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RIPPLE-TRAC for z/OS SYS1.PARMLIB

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A Separation of Concerns (SoC) Tool

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Overview of RIPPLE-TRAC for sys1.parmlib

Multi-dimensional separation of concerns is an approach to separation of concerns, supporting construction, evolution and integration of software. Its goals are to enable:

- Encapsulation of all kinds of concerns in a software system, simultaneously.
- Overlapping and interacting concerns.
- On-demand remodularization.

Separation of concerns is a concept that is at the core of software engineering. It refers to the ability to identify, encapsulate, and manipulate those parts of software that are relevant to a particular concern (concept, goal, purpose, etc.). Concerns are the primary motivation for organizing and decomposing software into manageable and comprehensible parts. Many kinds of concerns may be relevant to different developers in different roles, or at different stages of the software lifecycle. Appropriate separation of concerns has been hypothesized to reduce software complexity and improve comprehensibility; promote traceability; facilitate reuse, non-invasive adaptation, customization, and evolution; and simplify component integration.

The term *multi-dimensional separation of concerns* (MDSOC) refers to flexible and incremental separation, modularization, and integration of software artifacts based on any number of concerns. It overcomes limitations of existing mechanisms by permitting clean separation of multiple, potentially overlapping and interacting concerns simultaneously. MDSOC promotes reuse, improves comprehension, reduces the impact of change, eases maintenance and evolution, improves traceability, and opens the door to system refactoring and reengineering.

MDSOC summary:

Involves decomposition of software according to one or more dimensions of concern. A concern is any piece of concern or focus in a program. http://en.wikipedia.org/wiki/Separation_of_concerns

The separation allows:

- To allow people to work on individual pieces of the system in isolation;
- To facilitate reusability;
- To ensure the maintainability of a system;
- To add new features easily;
- To enable everyone to better understand the system;
- To allow support for multi-dimensional separation of concerns.

Remember, a dimension of concern is simply an approach to decomposing, organizing, and structuring software according to concerns of a particular kind. RIPPLE-TRAC falls into the realm of multi-dimensional separation of concerns.

The technology engaged by RIPPLE-TRAC presents the information from the point of view of the concern – the architect only sees information that is related to the concern and has control on what concerns should be brought to the forefront or obscured into the background. The uniqueness of RIPPLE-TRAC is the targeted approach, which we believe has potential to support longer term refactoring of application logic into reusable components and services (SOA). RIPPLE-TRAC can also be used as a support tool for migrating from one platform to another.

The RIPPLE-TRAC result set helps track and manage numerous cross silo, intricate, legacy component mappings. These mapping support situations where components across applications differ in structure. Manual mappings run the risk of missing critical data in the new/composite system. If missing components are discovered during implementation, the project would be delayed or cancelled.

RIPPLE-TRAC is a batch-driven environment that accepts application libraries as input and provides information on execution flow, physical system component relationships, and dependencies. RIPPLE-TRAC includes the ability to rapidly parse and cross-reference system components across multiple applications into an open repository, produce metrics and reports, and allow analysts to examine and extract information on an ad hoc basis. Results are depicted in a cross-reference list as well as a spreadsheet or any relational model chosen by the analyst.

RIPPLE-TRACs batch analyzer is more conducive to planning activities than an interactive static analysis tool. Planning teams can use metrics and summary-level information to assess the complexity of an application. The more complex a system, the more time it takes to analyze, enhance, improve, or transform. If, for example, a group of programs is highly complex, poorly structured, and utilizes a number of constructs that are hard to decipher, it would increase the time and skills needed to extract business logic from those programs.

What RIPPLE-TRAC is not

RIPPLE-TRAC is not a quick and dirty data migration tool that converts database call structures to embedded SQL. SQL is the standard access mode used to read and update data within a relational database . Such an approach sacrifices comprehensiveness, quality and integrity within the resulting relational database for the sake of time. The result is a database that is poorly designed, limited in its accessibility and flexibility, and detrimental to the business units relying on this data.[1]

Overview of RIPPLE-TRAC for z/OS SYS1.PARMLIB

RIPPLE-TRAC helps keep track of which parameters are included in selected parmlib members. This bookkeeping is necessary for two reasons:

1) The z/OS system does not keep track of parmlib members and their parameters.

2) The default general parameter list IEASYS00 is always read by the system and master scheduler initialization. The parameters in IEASYS00 can be overridden by the same parameters when they are specified in alternate general lists, such as IEASYS01, or IEASYS02. Then, certain parameters, such as FIX, APF, and MLPA, direct the system to particular specialized members (in this example, IEAFIXxx, and IEALPAxx). RIPPLE-TRAC keeps a record of which parameters and which values are in particular members, and which general members point to which particular specialized members (COMMNDxx, IEALPAxx, and so forth). RIPPLE-TRAC keeps this kind of bookkeeping reasonably simple.

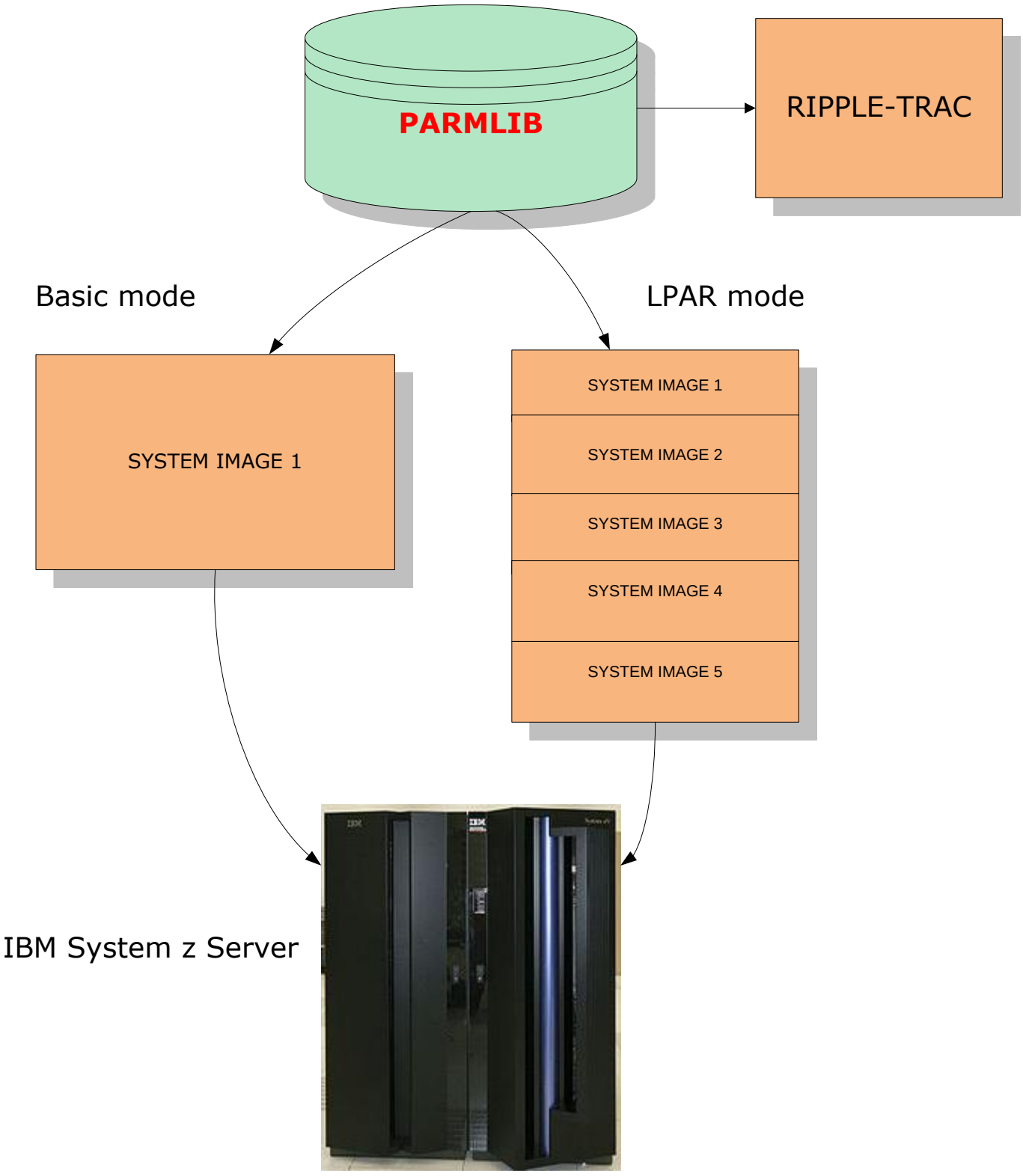
These mappings support situations where system components across multiple images differ in structure. Manual mappings run the risk of missing critical data in the new image. If missing components are discovered during implementation, you would have a challenge looking for the issue.

