

API/IFS Internal Trace Entries

This chapter contains internal API and IFS trace entries. It includes these sections:

- **API Internal Trace Entries**
This section describes API internal trace entries.
- **Flags and Return Codes**
Provides additional information about the SRE flags, TPL flags, and APICTFRE return codes
- **IFS Internal Trace Entries**
Describes IFS internal trace entries.

API Internal Trace Entries

This section describes API internal trace entries, listed alphabetically by type.

API

Table 3-1 API-type API internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|--|
| TBEG | UDW1: ASID UDW2: TCB UDW3: QSTR UDW4: TUCX | An address space has issued an AOPEN macro to the API. The ASID, TCB, and TUCX are logged. QSTR is valid only for the transport provider. |
| TEND | UDW1: TUCB TPCB UDW2: TCEP SVCID UDW4:EPCB | An address space has issued an ACLOSE macro to the API. The TUCB is logged. If an endpoint is OPEN, its TCEP and EPCB are logged. If a transport provider has ended, its TPCB and service ID are logged. |
| TOPN | UDW1: SRE UDW2: EPCB UDW3: ISRB | A TOPEN macro has been issued. The SRE and EPCB are logged. The ISRB is dispatched to process the OPEN. |
| TCLO | UDW1: EPCB UDW2: TUCB UDW3: ARCB UDW4: TPCB | A TCLOSE macro has been issued. The endpoint EPCB and the associated TUCB and ARCB are logged. |

Table 3-1 API-type API internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|---------------------|--|--|
| FSRE | UDW1: SRE UDW2: SREFLAG, TPLFLAG, RC UDW3: EPCB UDW4: TUCX | This entry is the first half of a type 00 or type 04 FSRE entry. An SRE is being completed. Its flags, the TPL flags, and the return code for APICTFRE is logged. The returned EPCB and TUCX is logged. (Read “Flags and Return Codes” on page -4 for more information.) |
| | UDW1: TCB UDW2: TUCB UDW3: ECB UDW4: TPL | This entry is the second half of a type 00 or type 04 FSRE entry. An SRE is being completed. A TCB may require further processing, and ECB may require posting. The user’s TPL address is logged. |
| | UDW1: SRE UDW2: SREFLAG, TPLFLAG, RC UDW3: EPCB UDW4: TUCX | This entry is the first half of a type 8 FSRE entry. An SRE has been queued for exit processing later by an IRB. The EPCB and TUCX are logged. |
| | UDW1: TCB UDW2: TUCB | This entry is the second half of a type 8 FSRE entry. If an IRB needs to be scheduled, the TCB address is logged. The TUCB is also logged. |
| FSRE (continued) | UDW1: SRE UDW2: SREFLAG, TPLFLAG, RC UDW3: EPCB UDW4: TUCX | This entry is the first half of a type 0C or 10 FSRE entry. An IRB exit is being driven. Its SRE and flags are logged, along with the APICTFRE return code, the EPCB and the TUCX. (Read “Flags and Return Codes” on page -4 for more information.) |
| | UDW1: TXPTYPE UDW2: TCEP UDW3: EXIT UDW4: TXPPARM | This entry is the second half of a type 0C or 10 FSRE entry. An IRB exit is being driven. The exit parameters are logged. |
| FUNC | UDW1: EPCB UDW2: SRE UDW3: TPL UDW4: FUNCTION CD | A TPL-based function has been issued. The SRE and EPCB are logged. The user’s TPL address and function code are logged. |
| SCMP | UDW1: TUCB | Work for a user has been completed at the logged TUCB. |
| SSRB | UDW1: SRB UDW2: ASCB UDW3: ARCB | An SRB is being scheduled for a user address space. The ASCB and ARCB are logged. The SRB address is given. |
| SOPN | UDW1: TPCB UDW2: EPCB UDW3: TIB | An OPEN request is being processed. The selected service is given by the TPCB and TIB. |
| SCLO | UDW1: FUNCTION UDW2: ARCB/TUCB | An ACLOSE is being processed. These are the function codes: 0 – Normal ACLOSE 4 – Abortive ACLOSE at end of memory 8 – Abortive ACLOSE at end of task The ARCB or TUCB is given. |
| TEOJ | UDW1: ASID UDW2: TCB UDW3: ARCB/TUCB | An end of task or end of memory (end of address space) event has taken place for a task using the API. |

