Where do control breaks occur within a report?

4. Which part goes to the Boston office?

5. Which jobs produce the Marketing reports?
A FIELD called “TITLE” at row 2, column 5, width 40

A FIELD called “BRANCHTI” at row 7, column 10, width 9
Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things? ✓ Done
2. What do you want me to capture? ✓ Done
3. Where do control breaks occur within a report? ✓ Done
4. Which part goes to the Boston office?
5. Which jobs produce the Marketing reports?
The Custom Report for the “Ash” branch

Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things? ✓ Done
2. What do you want me to capture? ✓ Done
3. Where do control breaks occur within a report? ✓ Done
4. Which part goes to the Boston office? ✓ Done
5. Which jobs produce the Marketing reports?
Product Administration – “Five Easy Pieces”

1. Where do you want me to keep things?
   ✓ Done
2. What do you want me to capture?
   ✓ Done
3. Where do control breaks occur within a report?
   ✓ Done
4. Which part goes to the Boston office?
   ✓ Done
5. Which jobs produce the Marketing reports?
   ✓ Done
Web-Based Report Viewing

- **Existing Web Browser**
  - Internet Explorer
  - Netscape
  - other?

- **IBM HTTP Server**
  - Installed on same image as Output Manager started task
  - Presents reports to users as requested

- **Security**
  - HTTP, HTTPS (SSL)
  - User Authentication – base capability of IBM HTTP Server

- **Offered as a Standard Feature**
  - No Additional Hardware
  - No Additional Software to buy
Selection Criteria: All jobs beginning with “B” that had exceptions

Scroll, Sort – Click to View

Indicate what you’re interested in and then click [Submit Query]
Selection Criteria: Jobs, Status, Date(s)

Interested in a particular date or range of dates? Use the drop-down Calendar!

Settings: Columns, Windows

Show or hide specific columns to suit your needs. Specify whether or not you want reports to open in separate windows.
Click to open Reports – Separate Windows for result comparisons

Archived vs. Online Reports
Archived vs. Online Reports

**Web-Based Report Viewing**

- **Browser-based alternative to ISPF panels**
  - Easily customized with company-specific artwork
  - Intuitive enough for even the most casual user

- **What features would you like to see?**
  - “Nice” printing?
  - Data export?
  - Others?
Archive Viewer

- **The Problems**
  - Customers have thousands of tapes tied up with archives
  - Business or legal requirements mandate that the reports be retained
  - Not enough DASD on the planet to bring them all back
  - Migration could take years – “we don’t have years”

- **The Solution**
  - Use existing utilities to obtain data about archive directory contents
  - Load this data into Output Manager
  - Recall reports from existing archive tapes upon request

- **The Benefits**
  - Drastically Simplify migrations to Output Manager
  - Eliminate need for mass data conversions (TB’s of data)
  - Facilitates use of existing tape copies of reports

Migrating to IBM Output Manager

- **Professional Services**
  - IBM Global Services personnel specifically assigned to get the job done right
  - Contact your IBM Account Manager

- **Going it alone**
  - Output Manager can be installed, configured and up and running in a few hours
  - The following slide highlights the steps associated with migration using Archive Viewer…
Migration using Archive Viewer

- Install, configure and start using Output Manager
- Stop capturing new reports with the existing product
- Ensure that copies of reports that you wish to retain have been archived to tape
- Extract data from the 3rd party product index via existing utilities
- Load the data into Output Manager tables using the utilities provided with Output Manager
- Discontinue your license for the 3rd party product
- Use Output Manager to access your existing tape archives as needed
- Scratch the 3rd party tapes when report retention limits have been reached -or- all reports have been recalled and processed through Output Manager

IBM Output Manager

- Report Capture, Archive, Online Viewing and Report Distribution in a single product
- Uses existing company standards for security as well as production data backups and retention
- Web-Based Report Viewing included as a standard feature
- Archive Viewer simplifies and expedites the migration process
- Extremely cost-effective particularly when replacing multiple products from multiple vendors
Thank You !!!

- Any questions?