STEPLIBs, ISPF, and JES Spool Management: Solving Problems You Thought Were Impossible

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New STEPLIB-Rx – Painless TSOPLUS Replacement

- Specifically Designed for TSOPLUS Users Facing "End of Life"

  - Replaces TSOPLUS STEPLIBX and TSOPLUS On Demand Application Facilities

  - Tone Working Directly with Computer Associates and Their Clients

  - Fully Supported by Tone Software

  - Certified on all z/OS Releases, Including z/OS 2.1

STEPLIB-Rx™
TSOPLUS Replacement Solution

New STEPLIB-Rx – Painless TSOPLUS Replacement

- NO Manual Conversions or Re-Implementations Needed

  - Provides Priority DDNAME Facility to Intelligently Translate STEPLIBX Allocations Imbedded in CLISTS and REXX Execs

  - Specify PRIORITY_DDNAME=STEPLIBX in the DYNASPCL Macro One Time

  - Previous STEPLIB allocation saved in a REXX/CLIST variable

  - Existing CLISTs and REXX Execs Run Without Changes or Manual Conversion Efforts

STEPLIB-Rx™
TSOPLUS Replacement Solution

New STEPLIB-Rx – Painless TSOPLUS Replacement

- STEPLIB-Rx Application Initiation Assist (AIA) Facility Replaces TSOPLUS On Demand Application Facility

    - Dynamically Allocates Data Sets Required to Execute an Application Upon Request

    - Users Enter One Simple AIA Command at ISPF Command Line

    - Desired Application is Executed Transparently to User – No Need for Users to Know Specific Method of Invocation of the Application

STEPLIB-Rx™
TSOPLUS Replacement Solution

ISPF Innovations – *DYNA-STEP*™

- ■ Full Featured Management of ISPF Allocations and STEPLIBs

  - ■ Dynamically alters the TSO/ISPF configuration at any time to any new configuration, or to access any application or multiple applications

  - ■ Provides direct access to multiple STEPLIBs, product versions, DB2 subsystems, all without leaving ISPF session

  - ■ Provides ISPF Dialog interface to speed allocation management

  - ■ Includes STEPLIB-Rx Functionality to Replace TSOPLUS "End of Life" and "End of Support"

  - ■ Supports multiple copies of the same reentrant module across ISPF split screens - NO LONGER IMPOSSIBLE!

DYNA-STEP™ **Comprehensive Library Management**

- Dynamically allocate or alter any closed TSO DD statement

  - STEPLIB concatenations can be open.

- Allocate up to 128 data sets to any DDNAME, including STEPLIB.

- Dynamically create new DDNAMEs and / or insert/delete libraries at any position into an existing DDNAME concatenation.

- Use an existing allocation to have its data sets inserted into another DD allocation.

- "Push and Pop" allocations allowing multiple sets of concatenations to be temporarily saved and restored anytime during the session

DYNA-STEP – Latest Enhancements

- Full z/OS 2.1 Support

- Includes Full Alias Support Anywhere Data Set Names Can be Specified

- Allocates ISPF and TSO library types such as ISPLLIB, ISPPLIB, ISPMLIB, ISPTLIB, and ISPSLIB using LIBDEF facility

- Ensure allocations unique to an ISPF screen are saved and restored when swapping screens

- Request the temporary data sets allocated during the DYNA-STEP process be freed if an error occurs

DYNA-STEP Latest Enhancements

- Addition of DYNA-STEP server address spaces

- Ensure libraries are not duplicated in a concatenation to shorten member searches

- Request allocations to system generated DDNAMEs and have the name passed in a REXX or CLIST variable

DYNA-STEP Latest Enhancements

- Many New Keywords:

  - LIBDEF – support ISPF's LIBDEF, as if it were a standard allocation

  - ONLY1 – removes duplicate data sets from the list before allocation

  - OPTIONS – display the current default options in use

  - PERSIST – maintain a non-STEPLIB allocation on this screen, regardless of changes made to it on other screens

  - RENT – allow multiple copies of a reentrant load module to be loaded

  - SERVER – change the server that the user's session is using

  - USECAT – use the catalog to locate the data set, rather than relying on the previous allocation information