Table 3-1 API-type API internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|----------------|---|--|
| TPEN | UDW1: SRE UDW2: EPCB UDW3: TPCB UDW4: REASON | A TPEND exit is being driven. The endpoint EPCB is given. The reason codes are from the TXP. |

ENPT

Table 3-2 ENPT-type API internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|---|---|
| DQSR | UDW1: A(SRC) UDW2: A(EPCB) UDW3: TPLFNCCD | An API endpoint process in the host dequeued a Service Request Element (SRE) from an Endpoint Control Block (EPCB). |
| NQEP | UDW1: A(EPCB) UDW2: A(TUCB) | An API endpoint process in the ACB has enqueued an Endpoint Control Block (EPCB) on the owning Transport User Control Block (TUCB). |
| NQSR | UDW1: A(SRE) UDW2: A(EPCB) UDW3: TPLFNCCD UDW4: TPLRTNCD | An API endpoint process has enqueued a completed Service Request Element (SRE) on the owning Endpoint Control Block (EPCB). |
| QXIT | UDW1: A(TUCB) UDW2: A(QSTR) | An API endpoint process has driven the Queue Structure (QSTR) completion exit to notify the API task group that a Transport User Control Block (TUCB) contains completed requests to be passed to the transport user's process. |

PROV

Table 3-3 PROV-type API internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|---|---|
| DQEP | UDW1: A(EPCB) UDW2: A(TPCB) | The API transport provider process has dequeued an Endpoint Control Block (EPCB) from the Transport Provider Control Block (TPCB). The EPCB contains service requests destined for an endpoint process. |
| DSQR | UDW1: A(SRE) UDW2: A(EPCB) UDW3: TPLFNCCD | The API transport provider process has dequeued a Service Request Element (SRE) from its Endpoint Control Block (EPCB). The EPCB is being flushed by the transport provider process due to an error or termination. |
| NQEP | UDW1: A(EPCB) UDW2: A(TUCB) | The API transport provider process has enqueued an Endpoint Control Block (EPCB) on its Transport User Control Block (TUCB). The EPCB has been flushed by the transport provider due to an error or termination. |
| NQSR | UDW1: A(SRE) UDW2: A(EPCB) UDW3: TPLFNCCD UDW4: TPLRTNCD | The API transport provider process has enqueued a Service Request Element (SRE) on its Endpoint Control Block (EPCB). The EPCB is in the process of being flushed by the transport provider due to an error or termination. |
| QXIT | UDW1: A(TUCB) UDW2: A(QSTR) | The API transport provider has driven the Queue Structure (QSTR) completion exit to notify the API task group that a Transport User Control Block contains completed requests to be passed to the transport user's process. The requests have been flushed by the transport provider due to error or termination. |

Flags and Return Codes

This section provides additional information on the SRE flags, TPL flags, and APICTFRE return codes.

SRE Flags

Table 3-4 SRE flags

| Flag | Description |
|-------|------------------------|
| x'80' | Exit request. |
| x'40' | Special processing. |
| x'20' | Static SRE, not freed. |

TPL Flags

Table 3-5 IPL flags

| Flag | Description |
|-------|--------------------------|
| x'80' | Completed. |
| x'40' | Completed with error. |
| x'20' | External ECB. |
| x'10' | Completion exit routine. |
| x'08' | AMODE 31. |
| x'04' | Accepting connect. |

APICTFRE Return Codes

Table 3-6 APICTFRE return codes

| Flag | Description |
|------|----------------------|
| 0 | Normal completion. |
| 4 | Completion exit. |
| 8 | Flushing SREs. |
| 12 | Protocol event exit. |
| 16 | Failed, no XWAs. |
| 20 | Abortive close. |

IFS Internal Trace Entries

This section describes IFS internal trace entries, listed alphabetically by type.