The purpose of parmlib is to provide many initialization parameters in a pre-specified form in a single data set, and thus minimize the need for the operator to enter parameters.

SYS1.PARMLIB is the most important data set in a z/OS operating system.

The result sets can then be viewed on a PC. The objective with RIPPLE-TRAC is to create a simplified view of operating system components for supporting / learning and / gaining control of the complexities that a system programmer encounters.

IBM System z Server: Basic and LPAR mode



Overview of parmlib member

In this paper we use the following member:

IEASYSxx:	System parameters that are valid responses to the SPECIFY SYSTEM PARAMETERS message. Multiple system parameter lists are valid. The list is chosen by the operator SYSP parameter or through the SYSPARM statement of the LOADxx parmlib member LOADxx (system configuration data sets)

as well as these parameters within IEASYSxx.

APF	Names the parmlib member (IEAAPFxx) that contains authorized library names. IEAAPFxx can specify only a static APF list, which can only be updated at IPL and contain a maximum of 255 entries.
CLOCK	Completes the name of the parmlib member (CLOCKxx) that prompts the operator to initialize the TOD clock during NIP, and specifies the difference between the local time and Coordinated Universal Time (UTC).
CLPA	Causes NIP to load the link pack area with the modules contained in the LPALST concatenation. Also, CLPA purges VIO data set pages that were used in the previously initialized system. Thus, CLPA implies CVIO.
CMB	Specifies the I/O device classes for which measurement data is to be collected, in addition to the DASD and tape device classes.
CMD	Completes the name of the parmlib member (COMMNDxx) that contains commands to be issued internally during master scheduler initialization.
CON	Completes the name of the parmlib member (CONSOLxx) that centralizes control of the console configuration for your installation.
CSA	Specifies the sizes of the virtual common service area and extended common service area.
DUMP	Specifies whether SYS1.DUMP data sets for SVC dump are to be on direct access device(s). This parameter can also indicate that no SYS1.DUMP data sets are to be made available for SVC dumps.
GRS	Specifies whether the system is to participate in a global resource serialization complex. IEASYSxx

LNK	Completes the name of one or more parmlib members (LNKLSTxx) that contain names of data sets that are to be concatenated to SYS1.LINKLIB to form the LNKLST concatenation. You can also use PROG to specify the PROGxx member that defines the LNKLST concatenation.
LNKAUTH	Specifies whether all data sets in the LNKLST concatenation are to be treated as APF authorized or whether only those that are named in the APF table are to be treated as APF authorized.
LOGCLS	Specifies the JES output class for the log data sets.
LOGLMT	Specifies the maximum number of WTLs (messages) for a log data set. When the limit is reached, the data set is scheduled for sysout processing.
LPA	Completes the name of one or more parmlib members (LPALSTxx) that contain names of data sets that are to be concatenated to SYS1.LPALIB for building the pageable LPA (PLPA and extended PLPA).
MAXUSER	Specifies a value that the system uses (along with the RSVSTRT and RSVNONR parameter values) to limit the number of jobs and started tasks that the system can run concurrently during a given IPL.
MSTRJCL	Completes the name of the MSTJCLxx data set that contains the JCL used to start the master scheduler address space.
OPI	Indicates whether the operator is to be allowed to override particular parameters, or all parameters, contained in IEASYSxx.
OPT	Completes the name of a parmlib member (IEAOPTxx) that contains parameters to be used by various algorithms of the system resources manager.
PAGE	Gives the names of new page data sets to be used as additions to or replacements for existing page data sets.
PAGTOTL	Specifies the total number of page data sets that can be allocated for the life of the IPL. IEASYSxx
REAL	Specifies the maximum amount of central storage, in 1 KB blocks, that can be allocated for concurrent ADDRSPC=REAL jobs.
SCH	Specifies a parmlib member (SCHEDxx) from which the master scheduler will obtain its parameters.
SMF	Specifies a parmlib member (SMFPRMxx) from which SMF will obtain its parameters.
SQA	Specifies the size of the virtual system queue area to be created at IPL (in addition to the system's minimum virtual SQA and extended SQA).
SSN	Completes the name of the parmlib member IEFSSNxx, which contains the information to be used in identifying subsystems that are to be initialized.

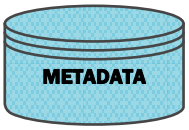
SVC	Completes the name of the parmlib member IEASVCxx, which contains the information an installation supplies to define its own SVCs. NIP processing places these SVCs in the SVC table. IEASYSxx
SYSNAME	Specifies the name of the system being initialized.
VAL	Names one or more parmlib members (VATLSTxx) that contain ”mount” and ”use” attributes of direct access devices.
VRREGN	Gives the default real-storage region size for an ADDRSPC=REAL job step that does not have a REGION parameter in its JCL.

RIPPLE-TRAC Run Time Behavior For SYS1.PARMLIB

The intent is to find all references to the PARMS and map them to their respective images.

We process 5 z/OS images in this paper from IEASYS01

METADATA



Metadata table allows you to store the descriptions of all SYS1.PARMLIB member parms in a central repository. You need this METADATA to describe the parms you are working with.

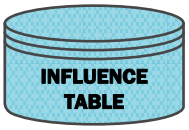
The metadata repository (**up to 500+**) is derived from manual input or other feeds.

The metadata table has 4 fields of which two are used for PARMLIB processing.