DYNA-STEP Latest Enhancements

- **New Server Available**
  - Makes use of PC interface, rather than SVC interface, to authorized code

  - Allows multiple levels of DYS300 to coexist in a single image:
    - e.g. One server with maintenance, one server without maintenance

  - Same level of support & security as with the SVC

- **New ISPF Exit**
  - Supports multiple servers in a single ISPF session

  - Supports switching between servers without getting out & back into ISPF

DYNA-STEP Latest Enhancements

- PERSIST
  - The same ease-of-use that DS has supported in STEPLIB since its inception has been extended for CLOSEd non-STEPLIB DDnames by maintaining the allocation state of a DD on a per screen basis. This will be true for non-STEPLIB DDs allocated with DS using the PERSIST keyword

- RENT
  - Support execution of multiple versions of a reentrant module on separate screens
  - Known to be useful for QMF, SAS

DYNA-STEP Latest Enhancements

- DYNALOC Searches for the Requested Member In:
    - LPA and Link List
    - SYSPROC/SYSUPROC
    - SYSEXEC/SYSUEXEC
    - ISPLLIB
    - ISPMLIB
    - ISPPLIB
    - ISPSLIB
    - ISPTLIB

- Documentation Reorganization
    - Response to customer requests for easier navigation

DYNA-STEP ISPF Dialog Interface: DYSISPF

- Full screen display of current allocations in a TSO session including STEPLIB

- A visual interface providing ability to modify allocations or perform ISPF functions on displayed data sets

DYNA-STEP ISPF Dialog Interface: DYSISPF

- Data sets within an allocation can be inserted, copied, moved or deleted

- Display fields

  - Server,Cm, *, S, DDname, Data Set, Volume, Unit, DSP

```
   Options      Help
------------------------------------------------------------- Row 1 to 35 of 117
        DYNA-STEP 3.0.0 Data Set Allocations    for Session    Server:D300QA
COMMAND ===>                                                SCROLL ===> PAGE
Cm *S DDname    Data Set                                  Volume Unit      Dsp
-- --  ------    -------                                  ------ --------  ---
__     ISPEXEC   ISP.SISPEXEC                             GBRES1 SYSALLDA SHR
                 SYS1.SBPXEXEC                            GBRES1 SYSALLDA SHR
__     ISPLLIB   SYS2.ISPLLIB                             PROD01 SYSALLDA SHR
__               GDDM.SADMMOD                             GBRES1 SYSALLDA SHR
__               SYS2.SYB.R210.LOADLIB                    PROD01 SYSALLDA SHR
```

DYNA-STEP ISPF Dialog Interface - DYSISPF

- If CONFIRM Option is Set (or defaulted) When Allocation is Modified (e.g. Insert):
  - Secondary display will be presented containing only the modified DD allocation
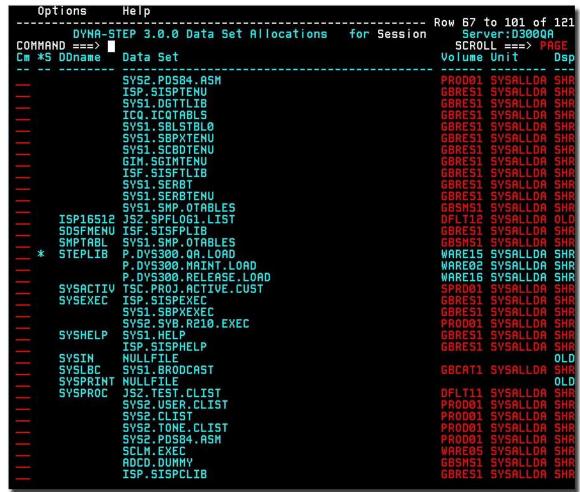
```
 Options     Help
----------------------------------------------------------------- Row 1 to 4 of 4
        DYNA-STEP 3.0.0 Data Set Re-allocation for ST          Review changes
COMMAND ===>                                                   SCROLL ===> PAGE
Cm *S DDname      Data Set                                  Volume Unit     Dsp
-- -- --------    ------------                              ------ --------  ---
__  -  STEPLIB    P.DYS300.QA.LOAD                          WARE15 SYSALLDA  SHR
__  -             P.DYS300.MAINT.LOAD                       WARE02 SYSALLDA  SHR
__  -             P.DYS300.RELEASE.LOAD                     WARE16 SYSALLDA  SHR
    -
************************************** Bottom of Data ****************************
```