ABND

Table 3-7 ABND-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|---|---|
| ESTA | UDW1: First half of PSW at time of ABEND UDW2: Second half of PSW at time of ABEND UDW3: System/user ABEND code UDW4-UDW5: Not used Modules: IFSVDAFY, IFSVIRPL, IFSVLGON, IFSVLTRM, IFSVNSXT, IFSVRELRL, IFSVSCIP, IFSVTPND, IFSXESTA, IJTCCIB | ABEND condition intercepted by an ESTAE exit. |
| FRR | UDW1: Third half of PSW at time of ABEND UDW2: Second half of PSW at time of ABEND UDW3: System/user ABEND code UDW4-UDW5: Not used Modules: Application code | ABEND condition intercepted by an FRR exit. |

CALL

Table 3-8 CALL-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|--|
| ADDR | UDW1: First four characters caller's name UDW2: Second four characters caller's name UDW3: First four characters callee's name UDW4: Second four characters callee's name UDW5: Call indicator flag Modules: IFSSCALL | Module called via entry point address. |
| ECM | UDW1: First four characters of module called. UDW2: Second four characters of module called. UDW3: Register 3 on entry to the PSW key mask and the primary ASID UDW4: Register 4 on entry to the A(latent parameter list) used to locate the ICVT UDW5: Register 1 parameter value on entry Modules: IJTOPCNM, IFSCSSI, IJTCCIB | Module called via external cross memory PC (space switch). |
| ECMR | UDW1: First four characters of module exiting UDW2: Second four characters of module exiting UDW3: Register 3 on entry to the PSW key mask and the primary ASID UDW4: Register 4 on entry to the A(latent parameter list) used to locate the ICVT UDW5: Not used Modules: IJTOPCNM, IFSCSSI, IJTCCIB | Module called via external cross memory PC is returning to the caller. |
| LCD | UDW1: First four characters caller's name UDW2: Second four characters caller's name UDW3: First four characters callee's name UDW4: Second four characters callee's name Modules: IFSSCALL | Module called via LOAD, CALL, and DELETE (non-memory resident module) |

Table 3-8 CALL-type IFS internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|----------------|--|---|
| LCM | UDW1: First four characters caller's name UDW2: Second four characters caller's name UDW3: First four characters callee's name UDW4: Second four characters callee's name UDW5: Call indicator flag Modules: IFSSCALL | Module called via local cross memory PC (non-space switch). |
| LDER | UDW1: First four characters callee's name UDW2: Second four characters callee's name UDW3: Register 15 set by callee UDW4: Register 0 set by callee UDW5: Register 1 set by callee Modules: IFSSCALL | Module to be called was not found. |
| LDTB | UDW1: First four characters caller's name UDW2: Second four characters caller's name UDW3: First four characters callee's name UDW4: Second four characters callee's name UDW5: Call indicator flag Modules: IFSSCALL | Module called via loaded- module table entry. |
| RET | UDW1: First four characters callee's name UDW2: Second four characters callee's name UDW3: Register 15 set by callee UDW4: Register 0 set by callee UDW5: Register 1 set by callee Modules: IFSSCALL | Module called is returning to caller. |
| SRB | UDW1: First four characters callee's name UDW2: Second four characters callee's name UDW3: Register 0 parameter on entry A(SRB()) UDW4: Register 1 parameter on entry UDW5: Not used Modules: IFSVDAFY, IFSVIRPL, IFSVLGON, IFSVLTRM, IFSVNSXT, IFSVRELRL, IFSVSCIP, IFSVTPND | Module called via MVS SRB dispatch. |
| SRBR | UDW1: First four characters callee's name UDW2: Second four characters callee's name IDW3: Register 0 parameter on entry A(SRB()) IDW4: Register 1 parameter on entry IDW5: Not used Modules: IFSVDAFY, IFSVIRPL, IFSVLGON, IFSVLTRM, IFSVNSXT, IFSVRELRL, IFSVSCIP, IFSVTPND | Module called via MVS SRB dispatch returning. |

DISP

Table 3-9 DISP-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|---|--|
| DRVR | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – dispatch task driver. |
| INIT | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – initial dispatch of an ISRB. |
| RESD | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – driver task posted. |
| RESM | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – Resume dispatch of a previously suspended ISRB. |
| SUSP | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – Suspend dispatch of an ISRB. |
| TERM | UDW1: Address of FRR Stack UDW2: Address of first module work area (MWA) UDW3: 2 byte queue priority, 1 byte lock mask UDW4: Name or address of target routine UDW5: Characters 5-8 of routine (UDW4-addr) Modules: IFSSTDRV | ISRB Dispatching – Terminate dispatch of an ISRB. |