PARM NAME 28 BYTES
PARM DESCRIPTION 32 BYTES

```
+----+ +--------28 bytes----------+ +-----32 bytes-----------------+ --
       APF                          AUTHORIZATION LIST-IEAAPF00
       CLOCK                        TIME OF DAY PARMS-CLOCK00
       CLPA                         RELOAD LPA AT EVERY IPL
       CMB                          ADDITIONAL CMB ENTRIES
       CMD                          AUTO COMMANDS-COMMD00
       CON                          CONSOLE PARMS-CONSOL00
       CSA                          MINIMUM CSA AND ECSA SIZES
       DUMP                         PLACE SVC DUMPS ON DASD DEV
       GRS                          NO COORDINATION OF GRS REQ
       ICS                          SRM CONTROL SPECS-IEAICS00
       IPS                          SRM PERF SPECS - IEAIPS00
       LNK                          LINK LIST-LNKLST00
       LNKAUTH                      MVS/XA DEFAULT, APFTAB IS ALT
       LOGCLS                       SYSOUT=L FOR SYSLOG
       LOGLMT                       LINES OF SYSLOG BEFORE AUTO SPIN
       LPA                          LPA LIST-LPALST00
       MAXUSER                      (SYS TASKS + INITS + TSOUSERS)
       MSTRJCL                      MASTER JCL-MSTJCL00
       PAGTOT                       ALLOW TOTAL OF 16 PAGE D/S, 4 SW
       OPI                          ALLOW OPERATOR OVERRIDE-IEASYS00
       OPT                          SRM TUNING PARM-IEAOPT00
       PAGE                         PLPA PAGE DATA SET
       REAL                         MAX FOR V=R JOBS
       SCH                          SCHEDULER PARMS-SCHED00
       SMF                          SMF PARAMETERS-SMFPRM00
       SQA                          SQA (8 X 64K) * 256K
       SSN                          SUBSYSTEM NAMES-IEFSSN00
       SVC                          USER SVC LIST-IEASVC00
       SYSNAME                      ID OF SYSTEM IN GRS COMLEX
       VAL                          VOLUME ATTRIBUTE LIST-VATLST00
       VRREGN                       DEFAULT REAL-STORAGE REGION SIZE
```

EXTERNAL CONCERN



An EXTERNAL CONCERN is an element, an element expression, or an aggregate to be passed to RIPPLE-TRAC's run time engine. (INCREMENTS OF up to 500+ in each run)

If you created as many entries in the external concern table as there are parms in SYS1.PARMLIB in column 1-40, RIPPLE-TRAC will create a result set that depicts these parms within the parent member and their values across all images.

IMAGE1

The following ITEMS OF CONCERN for **IMAGE1** are used as input to RIPPLE-TRAC.
In this case, we are looking for all these parms in image1 on the z/os. The parms can cross all members in SYS1.PARMLIB.

```
+---------CONCERN 40 BYTES------------++-FREE    20 BYTES-++-TYPE
*****                                                    +-1 BYTE
******************NOMENCLATURE SECTION***********************
****                                                    ****
****  NOTE: BE SURE NO DUPLICATES EXIST IN COL 1-40      ****
****                                                    ****
****  THE NEXT 20 BYTES IS FOR z/OS IMAGE NAME          ****
****                                                    ****
****  THE PLUS SIGN SAY'S NOT ONLY GIVE ME THE PARM BUT  ****
****  INCLUDE THE NEXT 30 BYTES AFTER THE PARM          ****
****                                                    ****
**************END NOMENCLATURE SECTION**********************
***************SYS1.PARMLIB SECTION************************+
******IEASYS01 PARMS*****************************************+
APF                                    IMAGE1              +
CLOCK                                  IMAGE1              +
CLPA                                   IMAGE1              +
CMB                                    IMAGE1              +
CMD                                    IMAGE1              +
CON                                    IMAGE1              +
CSA                                    IMAGE1              +
DUMP                                   IMAGE1              +
GRS                                    IMAGE1              +
ICS                                    IMAGE1              +
IPS                                    IMAGE1              +
LNK                                    IMAGE1              +
LNKAUTH                                IMAGE1              +
LOGCLS                                 IMAGE1              +
LOGLMT                                 IMAGE1              +
LPA                                    IMAGE1              +
MAXUSER                                IMAGE1              +
MSTRJCL                                IMAGE1              +
PAGTOTL                                IMAGE1              +
OPI                                    IMAGE1              +
PAGE                                   IMAGE1              +
REAL                                   IMAGE1              +
```

```
SCH                                          IMAGE1              +
SMF                                          IMAGE1              +
SQA                                          IMAGE1              +
SSN                                          IMAGE1              +
SVC                                          IMAGE1              +
SYSNAME                                      IMAGE1              +
VAL                                          IMAGE1              +
VRREGN                                       IMAGE1              +
*END   IEASYS01 PARMS*****************************************+
```

The above fields are gathered manually in this release. (V2.1.01)

The RIPPLE-TRAC repository holds all of output from the RIPPLE-TRAC process as a flat file.

Multiple reports and spreadsheets can be generated from this file:

MEMBER/IMAGE1 PARM RESULT SET

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS01	+	IMAGE1	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS01	+	IMAGE1	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
3	IEASYS01	+	IMAGE1	CLPA	CLPA	RELOAD LPA AT EVERY IPL
3	IEASYS01	+	IMAGE1	LPA	LPA	LPA LIST-LPALST00
4	IEASYS01	+	IMAGE1	CMB	CMB=(UNITR COMM GRAPH CHRDR)	ADDITIONAL CMB ENTRIES
5	IEASYS01	+	IMAGE1	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS01	+	IMAGE1	CON	CON=0	CONSOLE PARMS-CONSOL00
7	IEASYS01	+	IMAGE1	CSA	CSA=(3100 5000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS01	+	IMAGE1	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
9	IEASYS01	+	IMAGE1	GRS	GRS=NONE	NO COORDINATION OF GRS REQ
10	IEASYS01	+	IMAGE1	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS01	+	IMAGE1	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS01	+	IMAGE1	LNK	LNK=00	LINK LIST-LNKLST00
13	IEASYS01	+	IMAGE1	LNK	LNKAUTH=LNKLST	LINK LIST-LNKLST00
13	IEASYS01	+	IMAGE1	LNKAUTH	LNKAUTH=LNKLST	MVS/XA DEFAULT APFTAB IS ALT
14	IEASYS01	+	IMAGE1	LOGCLS	LOGCLS=L	SYSOUT=L FOR SYSLOG
15	IEASYS01	+	IMAGE1	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
16	IEASYS01	+	IMAGE1	LPA	LPA=00	LPA LIST-LPALST00
17	IEASYS01	+	IMAGE1	MAXUSER	MAXUSER=500	(SYS TASKS + INITS + TSOUSERS)
18	IEASYS01	+	IMAGE1	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
19	IEASYS01	+	IMAGE1	PAGTOTL	PAGTOTL=(16 4)	
20	IEASYS01	+	IMAGE1	OPI	OPI=NO	ALLOW OPERATOR OVERRIDE-IEASYS00
22	IEASYS01	+	IMAGE1	LPA	LPA	LPA LIST-LPALST00
22	IEASYS01	+	IMAGE1	PAGE	PAGE=(PAGE.VSYSCAT.PLPA	PLPA PAGE DATA SET
23	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSCAT.COMMON	PLPA PAGE DATA SET
24	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG2	PLPA PAGE DATA SET