DYNA-STEP ISPF Dialog Interface - DYSISPF

- Provides Ability for Verification or Further Modification Before Committing Changes

DYNA-STEP ISPF Dialog Interface - DYSISPF

- Once Changes are Committed:

  - Either the next modified allocation will be displayed, OR…

DYNA-STEP ISPF Dialog Interface - DYSISPF

- Or the Main Display is Presented (if no further mods) with the Newly Modified Allocations

DYNA-STEP ISPF Dialog Interface - DYSISPF

- This Action May be Altered by Modifying the DYSISPF Options

- Options Allow Automatic "Commit Changes" when ENTER is Hit with No Further Changes

- When Allocations are Committed, Actual Re-allocation occurs by Executing the DYNASTEP Command Internally

```
Options      Help
                                                        of 117
  _  1. Turn ON commit re-allocations after no more changes    00QA
     2. Turn OFF display of CONFIRM screen to verify DD changes > PAGE
     3. DYNASTEP Options                                         Dsp
                                                        --- ---
            SYS1.SBLSTBL0                      GBRES1 SYSALLDA SHR
   _        SYS1.SBPXTENU                      GBRES1 SYSALLDA SHR
   _        SYS1.SCBDTENU                      GBRES1 SYSALLDA SHR
   _        GIM.SGIMTENU                       GBRES1 SYSALLDA SHR
   _        ISF.SISFTLIB                       GBRES1 SYSALLDA SHR
   _        SYS1.SERBT                         GBRES1 SYSALLDA SHR
   _        SYS1.SERBTENU                      GBRES1 SYSALLDA SHR
   _        SYS1.SMP.OTABLES                   GBSMS1 SYSALLDA SHR
   _  ISP16512 JSZ.SPFLOG1.LIST                DFLT12 SYSALLDA OLD
```

DYNA-STEP ISPF Dialog Interface - DYSISPF

- The DYNASTEP Command Options to Use When Performing Re-allocations Can be Modified via the Options Display

DYNA-STEP ISPF Dialog Interface - DYSISPF

- Alternatively - Current Options Can be Listed At Bottom of Screen by Issuing the OPTION SHOW Primary Command

DYNA-STEP ISPF Dialog Interface - DYSISPF

- Line Commands
  - ISPF Services
    - Browse, Browse All, Edit, Edit All, View, View All, Info
  - Manipulation
    - Copy, Move, Insert, Delete, Insert Before
    - Show, Unstack

- Primary Commands
  - Find, Rfind, Reset, Show, Default, Option, Save, Commit

OMC-FLASH™

JES2 and JES3 Spool Viewing and Management

New Release 4.7.0 – Now Generally Available

John Szura, Lead Developer
Tone Software

Brian Vohs, Developer
Tone Software

OMC-FLASH™ JES2-JES3 Spool & Resource Management

- **Comprehensive Job and Output Control:**

  - View All Queues: input, execution, output

  - Select by destination, owner, system, writer and/or job class, or any defined field criteria

  - View and process Jobs, Tasks, and Spooled Output

  - Include batch jobs, started tasks, TSO users, APPC jobs, active tasks, held and non-held output

  - Browse, Cut & Paste, Sort, Find, Print, Copy to Disk Dataset, Hold, Requeue, Delete, More

  - Define and Save COPY/PRINT Profiles - Unique parameters for different types of output – recall profiles on demand

OMC-FLASH – JES2 and JES3 Job and Output Control

- Overtypeable Fields to modify CLASS, Status, Form, DEST, WTR name, FCB, UCS, copy count, more

- Sort Jobs by CLASS, PRIORITY, WRITER NAME, Column Headings

- Control Print and Print Devices:

  - Requeue, forward space, back space

- Display 132 Character Columns, scroll Left/Right

- Command Aliasing Facility (CMDALIAS) provides custom aliases for primary and line commands