IUCV

Table 3-10 IFS internal trace entries for IUCV

| Type | User Fields | Description | Module |
|------|----------------------------|---|----------|
| CLBK | UDW1: Pathid | IUCV callback issued. | T01EUxx |
| | UDW2: Function (text) | | T01AMIUC |
| | UDW3: A(SEPM) | | T011SRV |
| | UDW4: A(SAW) | | T011SCA |
| | | | T011SGS |
| | | | T011STS |
| CONT | UDW1: Pathid | Function resumed. | T011SPC |
| | UDW2: Function (text) | | |
| | UDW3: A(SEPM) | | |
| | UDW4: A(SAW) | | |
| DEQU | UDW1: A(IASB) | IUMS dequeued from IASB or PTPC. | T02SSCHD |
| | UDW2: A(PTPC) | | T02CINTL |
| | UDW3: A(IUMS) | | |
| DIRC | UDW1: A(IUMS) | Calling direct call external interrupt routine (Part 1). | T02SSCHD |
| | UDW2: PC number | | |
| | UDW3: IPARML+0 | | |
| | UDW4: IPARML+4 | | |
| DIR2 | R15: IPARML+8 | Calling direct call external interrupt routine (Part 2). | T02SSCHD |
| | R00: IPARML+C | | |
| | R01: IPARML+10 | | |
| | UDW1: IPARML+14 | | |
| | UDW2: IPARML+18 | | |
| | UDW3: IPARML+1C | | |
| | UDW4: IPARML+20 | | |
| DIRX | UDW1: A(IUMS) | Return for call to direct call external interrupt routine. | T02SSCHD |
| | UDW2: PC number | | |
| FAIL | UDW1: Pathid | IUCV function call failed. | T011Sxx |
| | UDW2: Function (text) | | T01AMIUC |
| | UDW3: Return code | | |
| | UDW4: IPRCODE | | |
| FARG | R15: TRGCLS, socket number | IUCV socket function call data (contents of argument data depends on function). The TRGCLS information contained in R15 is described in the TRGCLS table, following. | T011Sxx |
| | R00: Argument data+0 | | |
| | R01: Argument data+4 | | |
| | UDW1: Argument data+8 | | |
| | UDW2: Argument data+C | | |
| | UDW3: Argument data+10 | | |
| | UDW4: Argument data+14 | | |

Table 3-10 IFS internal trace entries for IUCV (Continued)

| Type | User Fields | Description | Module |
|------|--|--|----------|
| FREP | R15: TRGCLS, socket number R00: Argument data+0 R01: Argument data+4 UDW1: Argument data+8 UDW2: Argument data+C UDW3: Argument data+10 UDW4: Argument data+14 | IUCV socket function reply data (contents of argument data depends on function). | T011Sxx |
| FRET | UDW1: A(IPARML) UDW2: Return_value UDW3: IPARML+0 UDW4: IPARML+4 | IUCV function complete (part 1). | T02CIUCV |
| FRE2 | R15: IPARML+8 R00: IPARML+C R01: IPARML+10 UDW1: IPARML+14 UDW2: IPARML+18 UDW3: IPARML+1C UDW4: IPARML+20 | IUCV function complete (part 2). | T02CIUCV |
| FUNC | UDW1: A(IPARML) UDW2: Function (text) UDW3: IPARML+0 UDW4: IPARML+4 | IUCV function being processed (part 1). | T02CIUCV |
| FUN2 | R15: IPARML+8 R00: IPARML+C R01: IPARML+10 UDW1: IPARML+14 UDW2: IPARML+18 UDW3: IPARML+1C UDW4: IPARML+20 | IUCV function being processed (part 2). | T02CIUCV |
| IENT | UDW1: Pathid UDW2: Function (text) UDW3: A(SEPM) | Socket function being processed by OMVS | T011SPC |
| IEXT | UDW1: Pathid UDW2: Function (text) UDW3: Return_value UDW4: Return_code | Socket function has completed processing. | T011SPC |
| INTL | UDW1: A(IRBI) UDW2: A(ASCB) UDW3: A(TCB) | IUCV internal function call. | T02CINTL |