25	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG3	PLPA PAGE DATA SET
26	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG4	PLPA PAGE DATA SET
27	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG5	PLPA PAGE DATA SET
28	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG6	PLPA PAGE DATA SET
29	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG7	PLPA PAGE DATA SET
30	IEASYS01	+	IMAGE1	PAGE	PAGE.VSYSPG8 L)	PLPA PAGE DATA SET
31	IEASYS01	+	IMAGE1	REAL	REAL=128	MAX FOR V=R JOBS
32	IEASYS01	+	IMAGE1	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS01	+	IMAGE1	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
34	IEASYS01	+	IMAGE1	SQA	SQA=(8 128)	SQA (8 X 64K) * 256K
35	IEASYS01	+	IMAGE1	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS01	+	IMAGE1	SVC	SVC=00	USER SVC LIST-IEASVC00
37	IEASYS01	+	IMAGE1	SYSNAME	SYSNAME=SYSA	ID OF SYSTEM IN GRS COMLEX
38	IEASYS01	+	IMAGE1	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
39	IEASYS01	+	IMAGE1	VRREGN	VRREGN=128	DEFAULT REAL-STORAGE REGION SIZE

Column 1 ‘REL-SEQ’ is the relative sequence number of the line of code in the member.
Column 2 ‘MEMBER’ is the MEMBER name in SYS1.PARMLIB.
Column 3 ‘TYPE’ is the type of component, in this case, ‘+’ stands for extract parm data also.
Column 4 ‘IMAGE’ is the z/OS image name. In this case IMAGE1.
Column 5 ‘PARM’ is the parameter that was requested.
Column 6 ‘PARM DATA’ is the parameter plus the data.
Column 7 ‘DESCRIPTION’ is the description of the parameter.

IMAGE2

The following ITEMS OF CONCERN for **IMAGE2** are used as input to RIPPLE-TRAC.
In this case, we are looking for all these parms in image2 on the z/os. The parms can cross all members in SYS1.PARMLIB.

```
+---------CONCERN 40 BYTES-----------++-FREE    20 BYTES-++-TYPE
*****                                                    +-1 BYTE
******************NOMENCLATURE SECTION**********************
****                                                    ****
****  NOTE: BE SURE NO DUPLICATES EXIST IN COL 1-40      ****
****                                                    ****
****  THE NEXT 20 BYTES IS FOR z/OS IMAGE NAME          ****
****                                                    ****
****  THE PLUS SIGN SAY'S NOT ONLY GIVE ME THE PARM BUT  ****
****  INCLUDE THE NEXT 30 BYTES AFTER THE PARM          ****
****                                                    ****
**************END NOMENCLATURE SECTION**********************
****************SYS1.PARMLIB SECTION************************+
******IEASYS02 PARMS*****************************************+
APF                                    IMAGE2              +
CLOCK                                  IMAGE2              +
CLPA                                   IMAGE2              +
CMB                                    IMAGE2              +
CMD                                    IMAGE2              +
CON                                    IMAGE2              +
CSA                                    IMAGE2              +
DUMP                                   IMAGE2              +
GRS                                    IMAGE2              +
ICS                                    IMAGE2              +
IPS                                    IMAGE2              +
LNK                                    IMAGE2              +
LNKAUTH                                IMAGE2              +
LOGCLS                                 IMAGE2              +
LOGLMT                                 IMAGE2              +
LPA                                    IMAGE2              +
MAXUSER                                IMAGE2              +
MSTRJCL                                IMAGE2              +
PAGTOTL                                IMAGE2              +
OPI                                    IMAGE2              +
PAGE                                   IMAGE2              +
REAL                                   IMAGE2              +
SCH                                    IMAGE2              +
SMF                                    IMAGE2              +
SQA                                    IMAGE2              +
SSN                                    IMAGE2              +
SVC                                    IMAGE2              +
SYSNAME                                IMAGE2              +
VAL                                    IMAGE2              +
VRREGN                                 IMAGE2              +
*END  IEASYS02 PARMS****************************************+
```

MEMBER/IMAGE2 PARM RESULT SET

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS02	+	IMAGE2	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS02	+	IMAGE2	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
3	IEASYS02	+	IMAGE2	CLPA	CLPA	RELOAD LPA AT EVERY IPL
3	IEASYS02	+	IMAGE2	LPA	LPA	LPA LIST-LPALST00
4	IEASYS02	+	IMAGE2	CMB	CMB=(UNITR COMM GRAPH CHRDR)	ADDITIONAL CMB ENTRIES
5	IEASYS02	+	IMAGE2	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS02	+	IMAGE2	CON	CON=0	CONSOLE PARMS-CONSOL00
7	IEASYS02	+	IMAGE2	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS02	+	IMAGE2	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
9	IEASYS02	+	IMAGE2	GRS	GRS=NONE	NO COORDINATION OF GRS REQ
10	IEASYS02	+	IMAGE2	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS02	+	IMAGE2	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS02	+	IMAGE2	LNK	LNK=00	LINK LIST-LNKLST00
13	IEASYS02	+	IMAGE2	LNK	LNKAUTH=LNKLST	LINK LIST-LNKLST00
13	IEASYS02	+	IMAGE2	LNKAUTH	LNKAUTH=LNKLST	MVS/XA DEFAULT APFTAB IS ALT
14	IEASYS02	+	IMAGE2	LOGCLS	LOGCLS=L	SYSOUT=L FOR SYSLOG
15	IEASYS02	+	IMAGE2	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
16	IEASYS02	+	IMAGE2	LPA	LPA=00	LPA LIST-LPALST00
17	IEASYS02	+	IMAGE2	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
18	IEASYS02	+	IMAGE2	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
19	IEASYS02	+	IMAGE2	PAGTOTL	PAGTOTL=(16 4)	
20	IEASYS02	+	IMAGE2	OPI	OPI=YES	ALLOW OPERATOR OVERRIDE-IEASYS00
22	IEASYS02	+	IMAGE2	LPA	LPA	LPA LIST-LPALST00
22	IEASYS02	+	IMAGE2	PAGE	PAGE=(PAGE.VSYSCAT.PLPA	PLPA PAGE DATA SET
23	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSCAT.COMMON	PLPA PAGE DATA SET
24	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGA	PLPA PAGE DATA SET
25	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGB	PLPA PAGE DATA SET
26	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGC	PLPA PAGE DATA SET
27	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGD	PLPA PAGE DATA SET
28	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGE	PLPA PAGE DATA SET
29	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGF	PLPA PAGE DATA SET
30	IEASYS02	+	IMAGE2	PAGE	PAGE.VSYSPGG L)	PLPA PAGE DATA SET
31	IEASYS02	+	IMAGE2	REAL	REAL=256	MAX FOR V=R JOBS
32	IEASYS02	+	IMAGE2	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS02	+	IMAGE2	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
34	IEASYS02	+	IMAGE2	SQA	SQA=(8 128)	SQA (8 X 64K) * 256K
35	IEASYS02	+	IMAGE2	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS02	+	IMAGE2	SVC	SVC=00	USER SVC LIST-IEASVC00
37	IEASYS02	+	IMAGE2	SYSNAME	SYSNAME=SYSA	ID OF SYSTEM IN GRS COMLEX

38	IEASYS02	+	IMAGE2	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
39	IEASYS02	+	IMAGE2	VRREGN	VRREGN=128	DEFAULT REAL-STORAGE REGION SIZE

Column 1 'REL-SEQ' is the relative sequence number of the line of code in the member.
Column 2 'MEMBER' is the MEMBER name in SYS1.PARMLIB.
Column 3 'TYPE' is the type of component, in this case, '+' stands for extract parm data also.
Column 4 'IMAGE' is the z/OS image name. In this case IMAGE2.
Column 5 'PARM' is the parameter that was requested.
Column 6 'PARM DATA' is the parameter plus the data.
Column 7 'DESCRIPTION' is the description of the parameter.