OMC-FLASH – Customizable Job and Output Displays

- CONFIG Facility Personalizes Display of Jobs and Output Info

  - Choose exact fields, titles, column sizes, and position desired

  - Freeze columns, and specify colors to best fit needs

  - Set Highlighting colors and modes for specific lines and/or fields that match criteria – enables rapid location of desired info

OMC-FLASH – JES Environment Management

- Printer Status Display - Overtype Fields to Control Devices and Jobs

- Active and Historical SYSLOG Display - Customizable Format with Option to Save Preferred SYSLOG Format

- Global and Local SYSLOG Display Options – Specify SYSLOG(s) to Display: Local(s), Current System, Both Global and Local

- Display Console Facility - Securely View and Utilize System Operator's Console Directly from User Workstation

- Command to Retrieve Previous Commands in DC and EMCS

- Dynamic CPU Utilization Display - Graphical View of CPU Utilization and Associated Jobs and Processes

OMC-FLASH – JES3 Resource Management

- JES Initiator Display – Overtype Fields to View and Change Status

- Expanded OPERLOG Viewing Facility Across Multiple MVS Systems in a SYSPLEX Environment

- JES3 Control Block Viewing Facility for Both Job-related and Dataset-related JES3 Control Blocks

- JES3 WLM Scheduling Environment & Resource Display for Each Environment Defined in the SYSPLEX

- JES3 DJC NET Display - Modify DJC NETs, Display NET-ID, Cancel, Flush, Hold the NET and associated output

OMC-FLASH – JES3 Resource Management

- SYSPLEX Coupling Facility Support – Communicates via XCF with OMC-FLASH Servers on JES3 Global and Locals

- JES3 DSI Support – No Restart Needed for OMC-FLASH STCs on New Global and Local

- JES3 Writer and Hold Queue Commands - Requeue Data Sets and Jobs

- Support for JES3 PURGE DSP - Display Jobs Processed by the JES3 PURGE DSP

OMC-FLASH – JES Environment Management

- Issue MVS and JES Operator Commands from OMC-FLASH Command Line

- User Log Display – Display MVS/JES Commands and Results

- Health Checker Display Facility (HC) - View IBM Health Checker Output and Info, Check States and Values, Filter, Log Changes

- BATCH Processing Utility – COPY Data from Large Jobs and COPY Operator and System Log Records in Batch

- USS Status Display - Display USS Processes in JES2 and JES3, Use USS-related Line Commands

OMC-FLASH 4.7.0 – Extensive Enhancements

- 64-bit Storage

- Full REXX API - Powerful Tool to Automate Execution of OMC-FLASH Commands Against JES Jobs

- Can be Invoked Under OMC-FLASH, ISPF outside of OMC-FLASH, From TSO READY, or Through a Batch Job

- Automatically Performs Functions and Actions that Were Previously Only Available to Online Users

OMC-FLASH 4.7.0 – Extensive Enhancements

- REXX API Use Cases – No User Interaction Needed
  - Automatically Retrieve a List of Currently Active Jobs
  - List Jobs that Ended with Specific Return Codes
  - List Jobs that Were Submitted by Specific Users

- Expedites Job and Output Management Functions

- Results in Significant Manpower Savings for Repetitive or Common Tasks

OMC-FLASH™ Release 4.7.0 – Extensive Enhancements

- Browse by Pattern and Select Summary Matching Enhancements

- Specify Columns to be Searched, Designate Number of Lines Before and After the Match to Display

- Spool Volume Display Added

- Default Dialog Added to Select Saved Defaults for COPY/PRINT

- Confirmation Dialog Added for DJC Flush Line Command

- Additional SYSTEM Info

SHARE in Anaheim

OMC-FLASH 4.7.0 - Extensive Enhancements

- Job Search Facility Enhanced - Searches All Displayed Jobs for a Value and Optionally Displays Jobs With Matches or Without Matches

- Password Grace Period (7 days)

- SYSLOG display will be updated on scroll up or down

- SYSLOG option displays active SYSLOG job as well as in-storage buffers

- UOPT to set user options by screen

OMC-FLASH 4.7.0 - DSP Display Enhancements

- Additional Fields Added to Data Set Index Display

  - APPC TID - Asynchronous Peer to Peer Communication (APPC) Transaction ID

  - BDTJ# - BDT Job Number

  - BlkT - Data set's records have been blank truncated - Yes or No

  - Burst - BURST value specified on DD or OUTPUT JCL statement - Yes/No

  - Byte Cnt - Number of bytes in the data set

  - CCtl - Carriage Control of data set - ASA, Mach, Mixd or CPDS (Composed Page Data Stream)