Table 3-10 IFS internal trace entries for IUCV (Continued)

| Type | User Fields | Description | Module |
|------|--|--|----------|
| INTX | UDW1: A(IRBI) UDW2: Return_value UDW3: IPARML+0 UDW4: IPARML+4 | IUCV internal function call return (part 1). | T02CINTL |
| INT2 | R15: IPARML+8 R00: IPARML+C R01: IPARML+10 UDW1: IPARML+14 UDW2: IPARML+18 UDW3: IPARML+1C UDW4: IPARML+20 | IUCV internal function call return (part 2). | T02CINTL |
| PCAB | UDW1: PSW word 1 UDW2: PSW word 2 UDW3: PSW word 3 UDW4: PSW word 4 | Abend occurred during IUCV processing. | T02GIUCV |
| QUED | UDW1: A(IASB) UDW2: A(PTPC) UDW3: A(IUMS) UDW4: A(EORA) | IUMS queued to IASB or PTPC. | T02SSCHD |
| SIRB | UDW1: A(IASB) UDW2: A(SRBI) or 0 UDW3: A(IRBI) | External interrupt scheduled. | T02SSCHD |
| WAIT | UDW1: Pathid UDW2: Function (text) UDW3: A(SEPM) UDW4: A(SAW) | Socket function is awaiting callback. | T011Sxx |

Note The maximum internal trace table size is now 1024 pages.

TRGCLS Table

Table 3-11 TRGCLS function call values (for use in interpreting Internal Traces)

| Value | Description |
|--------------|-------------------------------------|
| 0 | INITAPI message |
| 1 | Socket Function: accept() |
| 2 | Socket Function: bind() |
| 3 | Socket Function: close() |
| 4 | Socket Function: connect() |
| 5 | Socket Function: fcntl() |
| 7 | Socket Function: gethostid() |
| 8 | Socket Function: gethostname() |
| 9 | Socket Function: getpeername() |
| 10 | Socket Function: getsockname() |
| 11 | Socket Function: getsockopt() |
| 12 | Socket Function: ioctl() |
| 13 | Socket Function: listen() |
| 14 | Socket Function: read(), readv() |
| 16 | Socket Function: recv(), recvfrom() |
| 19 | Socket Function: select() |
| 20 | Socket Function: send() |
| 22 | Socket Function: sendto() |
| 23 | Socket Function: setsockopt() |
| 24 | Socket Function: shutdown() |
| 25 | Socket Function: socket() |
| 26 | Socket Function: write() |
| 29 | LastErrNo Function |
| 30 | Socket Function: getclientid() |
| 31 | Socket Function: givesocket() |
| 32 | Socket Function: takesocket() |
| 35 | Socket Function: getibmssockopt() |
| 36 | Socket Function: setibmssockopt() |
| 42 | Cancel Function |

LOCK

Table 3-12 LOCK-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|--|
| CCB | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved. UDW2-5: Not used. Modules: IFSSLOCK | Lock Service – Conditionally obtain a control block lock. |
| CCML | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved. UDW2-5: Not used. Modules: IFSSLOCK | Lock Service – Conditionally obtain the cross memory local lock. |
| CLOC | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Conditionally obtain the local lock. |
| OCB | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Unconditionally obtain a control block lock. |
| OCML | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Unconditionally obtain the cross memory local lock. |
| OLOC | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Unconditionally obtain the local lock. |
| RCB | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Release a control block lock. |

Table 3-12 LOCK-type IFS internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|----------------|--|--|
| RCML | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Release the cross memory local lock. |
| RLOC | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Release the local lock. |
| TCB | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Test status of a control block lock. |
| TCML | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Test status of cross memory local lock. |
| TLOC | UDW1: One byte each Action, Mode, Lock Type Action Obtain(0), Release(4), Test(8) Mode Conditional(0), Unconditional(4) Type Local(0), CML(4), Control Block(8) 4th byte Reserved UDW2-5: Not used Modules: IFSSLOCK | Lock Service – Test status of local lock. |

MSG

Table 3-13 MSG-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|--------------------------------|
| | UDW1: Length of WTO and MCS flags UDW2: Characters 1-4 of message number issued UDW3: Characters 5-6 of message number issued UDW4: 2 half words of Descriptor and Route Code UDW5: WTO Multi-line information Modules: IFSSMSG | Operator message being issued. |