IMAGE3

The following ITEMS OF CONCERN for **IMAGE3** are used as input to RIPPLE-TRAC.
In this case, we are looking for all these parms in image3 on the z/os. The parms can cross all members in SYS1.PARMLIB.

```
+---------CONCERN 40 BYTES------------++-FREE    20 BYTES-++-TYPE
*****                                                    +-1 BYTE
******************NOMENCLATURE SECTION**********************
****                                                    ****
****  NOTE: BE SURE NO DUPLICATES EXIST IN COL 1-40      ****
****                                                    ****
****  THE NEXT 20 BYTES IS FOR z/OS IMAGE NAME          ****
****                                                    ****
****  THE PLUS SIGN SAY'S NOT ONLY GIVE ME THE PARM BUT  ****
****  INCLUDE THE NEXT 30 BYTES AFTER THE PARM          ****
****                                                    ****
**************END NOMENCLATURE SECTION**********************
****************SYS1.PARMLIB SECTION**********************+
******IEASYS03 PARMS*****************************************+
APF                                     IMAGE3              +
CLOCK                                   IMAGE3              +
CLPA                                    IMAGE3              +
CMB                                     IMAGE3              +
CMD                                     IMAGE3              +
CON                                     IMAGE3              +
CSA                                     IMAGE3              +
DUMP                                    IMAGE3              +
GRS                                     IMAGE3              +
ICS                                     IMAGE3              +
IPS                                     IMAGE3              +
LNK                                     IMAGE3              +
LNKAUTH                                 IMAGE3              +
LOGCLS                                  IMAGE3              +
LOGLMT                                  IMAGE3              +
LPA                                     IMAGE3              +
MAXUSER                                 IMAGE3              +
MSTRJCL                                 IMAGE3              +
PAGTOTL                                 IMAGE3              +
OPI                                     IMAGE3              +
PAGE                                    IMAGE3              +
REAL                                    IMAGE3              +
SCH                                     IMAGE3              +
SMF                                     IMAGE3              +
SQA                                     IMAGE3              +
SSN                                     IMAGE3              +
SVC                                     IMAGE3              +
```

```
SYSNAME                                  IMAGE3              +
VAL                                      IMAGE3              +
VRREGN                                   IMAGE3              +
*END   IEASYS03 PARMS*****************************************+
```

MEMBER/IMAGE3 PARM RESULT SET

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS03	+	IMAGE3	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS03	+	IMAGE3	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
3	IEASYS03	+	IMAGE3	CLPA	CLPA	RELOAD LPA AT EVERY IPL
3	IEASYS03	+	IMAGE3	LPA	LPA	LPA LIST-LPALST00
4	IEASYS03	+	IMAGE3	CMB	CMB=(UNITR COMM GRAPH CHRDR)	ADDITIONAL CMB ENTRIES
5	IEASYS03	+	IMAGE3	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS03	+	IMAGE3	CON	CON=0	CONSOLE PARMS-CONSOL00
7	IEASYS03	+	IMAGE3	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS03	+	IMAGE3	DUMP	DUMP=TAPE	PLACE SVC DUMPS ON DASD DEV
9	IEASYS03	+	IMAGE3	GRS	GRS=NONE	NO COORDINATION OF GRS REQ
10	IEASYS03	+	IMAGE3	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS03	+	IMAGE3	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS03	+	IMAGE3	LNK	LNK=00	LINK LIST-LNKLST00
13	IEASYS03	+	IMAGE3	LNK	LNKAUTH=LNKLST	LINK LIST-LNKLST00
13	IEASYS03	+	IMAGE3	LNKAUTH	LNKAUTH=LNKLST	MVS/XA DEFAULT APFTAB IS ALT
14	IEASYS03	+	IMAGE3	LOGCLS	LOGCLS=L	SYSOUT=L FOR SYSLOG
15	IEASYS03	+	IMAGE3	LOGLMT	LOGLMT=555555	LINES OF SYSLOG BEFORE AUTO SPIN
16	IEASYS03	+	IMAGE3	LPA	LPA=00	LPA LIST-LPALST00
17	IEASYS03	+	IMAGE3	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
18	IEASYS03	+	IMAGE3	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
19	IEASYS03	+	IMAGE3	PAGTOTL	PAGTOTL=(16 4)	
20	IEASYS03	+	IMAGE3	OPI	OPI=YES	ALLOW OPERATOR OVERRIDE-IEASYS00
22	IEASYS03	+	IMAGE3	LPA	LPA	LPA LIST-LPALST00
22	IEASYS03	+	IMAGE3	PAGE	PAGE=(PAGE.VSYSCAT.PLPA	PLPA PAGE DATA SET
23	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSCAT.COMMON	PLPA PAGE DATA SET
24	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGH	PLPA PAGE DATA SET
25	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGI	PLPA PAGE DATA SET
26	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGJ	PLPA PAGE DATA SET
27	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGK	PLPA PAGE DATA SET
28	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGL	PLPA PAGE DATA SET
29	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGM	PLPA PAGE DATA SET
30	IEASYS03	+	IMAGE3	PAGE	PAGE.VSYSPGN L)	PLPA PAGE DATA SET
31	IEASYS03	+	IMAGE3	REAL	REAL=128	MAX FOR V=R JOBS
32	IEASYS03	+	IMAGE3	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS03	+	IMAGE3	SMF	SMF=00	SMF PARAMETERS-SMFPRM00

34	IEASYS03	+	IMAGE3	SQA	SQA=(8 128)	SQA (8 X 64K) * 256K
35	IEASYS03	+	IMAGE3	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS03	+	IMAGE3	SVC	SVC=00	USER SVC LIST-IEASVC00
37	IEASYS03	+	IMAGE3	SYSNAME	SYSNAME=SYSA	ID OF SYSTEM IN GRS COMLEX
38	IEASYS03	+	IMAGE3	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
39	IEASYS03	+	IMAGE3	VRREGN	VRREGN=64	DEFAULT REAL-STORAGE REGION SIZE

Column 1 'REL-SEQ' is the relative sequence number of the line of code in the member.
Column 2 'MEMBER' is the MEMBER name in SYS1.PARMLIB.
Column 3 'TYPE' is the type of component, in this case, '+' stands for extract parm data also.
Column 4 'IMAGE' is the z/OS image name. In this case IMAGE3.
Column 5 'PARM' is the parameter that was requested.
Column 6 'PARM DATA' is the parameter plus the data.
Column 7 'DESCRIPTION' is the description of the parameter.