OMC-FLASH 4.7.0 – DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - CHARS - Values specified in CHARS keyword of DD or OUTPUT JCL statement

  - CHAR1 - First value specified in CHARS keyword of DD or OUTPUT JCL statement

  - CHAR2 - Second value specified in CHARS keyword of DD or OUTPUT JCL statement

  - CHAR3 - Third value specified in CHARS keyword of DD or OUTPUT JCL statement

  - CHAR4 - Fourth value specified in CHARS keyword of DD or OUTPUT JCL statement

OMC-FLASH 4.7.0 – DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - CpyMod - 4 character suffix of copy modification module in SYS1.IMAGELIB, table reference character (trc) specified on the MODIFY keyword of the DD or OUTPUT JCL statement for this data set

  - CurC - Current Copy Number currently being printed

  - Data Set Name - Generated name of JES data set

  - Date - Creation date of data set

  - DestDevt - Destination device type

  - DestGroup - Requested destination group

  - DSID - Data Set ID

OMC-FLASH 4.7.0 - DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - DS Type - Data Set Type - Print, Punch, Output statement or NJE/BTD data type:

    - (Job Header, Data Set Header, Job Stream, Data Set Stream, SYSOUT Data Set, Job Trailer)

  - Flash - 3800 flash form specified on the FLASH keyword of the DD or OUTPUT JCL statement

  - Format - Record format - Fixed, Variable, Undefined, Blocked

  - Formdef - Value specified in FORMDEF JCL parameter

  - Lines - Count of lines in the data set

  - LRECL - Logical Record Length

OMC-FLASH 4.7.0 - DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - NetGroup - BDT/TCP Group ID

  - Netserve - TCP/IP Netserv name

  - NJE - Network Job Entry type - SNA or TCP/IP

  - NJE Type - Network Job Entry data type - Input or Output

  - NJE Stat - NJE Status: Transaction sent, Transaction queued

  - OpenStatus - OPEN status - Open/Closed

  - OUTBIN - Printer output bin identifier specified on the OUTBIN keyword of the OUTPUT JCL statement

  - OUTDISP - Normal / Abnormal disposition of SYSOUT - JES2 only

  - OUTPT# - OUTPUT Statement number

OMC-FLASH 4.7.0 - DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - Pagedef - Value specified in PAGEDEF JCL parameter

  - Pages - Count of pages in the data set

  - PrMode - Process Mode value specified on the PRMODE keyword of the OUTPUT JCL statement- LINE, PAGE, other

  - PROC Step Name - Step name within JCL procedure

  - Pty - Output priority of the SYSOUT data set

  - RECFM - Record format in the form F, FB, FBA, FBM, V, VB, VBA, VBM, U

  - Records - Count of records in the data set

  - RmtWtr - Writer name on remote system

OMC-FLASH 4.7.0 - DSP Display Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - SAPIJ - SYSOUT API Application Job Number

  - SECLABL - Security Label

  - Spacing - Spacing specified on the CONTROL keyword of the OUTPUT JCL statement - Single/Double/Triple or Program

  - Spin - Spin data set indication - Yes or No

  - STCK Time - Store Clock value at time data set was created

  - Stp# - Step Number

  - Time - Creation time of data set

  - TSO - Data set created by TSO user

  - User ID - Owning / creating user ID

OMC-FLASH 4.7.0 – Extensive Enhancements

- Additional Fields Added to Data Set Index Display – Con't

  - XPagCmp - Complete transmission page count

  - XPagCur - Current transmission page count

  - XPty - BDT Transmission Priority

- Title Highlighting

- Full z/OS 2.1 Support

THANK YOU - Questions?

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TSOPLUS Replacement Solution

DYNA-STEP™

Dynamic STEPLIB and
ISPF Library Management

OMC-FLASH™

JES2 and JES3 Spool
Viewing and Management

FOR MORE INFORMATION VISIT: WWW.TONESOFT.COM