PAGE

Table 3-14 PAGE-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|---|-------------------------------------|
| FIXF | UDW1: Ending A(Object) being fixed. UDW2: Beginning A(Object) being fixed. UDW3-UDW4: 8 character name of object type being fixed Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'FIXF' Modules: IFSSPAGE | Page Service – Fix a page(s) fast. |
| FIXL | UDW1: Ending A(Object) being fixed. UDW2: Beginning A(Object) being fixed. UDW3-UDW4: 8 character name of object type being fixed Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'FIXL' Modules: IFSSPAGE | Page Service – Fix a page(s) fast. |
| FIXS | UDW1: Ending A(Object) being fixed. UDW2: Beginning A(Object) being fixed. UDW3-UDW4: 8 character name of object type being fixed Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'FIXS' Modules: IFSSPAGE | Page Service – Fix a page(s) short. |
| FREA | UDW1: Ending A(Object) being freed. UDW2: Beginning A(Object) being freed. UDW3-UDW4: 8 character name of object type being freed Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'FREA' Modules: IFSSPAGE | Page Service – Free a page(s) fast. |
| FREE | UDW1: Ending A(Object) being freed. UDW2: Beginning A(Object) being freed. UDW3-UDW4: 8 character name of object type being freed Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'FREE' Modules: IFSSPAGE | |

Table 3-14 PAGE-type IFS internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|----------------|---|--|
| LOAD | UDW1: Ending A(Object) being loaded. UDW2: Beginning A(Object) being loaded. UDW3-UDW4: 8 character name of object type being loaded Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'LOAD' Modules: IFSSPAGE | Page Service – Force a page(s) load. |
| OUT | UDW1: Ending A(Object) being paged out. UDW2: Beginning A(Object) being paged out. UDW3-UDW4: 8 character name of object type being paged out Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'OUT ' Modules: IFSSPAGE | Page Service – Force a page(s) out. |
| RLSE | UDW1: Ending A(Object) being released. UDW2: Beginning A(Object) being released. UDW3-UDW4: 8 character name of object type being released Module name, MWA, BUFFER, MODULE (calling module), AREA of control block ID. UDW5: Character string C'RLSE' Modules: IFSSPAGE | Page Service – Release a page(s). |

PMGR

Table 3-15 PMGR-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|---|---|
| FPOL | UDW1: Pool header name UDW2: Number of free elements in the pool UDW3: A(first element being freed) UDW4-UDW5: Unused Modules: IFSPFPOL | Pool Management – Free a chain of pool elements. |
| GPOL | UDW1: Pool header name UDW2: Number of free elements in the pool UDW3: A(first element being freed) UDW4-UDW5: Unused Modules: IFSPGPOL | Pool Management – Get a chain of pool elements. |

POST

Table 3-16 POST-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|--|---------------------|
| | UDW1-UDW5: Not used Modules: IFSSTDRV | Task driver posted. |

SCHD

Table 3-17 SCHD-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|---|
| COMP | UDW1: Target task group ID, 3 characters UDW2: Name or address of target routing UDW3: Characters 5-8 of routing (UDW4-addr) UDW4: A(ISRB) being scheduled UDW5: Not used Modules: IFSSSCHD | ISRB Scheduling – prepare an extended ECB. |
| IMME | UDW1: Target task group ID, 3 characters UDW2: Name or address of target routing UDW3: Characters 5-8 of routing (UDW4-addr) UDW4: A(ISRB) being scheduled UDW5: Not used Modules: IFSSSCHD | ISRB Scheduling – Immediately queue the ISRB to the target ITGB. |
| PREP | UDW1: Target task group ID, 3 characters UDW2: Name or address of target routing UDW3: Characters 5-8 of routing (UDW4-addr) UDW4: A(ISRB) being scheduled UDW5: Not used Modules: IFSSSCHD | ISRB Scheduling – Prepare the ISRB ECB to be posted by an external process. If already posted, treat as an IMME type event. |
| XECB | UDW1: Target task group ID, 3 characters UDW2: Name or address of target routing UDW3: Characters 5-8 of routing (UDW4-addr) UDW4: A(ISRB) being scheduled UDW5: Not used Modules: IFSXPOST | ISRB Scheduling – an extended ECB was posted. |

SSOB

Table 3-18 SSOB-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|--|
| CMD | UDW1: Length of SSOB UDW2: A(SSIB) UDW3: Return code from subsystem UDW4: A(Function dependent area SSOB) UDW5: Not used Modules: IFSCSSI | Operator command received via subsystem interface. |