IMAGE4

The following ITEMS OF CONCERN for **IMAGE4** are used as input to RIPPLE-TRAC.
In this case, we are looking for all these parms in IMAGE4 on the z/os. The parms can cross all members in SYS1.PARMLIB.

```
+---------CONCERN 40 BYTES-----------++-FREE    20 BYTES-++-TYPE
*****                                                    +-1 BYTE
******************NOMENCLATURE SECTION**********************
****                                                    ****
****  NOTE: BE SURE NO DUPLICATES EXIST IN COL 1-40      ****
****                                                    ****
****  THE NEXT 20 BYTES IS FOR z/OS IMAGE NAME          ****
****                                                    ****
****  THE PLUS SIGN SAY'S NOT ONLY GIVE ME THE PARM BUT  ****
****  INCLUDE THE NEXT 30 BYTES AFTER THE PARM          ****
****                                                    ****
***************END NOMENCLATURE SECTION**********************
****************SYS1.PARMLIB SECTION************************+
******IEASYS04 PARMS*****************************************+
APF                                    IMAGE4               +
CLOCK                                  IMAGE4               +
CLPA                                   IMAGE4               +
CMB                                    IMAGE4               +
CMD                                    IMAGE4               +
CON                                    IMAGE4               +
CSA                                    IMAGE4               +
DUMP                                   IMAGE4               +
GRS                                    IMAGE4               +
ICS                                    IMAGE4               +
IPS                                    IMAGE4               +
LNK                                    IMAGE4               +
LNKAUTH                                IMAGE4               +
LOGCLS                                 IMAGE4               +
LOGLMT                                 IMAGE4               +
LPA                                    IMAGE4               +
MAXUSER                                IMAGE4               +
MSTRJCL                                IMAGE4               +
PAGTOTL                                IMAGE4               +
OPI                                    IMAGE4               +
PAGE                                   IMAGE4               +
```

```
REAL                                    IMAGE4              +
SCH                                     IMAGE4              +
SMF                                     IMAGE4              +
SQA                                     IMAGE4              +
SSN                                     IMAGE4              +
SVC                                     IMAGE4              +
SYSNAME                                 IMAGE4              +
VAL                                     IMAGE4              +
VRREGN                                  IMAGE4              +
*END  IEASYS04 PARMS*************************************+
```

MEMBER/IMAGE4 PARM RESULT SET

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS04	+	IMAGE4	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS04	+	IMAGE4	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
3	IEASYS04	+	IMAGE4	CLPA	CLPA	RELOAD LPA AT EVERY IPL
3	IEASYS04	+	IMAGE4	LPA	LPA	LPA LIST-LPALST00
4	IEASYS04	+	IMAGE4	CMB	CMB=(UNITR COMM GRAPH CHRDR)	ADDITIONAL CMB ENTRIES
5	IEASYS04	+	IMAGE4	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS04	+	IMAGE4	CON	CON=0	CONSOLE PARMS-CONSOL00
7	IEASYS04	+	IMAGE4	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS04	+	IMAGE4	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
9	IEASYS04	+	IMAGE4	GRS	GRS=NONE	NO COORDINATION OF GRS REQ
10	IEASYS04	+	IMAGE4	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS04	+	IMAGE4	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS04	+	IMAGE4	LNK	LNK=05	LINK LIST-LNKLST00
13	IEASYS04	+	IMAGE4	LNK	LNKAUTH=LNKLST	LINK LIST-LNKLST00
13	IEASYS04	+	IMAGE4	LNKAUTH	LNKAUTH=LNKLST	MVS/XA DEFAULT APFTAB IS ALT
14	IEASYS04	+	IMAGE4	LOGCLS	LOGCLS=L	SYSOUT=L FOR SYSLOG
15	IEASYS04	+	IMAGE4	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
16	IEASYS04	+	IMAGE4	LPA	LPA=00	LPA LIST-LPALST00
17	IEASYS04	+	IMAGE4	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
18	IEASYS04	+	IMAGE4	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
19	IEASYS04	+	IMAGE4	PAGTOTL	PAGTOTL=(16 4)	
20	IEASYS04	+	IMAGE4	OPI	OPI=NO	ALLOW OPERATOR OVERRIDE-IEASYS00
22	IEASYS04	+	IMAGE4	LPA	LPA	LPA LIST-LPALST00
22	IEASYS04	+	IMAGE4	PAGE	PAGE=(PAGE.VSYSCAT.PLPA	PLPA PAGE DATA SET
23	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSCAT.COMMON	PLPA PAGE DATA SET
24	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGO	PLPA PAGE DATA SET
25	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGP	PLPA PAGE DATA SET
26	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGQ	PLPA PAGE DATA SET
27	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGR	PLPA PAGE DATA SET
28	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGS	PLPA PAGE DATA SET
29	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGT	PLPA PAGE DATA SET

30	IEASYS04	+	IMAGE4	PAGE	PAGE.VSYSPGU L)	PLPA PAGE DATA SET
31	IEASYS04	+	IMAGE4	REAL	REAL=128	MAX FOR V=R JOBS
32	IEASYS04	+	IMAGE4	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS04	+	IMAGE4	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
34	IEASYS04	+	IMAGE4	SQA	SQA=(8 128)	SQA (8 X 64K) * 256K
35	IEASYS04	+	IMAGE4	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS04	+	IMAGE4	SVC	SVC=00	USER SVC LIST-IEASVC00
37	IEASYS04	+	IMAGE4	SYSNAME	SYSNAME=SYSA	ID OF SYSTEM IN GRS COMLEX
38	IEASYS04	+	IMAGE4	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
39	IEASYS04	+	IMAGE4	VRREGN	VRREGN=64	DEFAULT REAL-STORAGE REGION SIZE

Column 1 'REL-SEQ' is the relative sequence number of the line of code in the member.
Column 2 'MEMBER' is the MEMBER name in SYS1.PARMLIB.
Column 3 'TYPE' is the type of component, in this case, '+' stands for extract parm data also.
Column 4 'IMAGE' is the z/OS image name. In this case IMAGE4.
Column 5 'PARM' is the parameter that was requested.
Column 6 'PARM DATA' is the parameter plus the data.
Column 7 'DESCRIPTION' is the description of the parameter.

