

## Article

[Robert Cemper](#) · Jul 29, 2020 5m read

## SQL for ^ERROR Global

Standard error logs in IRIS / Caché / Ensemble are written global ^ERRORS.

As this piece dates back some decades back to previous millennium its structure is far from the typical SQL storage structures.

The global is written by routine ^%ETN.int and the content becomes visible from terminal command line by routine ^%ERN or in Mgmt Portal as Application Error Log.

It is just not available to SQL as there is no Class wrapped around.

For several reasons:

- When it was designed it was good practice to have index like structures in the same globals as the data. If I say 'like', this means it is of no use for SQL.
- As next the content of objects are going to deeper levels than the rest. As a consequence, the depth of subscripts (typically IdKey) varies from 3 to 11.

^ERRORS is independent in every namespace

It is structured by Day,SequenceByDay, Type, ItemName (Variable, OREF),Value

zrcc.ERRORStack covers this as SQL table.

Deeper content of the objects becomes visible by the included custom query.

The SQL procedure zrcc.ERRORStackDump(Day,Sequence) returns all available content and presents subscripts and values as you see in global listing.

How to make best use of both components:

First: find your day and sequence number using SQL

Example: `SELECT * FROM zrcc.ERRORStack where item='$ZE'`

Day	Seq	Stk	Type	Item	Value
2020-07-02	1	0	V	\$ZE	<WRITE>zSend+204^%Net.HttpRequest.1
2020-07-07	1	0	V	\$ZE	<WRITE>zSend+204^%Net.HttpRequest.1
2020-07-15	1	0	V	\$ZE	<WRITE>zSend+204^%Net.HttpRequest.1
2020-07-20	1	0	V	\$ZE	<LOG ENTRY>
2020-07-26	1	0	V	\$ZE	<WRITE>zSend+204^%Net.HttpRequest.1

Then in SQL: `CALL zrcc.ERRORStackDump('2020-07-26',1)`

Row count: 541 Performance: 0.026 seconds 6557 global references

Ref	Value
-----	-------

2020-07-26,1,"*STACK",0,"V","Routine")	zSend+204^%Net.HttpRequest.1
2020-07-26,1,"*STACK",1,"I")	1^S^^^0^
2020-07-26,1,"*STACK",1,"L")	1 SIGN ON
2020-07-26,1,"*STACK",1,"S")	
2020-07-26,1,"*STACK",1,"T")	SIGN ON
2020-07-26,1,"*STACK",1,"V","%dsTrackingKeys","N","""Analyzer""")	6

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2020-07-26,1,"*STACK",1,"V","%dsTrackingKeys","N","""Architect""") 7
2020-07-26,1,"*STACK",1,"V","%dsTrackingKeys","N","""DashboardViewer""") 8
2020-07-26,1,"*STACK",1,"V","%dsTrackingKeys","N","""ResultSet""") 9
2020-07-26,1,"*STACK",1,"V","%objcn") 2
2020-07-26,1,"*STACK",3,"V", "Task") <OBJECT REFERENCE>[1@%SYS.Task]
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1) 142
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,0) 3671
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,1) +----- general information
-----
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,2) | oref value: 1
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,3) | class name: %SYS.Task
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,4) | %%OID: $lb("13", "%SYS.Task")
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,5) | reference count: 5
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,6) +----- attribute values --
-----
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,7) | %Concurrency =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,8) 4 <Set>
- - -
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,53) | EmailOutput =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,54) 0
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,55) | EndDate =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,56) ""
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,57) | Error =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,58) "<WRITE>zSend+204^%Net.HttpRequest.1"
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,59) | Expires =
- - -
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,111) | Status =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,112) "0 "_$lb($lb(5002,"POST to Server Fa
iled",,,,,,$lb(", "%SYS",$lb("$^zSend+204^%Net.HttpRequest.1 +1", "$^zPost+1^%Net.Http
Request.1 +1", "$^zSendData+20^FT.Collector.1 +1", "$^zTransfer+12^FT.Collector.1 +1", "$^zOnTask+3^%SYS.Task.FeatureTracker.1 +1", "D^zRunTask+74^%SYS.TaskSuper.1 +1", "$^zRu
nTask+54^%SYS.TaskSuper.1 +1", "D^zRun+26^%SYS.TaskSuper.1 +1"))),$lb(6085,"ISC.Featur
eTracker.SSL.Config", "SSL/TLS error in SSL_connect(), SSL_ERROR_SSL: protocol error,
error:14090086:SSL routines:ssl3_get_server_certificate:certificate verify failed",,,
,,,,$lb(", "%SYS",$lb("e^zSend+303^%Net.HttpRequest.1^1", "e^zPost+1^%Net.HttpRequest.1^
1", "e^zSendData+20^FT.Collector.1^1", "e^zTransfer+12^FT.Collector.1^1", "e^zOnTask+3^%
SYS.Task.FeatureTracker.1^1", "e^zRunTask+74^%SYS.TaskSuper.1^1", "d^zRunTask+54^%SYS.T
askSuper.1^1", "e^zRun+26^%SYS.TaskSuper.1^1", "d^^^0"))))/* ERROR #5002: Cache error:
POST to Server Failed- ERROR #6085: Unable to write to socket with SSL/TLS configurat
ion 'ISC.FeatureTracker.SSL.Config', error reported 'SSL/TLS error in SSL_connect(),
SSL_ERROR_SSL: protocol error, error:14090086:SSL routines:ssl3_get_server_certificat
e:certificate verify failed' */
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,113) | SuspendOnError =
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,114) 0
2020-07-26,1,"*STACK",3,"V", "Task", "OREF",1,115) | Suspended =
- - -
2020-07-26,1,"*STACK",6,"V", "Status1") 1
2020-07-26,1,"*STACK",6,"V", "Task") <OBJECT REFERENCE>[1@%SYS.Task]
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1) 142
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,0) 3671
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,1) +----- general information
-----
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,2) | oref value: 1
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,3) | class name: %SYS.Task
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,4) | %%OID: $lb("13", "%SYS.Task")
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,5) | reference count: 5
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,6) +----- attribute values --
-----
2020-07-26,1,"*STACK",6,"V", "Task", "OREF",1,7) | %Concurrency =

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2020-07-26,1,"*STACK",6,"V","Task","OREF",1,8) 4 <Set>
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,9) | DailyEndTime =
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,10) 0
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,11) | DailyFrequency =
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,12) 0
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,13) | DailyFrequencyTime =
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,14) ""
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,15) | DailyIncrement =
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,16) ""
2020-07-26,1,"*STACK",6,"V","Task","OREF",1,17) | DailyStartTime =
- - -
2020-07-26,1,"*STACK",12,"V","%00000","N","""JournalState""") 12
2020-07-26,1,"*STACK",13,"I") 13^Z^ETNERRB^%ETN^0
2020-07-26,1,"*STACK",13,"L") 13 ERROR TRAP S $ZTRAP="ETNERRB^%ETN"
2020-07-26,1,"*STACK",13,"S") S $ZTRAP="ETNERRB^%ETN"
2020-07-26,1,"*STACK",13,"T") ERROR TRAP
```

541 row(s) affected

[GitHub](#)

[#Other](#)

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Source URL: <https://community.intersystems.com/post/sql-error-global>