TSO

Table 3-19 ISO-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|--|---------------------|
| PARS | UDW1: First four characters of command text UDW2: Second four characters of command text UDW3: A(Area) returned by IKJPARS UDW4: Length of area returned by IKJPARS UDW5: Not used Modules: IFSIPOOL, IFSO\$CON, IFSO\$ROU, IFSOABND, IFSOSNAP, IJTICNFG, IJTOAPF, IJTOATCH, IJTOGTF, IJTOHELP, IJTOLSPC, IJTOMEM, IJTOMODU, IJTOMVS, IFTOP, IJTOPOOL, IJTOSET, IJTOSRC, IJTOSTAR, IJTOSTCK, IJTOSTOP, IJTOTASK, IJTOTRAC, IJTOVAVT, IJTOWAIT, TSOAOPER | TSO Command parser |
| SCAN | UDW1: First four characters of command verb UDW2: Second four characters of command verb UDW3: Halfword length of command, one byte flag one byte reserved UDW4: A(command buffer) for scan UDW5: A(ECB) used during scan Modules: IJTICNFG, IJTOTSO, IJTSCSRB | TSO Command Scanner |

VTAM

Table 3-20 VTAM-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|---------|--|---|
| BIND | UDW1: First word of BIND parameters, one byte format/type, one byte Function Management profile, one byte Transmission Services profile, one byte primary LU protocols UDW2: One byte secondary LU protocols, two byte common LU protocols, one byte reserved UDW3: First four characters of primary LU name UDW4: Second four characters of primary LU name UDW5: Not used Modules: IFSVSCIP | VTAM Services – BIND request (SCIP) |
| CINT | UDW1: A(CINIT RU) UDW2-UDW5: Not used Modules: IFSVLGON | VTAM Services – CINIT request (LOGON). |
| CLER | UDW1-UDW5: Not used Modules: IFSVSCIP | VTAM Services – CLEAR request (SCIP). |
| CLUP | UDW1: A(Cleanup RU) UDW2-UDW5: Not used Modules: IFSVNSXT | VTAM Services – CLEANUP request (NSEXIT). |
| LTRM | UDW1: A(VTAM Session control block) UDW2: Communications ID UDW3: Reason code UDW4-UDW5: Not used Modules: IFSVLTRM | VTAM Services – Outage notify (LOSTERM). |
| NPSE | UDW1: A(NPSE RU) UDW2-UDW5: Not used Modules: IFSVNSXT | VTAM Services – NSPE request (NSEXIT). |
| NTFY | UDW1: A(Notify RU) UDW2-UDW5: Not used Modules: IFSVNSXT | VTAM Services – NOTIFY request (NSEXIT). |
| QEC | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – QEC request (DYASY). |
| RELQ | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – RELQ request (DYASY). |
| RELR | UDW1: A(VTAM Session control block) UDW2: A(VTAM Application LU control block) UDW3-UDW5: Not used Modules: IFSVRELR | VTAM Services – RELREQ request (RELREQ). |
| RRQR | UDW1-UDW5: Not used Modules: IFSVSCIP | VTAM Services – RRQR request (SCIP). |
| RSHD | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – RSHUTD request (DYASY). |
| SBI | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – SBI request (DFASY). |
| SDT | UDW1-UDW5: Not used Modules: IFSVSCIP | VTAM Services – SDT request (SCIP). |
| SGNL | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – SIGNAL request (DFASY). |

Table 3-20 VTAM-type IFS internal trace entries (Continued)

| Subtype | User Fields/Modules | Description |
|----------------|--|--|
| SHTC | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – SHUTC request (DFASY). |
| SHTD | UDW1-UDW5: Not used Modules: IFSVDAFY | VTAM Services – SHUTD request (DFASY). |
| STSN | UDW1-UDW5: Not used Modules: IFSVSCIP | VTAM Services – STSN request (SCIP). |
| TPND | UDW1: A(VTAM application LU control block) UDW2: Reason code UDW3-UDW5: Not used Modules: IFSVTPND | VTAM Services – OUTAGE notify (TPEND). |
| UNBD | UDW1: A(UNBIND RU) UDW2-UDW5: Not used Modules: IFSVSCIP | VTAM Services – UNBIND request (SCIP). |
| VRPL | UDW1: First word of the VTAM RPL UDW2: Request header type from the RPL UDW3: Post/Respond flags from the RPL UDW4: User data field from the RPL UDW5: Error feedback code from the RPL Modules: IFSVDAFY, IFSVLGON, IFSVNSXT, IFSVSCIP | VTAM Services – RPL request (SCIP). |

WAIT

Table 3-21 WAIT-type IFS internal trace entries

| Subtype | User Fields/Modules | Description |
|----------------|--|----------------------------------|
| | UDW1-UDW5: Not used Modules: IFSSTDRV | Task driver entering wait state. |

