Offsite Health Check Details

1. Run the following jobs to extract SMF records (with filtering), collect SMS construct information and DFSMShsm daily statistics reports:

   • SMF extract – Run the following JCL which uses SORT to extract the records and filter datasets, jobs or DD names to be excluded from the analysis. *SMF data from LPARs or Sysplexes that are to be analyzed together should be concatenated for input.* This job extracts SMF record types 14, 15, and 30 all subtypes.

   Required Changes to the JCL:
   ○ Add a JOB CARD
   ○ HLQ – hlq for the output file to be uploaded
   ○ Study – Change last qualifier to a unique value for the environment or date being analyzed.
   ○ Update/add any of your Dataset Name, Job Name or DD Name filters to the SYSIN parameters. Leave the Default parameters in place.

   ```plaintext
   //* ADD JOB CARD
   //* OPTION SPANINC=RC0 IS ONLY VALID FOR IBM SORT NOT SYNCSORT
   //*
   //JS10 EXEC PGM=IEFBR14
   //SORTOUT DD DSN=hlq.ICEPAK.SMF.EXTRACT.study,
   //     DISP=(MOD,DELETE),
   //     UNIT=SYSDA,SPACE=(TRK,(1,1),RLSE)
   //*-------------------------------------------------------------
   //SORT EXEC PGM=SORT
   //TOOLMSG DD SYSOUT=* 
   //DFSMSG DD SYSOUT=* 
   //SYSCOUT DD SYSOUT=* 
   //*--------------- UNSORTED SMF INPUT ----------------------------- 
   //SORTIN DD DSN=your.smf.data,
   //     DISP=SHR
   //*
   //*--------------- SOR TED SMF OUTPUT ----------------------------- 
   //SORTOUT DD DSN= hlq.ICEPAK.SMF.EXTRACT.study,
   //     DISP=(NEW,CATLG),
   //     UNIT=SYSDA,SPACE=(CYL,(500,10),RLSE)
   //SYSIN DD *
   OPTION VLSHRT
   SORT FIELDS=COPY
   INCLUDE COND=((6,1,CH,EQ,X'0E',OR,6,1,CH,EQ,X'0F',OR,
   6,1,CH,EQ,X'1E'),AND,
   (69,6,CH,NE,C'SYS1.'),AND, ← DEFAULT DATASET EXCLUSIONS
   (69,6,CH,NE,C'HSM'),AND,
   (69,6,CH,NE,C'SYS2'),AND, ..
   ```
• DCOLLECT is used to collect information about the various SMS constructs in your environment.

Required Changes to the JCL:
   o Add a JOBCARD
   o Change ??????? to your SMS SCDS dataset name
   o HLQ – hlq for the output file to be uploaded

//** ADD JOBCARD
//**----------------------------------------------------------
//** DCOLLECT - DUMP ALL SMS CONSTRUCT DATA
//** 1. CHANGE HLQ TO YOUR HLQ
//** 2. CHANGE ??????? TO YOUR SMS SCDS DATASETS NAME
//**----------------------------------------------------------
//DCOLBKUP EXEC PGM=IDCAMS
//SYSPRINT DD SYSOUT=* 
//OUTDS DD DSN=HLQ.DCOLLECT.SMS,
HSMSTATS collects DFSMSshm information needed for creation of reports on the current customer environment for migration and recall activity.

Required Changes to the JCL:
- Jobcard
- DSN1 – hlq for the output file to be uploaded

```
//**  INSERT YOUR JOB CARD HERE
//**
//** CHANGE HLQ TO YOUR HLQ
//** CHANGE DATES TO STUDY PERIOD
//**
//STEP1   EXEC PGM=IKJEFT01
//SYSTSPRT DD  SYSOUT=*  
//SYSTSIN  DD  *  
HSEND REPORT FUNCTION(RECALL) +
    FROMDATE(YYYY/MM/DD) TODATE(YYYY/MM/DD) +
    OUTDATASET(HLQ.ICEPAK.HSM.RECALL)  
HSEND REPORT +
    FROMDATE(YYYY/MM/DD) TODATE(YYYY/MM/DD) +
    OUTDATASET(HLQ.ICEPAK.HSM.DAILY) 
HSEND REPORT FUNCTION(MIGRATION) +
    FROMDATE(YYYY/MM/DD) TODATE(YYYY/MM/DD) +
    OUTDATASET(HLQ.ICEPAK.HSM.MIGRATE) 
HSEND REPORT FUNCTION(RECYCLE) +
    FROMDATE(YYYY/MM/DD) TODATE(YYYY/MM/DD) +
    OUTDATASET(HLQ.ICEPAK.HSM.RECYCLE)  
/*```
The terse job executes an IBM supplied program that compresses the output files created in the SMF extract job.

Required Changes to the JCL:
- Add a JOBCARD
- HLQ – Change symbolic to your HLQ
- DSN4 – Change symbolic to a study name.

```c
//** ADD JOBCARD
/**
/*
//TERSE   PROC HLQ=,
//             DSN4=DATE
//****************************************************
//*                                                  *
//*       TRSMAIN WITH PACK OPTION                   *
//*                                                  *
//* USE PARM=PACK TO PACK A DATASET/MEMBER            *
//* USE PARM=UNPACK TO UNPACK A DATASET/MEMBER        *
//* POINT THE INFILE DD TO YOUR INPUT DSN AND         *
//* THE OUTFILE DD TO A NEW OR EXISTING OUTPUT        *
//* DSN OF TYPE PO OR PS.                            *
//*                                                  *
//* NOTE: ACCORDING TO THE FTP INSTRUCTIONS FROM IBM, IT SOUNDS LIKE THE DATA MUST BE UNPACKED INTO A DSN THAT HAS THE SAME ATTRIBUTES AS THE ORIGINAL DSN. *
//*                                                  *
//* INPUT DATASET MUST HAVE LRECL OF 1024 RECFM=FB    *
//* OUTPUT                                           *
//* FOR SMF RECFM=VBS LRECL=23760 BLKSIZE=0           *
//*                                                  *
//****************************************************
//STEP1   EXEC PGM=TRSMAIN,PARM=PACK
//SYSPRINT DD   SYSOUT=*  
//INFILE   DD   DISP=SHR,DSN=&HLQ.ICEPAK.SMF.EXTRACT.&DSN4
//OUTFILE  DD   DISP=(NEW,CATLG),UNIT=SYSDA,
//             DSN=&HLQ.ICEPAK.SMF.EXTRACT.&DSN4..TERSED,
//             SPACE=(CYL,(500,350),RLSE),
//             LRECL=1024,BLKSIZE=0,RECFM=FB
//STEP2   EXEC PGM=TRSMAIN,PARM=PACK
```
• This FTP job logs into and sends the tersed files created in the Terse job to the 21st Century FTP site. 21st Century Software supplies a USERID and password to our server.

    Required Changes to the JCL:
    o Add a Jobcard
    o HLQ – Change to your hlq
    o Update userid
    o Update password

    //** ADD JOBCARD
    //**
    //**
    //FTPIT EXEC PGM=FTP
    //SYSPRINT DD SYSOUT=*  
    //SYSPUT   DD SYSOUT=*  
    //INPUT   DD *
    94.242.254.33
    userid
    password
    BIN
    prompt off
    mput hlq.*.*.tersed
    QUIT

    ******************