IMAGE5

The following ITEMS OF CONCERN for **IMAGE5** are used as input to RIPPLE-TRAC.
In this case, we are looking for all these parms in IMAGE5 on the z/os. The parms can cross all members in SYS1.PARMLIB.

```
+---------CONCERN 40 BYTES-----------++-FREE    20 BYTES-++-TYPE
*****                                                    +-1 BYTE
******************NOMENCLATURE SECTION**********************
****                                                    ****
****  NOTE: BE SURE NO DUPLICATES EXIST IN COL 1-40     ****
****                                                    ****
****  THE NEXT 20 BYTES IS FOR z/OS IMAGE NAME          ****
****                                                    ****
****  THE PLUS SIGN SAY'S NOT ONLY GIVE ME THE PARM BUT  ****
****  INCLUDE THE NEXT 30 BYTES AFTER THE PARM          ****
****                                                    ****
**************END NOMENCLATURE SECTION**********************
****************SYS1.PARMLIB SECTION************************+
******IEASYS05 PARMS*****************************************+
APF                                    IMAGE5              +
CLOCK                                  IMAGE5              +
CLPA                                   IMAGE5              +
CMB                                    IMAGE5              +
CMD                                    IMAGE5              +
CON                                    IMAGE5              +
CSA                                    IMAGE5              +
DUMP                                   IMAGE5              +
GRS                                    IMAGE5              +
ICS                                    IMAGE5              +
IPS                                    IMAGE5              +
LNK                                    IMAGE5              +
LNKAUTH                                IMAGE5              +
LOGCLS                                 IMAGE5              +
LOGLMT                                 IMAGE5              +
LPA                                    IMAGE5              +
```

```
MAXUSER                                  IMAGE5               +
MSTRJCL                                  IMAGE5               +
PAGTOTL                                  IMAGE5               +
OPI                                      IMAGE5               +
PAGE                                     IMAGE5               +
REAL                                     IMAGE5               +
SCH                                      IMAGE5               +
SMF                                      IMAGE5               +
SQA                                      IMAGE5               +
SSN                                      IMAGE5               +
SVC                                      IMAGE5               +
SYSNAME                                  IMAGE5               +
VAL                                      IMAGE5               +
VRREGN                                   IMAGE5               +
*END   IEASYS05 PARMS*****************************************+
```

MEMBER/IMAGE5 PARM RESULT SET

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS05	+	IMAGE5	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS05	+	IMAGE5	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
3	IEASYS05	+	IMAGE5	CLPA	CLPA	RELOAD LPA AT EVERY IPL
3	IEASYS05	+	IMAGE5	LPA	LPA	LPA LIST-LPALST00
4	IEASYS05	+	IMAGE5	CMB	CMB=(UNITR COMM GRAPH CHRDR)	ADDITIONAL CMB ENTRIES
5	IEASYS05	+	IMAGE5	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS05	+	IMAGE5	CON	CON=0	CONSOLE PARMS-CONSOL00
7	IEASYS05	+	IMAGE5	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS05	+	IMAGE5	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
9	IEASYS05	+	IMAGE5	GRS	GRS=NONE	NO COORDINATION OF GRS REQ
10	IEASYS05	+	IMAGE5	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS05	+	IMAGE5	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS05	+	IMAGE5	LNK	LNK=07	LINK LIST-LNKLST00
13	IEASYS05	+	IMAGE5	LNK	LNKAUTH=LNKLST	LINK LIST-LNKLST00
13	IEASYS05	+	IMAGE5	LNKAUTH	LNKAUTH=LNKLST	MVS/XA DEFAULT APFTAB IS ALT
14	IEASYS05	+	IMAGE5	LOGCLS	LOGCLS=L	SYSOUT=L FOR SYSLOG
15	IEASYS05	+	IMAGE5	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
16	IEASYS05	+	IMAGE5	LPA	LPA=04	LPA LIST-LPALST00
17	IEASYS05	+	IMAGE5	MAXUSER	MAXUSER=800	(SYS TASKS + INITS + TSOUSERS)
18	IEASYS05	+	IMAGE5	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
19	IEASYS05	+	IMAGE5	PAGTOTL	PAGTOTL=(16 4)	
20	IEASYS05	+	IMAGE5	OPI	OPI=NO	ALLOW OPERATOR OVERRIDE-IEASYS00
22	IEASYS05	+	IMAGE5	LPA	LPA	LPA LIST-LPALST00
22	IEASYS05	+	IMAGE5	PAGE	PAGE=(PAGE.VSYSCAT.PLPA	PLPA PAGE DATA SET
23	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSCAT.COMMON	PLPA PAGE DATA SET
24	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGV	PLPA PAGE DATA SET
25	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGW	PLPA PAGE DATA SET

26	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGX	PLPA PAGE DATA SET
27	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGY	PLPA PAGE DATA SET
28	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGZ	PLPA PAGE DATA SET
29	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGTZ1	PLPA PAGE DATA SET
30	IEASYS05	+	IMAGE5	PAGE	PAGE.VSYSPGZ2 L)	PLPA PAGE DATA SET
31	IEASYS05	+	IMAGE5	REAL	REAL=512	MAX FOR V=R JOBS
32	IEASYS05	+	IMAGE5	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS05	+	IMAGE5	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
34	IEASYS05	+	IMAGE5	SQA	SQA=(8 128)	SQA (8 X 64K) * 256K
35	IEASYS05	+	IMAGE5	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS05	+	IMAGE5	SVC	SVC=00	USER SVC LIST-IEASVC00
37	IEASYS05	+	IMAGE5	SYSNAME	SYSNAME=SYSA	ID OF SYSTEM IN GRS COMLEX
38	IEASYS05	+	IMAGE5	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
39	IEASYS05	+	IMAGE5	VRREGN	VRREGN=64	DEFAULT REAL-STORAGE REGION SIZE

Column 1 ‘REL-SEQ’ is the relative sequence number of the line of code in the member.
Column 2 ‘MEMBER’ is the MEMBER name in SYS1.PARMLIB.
Column 3 ‘TYPE’ is the type of component, in this case, ‘+’ stands for extract parm data also.
Column 4 ‘IMAGE’ is the z/OS image name. In this case IMAGE5.
Column 5 ‘PARM’ is the parameter that was requested.
Column 6 ‘PARM DATA’ is the parameter plus the data.
Column 7 ‘DESCRIPTION’ is the description of the parameter.

PARM/MEMBER PARM RESULT SET ACROSS 5 IMAGES

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
7	IEASYS01	+	IMAGE1	CSA	CSA=(3100 5000)	MINIMUM CSA AND ECSA SIZES
7	IEASYS02	+	IMAGE2	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
7	IEASYS03	+	IMAGE3	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
7	IEASYS04	+	IMAGE4	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
7	IEASYS05	+	IMAGE5	CSA	CSA=(2100 4000)	MINIMUM CSA AND ECSA SIZES
8	IEASYS01	+	IMAGE1	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
8	IEASYS02	+	IMAGE2	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
8	IEASYS03	+	IMAGE3	DUMP	DUMP=TAPE	PLACE SVC DUMPS ON DASD DEV
8	IEASYS04	+	IMAGE4	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
8	IEASYS05	+	IMAGE5	DUMP	DUMP=DASD	PLACE SVC DUMPS ON DASD DEV
15	IEASYS01	+	IMAGE1	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
15	IEASYS02	+	IMAGE2	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
15	IEASYS03	+	IMAGE3	LOGLMT	LOGLMT=555555	LINES OF SYSLOG BEFORE AUTO SPIN
15	IEASYS04	+	IMAGE4	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
15	IEASYS05	+	IMAGE5	LOGLMT	LOGLMT=999999	LINES OF SYSLOG BEFORE AUTO SPIN
17	IEASYS01	+	IMAGE1	MAXUSER	MAXUSER=500	(SYS TASKS + INITS + TSOUSERS)
17	IEASYS02	+	IMAGE2	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
17	IEASYS03	+	IMAGE3	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
17	IEASYS04	+	IMAGE4	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)
17	IEASYS05	+	IMAGE5	MAXUSER	MAXUSER=250	(SYS TASKS + INITS + TSOUSERS)

This result set depicts filtering by PARM/MEMBER across multiple images.

Column 1 'REL-SEQ' is the relative sequence number of the line of code.
Column 2 'MEMBER' is the MEMBER name in SYS1.PARMLIB.
Column 3 'TYPE' is the type of component, in this case, '+' stands for extract parm data also.
Column 4 'IMAGE' is the z/OS image name. In this case IMAGE1-5.
Column 5 'PARM' is the parameter that was requested.
Column 6 'PARM DATA' is the parameter plus the data.
Column 7 'DESCRIPTION' is the description of the parameter.

PARM/MEMBER/ DIRECTOR LIST ACROSS 5 IMAGES

The directors (such as CMD=00) point or direct the system to one or more specialized members, such as COMMD00.

REL-SEQ	MEMBER	TYPE	IMAGE	PARM	PARM DATA	DESCRIPTION
1	IEASYS01	+	IMAGE1	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
1	IEASYS02	+	IMAGE2	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
1	IEASYS03	+	IMAGE3	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
1	IEASYS04	+	IMAGE4	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
1	IEASYS05	+	IMAGE5	APF	APF=00	AUTHORIZATION LIST-IEAAPF00
2	IEASYS01	+	IMAGE1	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
2	IEASYS02	+	IMAGE2	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
2	IEASYS03	+	IMAGE3	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
2	IEASYS04	+	IMAGE4	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
2	IEASYS05	+	IMAGE5	CLOCK	CLOCK=00	TIME OF DAY PARMS-CLOCK00
5	IEASYS01	+	IMAGE1	CMD	CMD=00	AUTO COMMANDS-COMMD00
5	IEASYS02	+	IMAGE2	CMD	CMD=00	AUTO COMMANDS-COMMD00
5	IEASYS03	+	IMAGE3	CMD	CMD=00	AUTO COMMANDS-COMMD00
5	IEASYS04	+	IMAGE4	CMD	CMD=00	AUTO COMMANDS-COMMD00
5	IEASYS05	+	IMAGE5	CMD	CMD=00	AUTO COMMANDS-COMMD00
6	IEASYS01	+	IMAGE1	CON	CON=0	CONSOLE PARMS-CONSOL00
6	IEASYS02	+	IMAGE2	CON	CON=0	CONSOLE PARMS-CONSOL00
6	IEASYS03	+	IMAGE3	CON	CON=0	CONSOLE PARMS-CONSOL00
6	IEASYS04	+	IMAGE4	CON	CON=0	CONSOLE PARMS-CONSOL00
6	IEASYS05	+	IMAGE5	CON	CON=0	CONSOLE PARMS-CONSOL00
10	IEASYS01	+	IMAGE1	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
10	IEASYS02	+	IMAGE2	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
10	IEASYS03	+	IMAGE3	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
10	IEASYS04	+	IMAGE4	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
10	IEASYS05	+	IMAGE5	ICS	ICS=00	SRM CONTROL SPECS-IEAICS00
11	IEASYS01	+	IMAGE1	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
11	IEASYS02	+	IMAGE2	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
11	IEASYS03	+	IMAGE3	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
11	IEASYS04	+	IMAGE4	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
11	IEASYS05	+	IMAGE5	IPS	IPS=00	SRM PERF SPECS - IEAIPS00
12	IEASYS01	+	IMAGE1	LNK	LNK=00	LINK LIST-LNKLST00
12	IEASYS02	+	IMAGE2	LNK	LNK=00	LINK LIST-LNKLST00
12	IEASYS03	+	IMAGE3	LNK	LNK=00	LINK LIST-LNKLST00
12	IEASYS04	+	IMAGE4	LNK	LNK=00	LINK LIST-LNKLST00
12	IEASYS05	+	IMAGE5	LNK	LNK=00	LINK LIST-LNKLST00
16	IEASYS01	+	IMAGE1	LPA	LPA=00	LPA LIST-LPALST00
16	IEASYS02	+	IMAGE2	LPA	LPA=00	LPA LIST-LPALST00
16	IEASYS03	+	IMAGE3	LPA	LPA=00	LPA LIST-LPALST00

16	IEASYS04	+	IMAGE4	LPA	LPA=00	LPA LIST-LPALST00
16	IEASYS05	+	IMAGE5	LPA	LPA=00	LPA LIST-LPALST00
18	IEASYS01	+	IMAGE1	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
18	IEASYS02	+	IMAGE2	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
18	IEASYS03	+	IMAGE3	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
18	IEASYS04	+	IMAGE4	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
18	IEASYS05	+	IMAGE5	MSTRJCL	MSTRJCL=00	MASTER JCL-MSTJCL00
32	IEASYS01	+	IMAGE1	SCH	SCH=00	SCHEDULER PARMS-SCHED00
32	IEASYS02	+	IMAGE2	SCH	SCH=00	SCHEDULER PARMS-SCHED00
32	IEASYS03	+	IMAGE3	SCH	SCH=00	SCHEDULER PARMS-SCHED00
32	IEASYS04	+	IMAGE4	SCH	SCH=00	SCHEDULER PARMS-SCHED00
32	IEASYS05	+	IMAGE5	SCH	SCH=00	SCHEDULER PARMS-SCHED00
33	IEASYS01	+	IMAGE1	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
33	IEASYS02	+	IMAGE2	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
33	IEASYS03	+	IMAGE3	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
33	IEASYS04	+	IMAGE4	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
33	IEASYS05	+	IMAGE5	SMF	SMF=00	SMF PARAMETERS-SMFPRM00
35	IEASYS01	+	IMAGE1	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
35	IEASYS02	+	IMAGE2	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
35	IEASYS03	+	IMAGE3	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
35	IEASYS04	+	IMAGE4	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
35	IEASYS05	+	IMAGE5	SSN	SSN=00	SUBSYSTEM NAMES-IEFSSN00
36	IEASYS01	+	IMAGE1	SVC	SVC=00	USER SVC LIST-IEASVC00
36	IEASYS02	+	IMAGE2	SVC	SVC=00	USER SVC LIST-IEASVC00
36	IEASYS03	+	IMAGE3	SVC	SVC=00	USER SVC LIST-IEASVC00
36	IEASYS04	+	IMAGE4	SVC	SVC=00	USER SVC LIST-IEASVC00
36	IEASYS05	+	IMAGE5	SVC	SVC=00	USER SVC LIST-IEASVC00
38	IEASYS01	+	IMAGE1	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
38	IEASYS02	+	IMAGE2	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
38	IEASYS03	+	IMAGE3	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
38	IEASYS04	+	IMAGE4	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00
38	IEASYS05	+	IMAGE5	VAL	VAL=00	VOLUME ATTRIBUTE LIST-VATLST00

This result set depicts filtering by PARM/MEMBER/DIRECTOR across multiple images.

Column 1 ‘REL-SEQ’ is the relative sequence number of the line of code.
Column 2 ‘MEMBER’ is the MEMBER name in SYS1.PARMLIB.
Column 3 ‘TYPE’ is the type of component, in this case, ‘+’ stands for extract parm data also.
Column 4 ‘IMAGE’ is the z/OS image name. In this case IMAGE1-5.
Column 5 ‘PARM’ is the parameter that was requested .
Column 6 ‘PARM DATA’ is the parameter plus the data in this case, DIRECTORS are requested.
Column 7 ‘DESCRIPTION’ is the description of the parameter.