



DOCUMENTATION

Navigating Signal Tab

HEAL Software Inc.

The Signals tab shows every signal HEAL has raised in one place. Filter, sort, and download the list to see what is affecting your applications and services.

What you can do here

- See every Problem, Early Warning, and Info Signal.
- Read each signal's type, severity, status, and description.
- See the affected applications and services.
- Filter by timestamp, type, severity, or status.
- Download the list as CSV.

Open the Signals tab

Sign in to the HEAL UI and click the **Signals** tab. From the Signals List, switch between **Lead Signals** and **Info Signals**.

Pick **Lead Signals** to see all Problems and Early Warnings.

Type	Id	Severity	Description	Status	Applications	Events Count	Last Event Time	Started On	Ended On	Solution
EW	E-2-2-2-1683539820	Severe	Event(s) in Core-Weblogio-Servers root cause service(s) may impact transaction perform...	Open	CoreBanking	8	2023-05-08 15:41	2023-05-08 15:27	-	
EW	E-2-6-9-1683539640	Default	Event(s) in Channel-CBC-Service root cause service(s) may impact transaction performa...	Open	CoreBanking	31	2023-05-08 15:42	2023-05-08 15:24	-	
P	P-2-403-2-16834705...	Severe	Transactions at Core-Weblogio-Servers have been affected.	Closed	CoreBanking	1027	2023-05-08 15:13	2023-05-07 20:13	2023-05-08 15:28	
P	P-2-403-9-16834662...	Severe	Transactions at Channel-CBC-Service have been affected.	Closed	CoreBanking	5912	2023-05-08 15:05	2023-05-07 19:00	2023-05-08 15:20	
EW	E-2-409-10-1683465...	Severe	Event(s) in FinApp-Coresession-Service root cause service(s) may impact transaction pe...	Upgraded	CoreBanking	66	2023-05-07 20:13	2023-05-07 18:55	2023-05-07 20:13	
EW	E-2-2-2-1683465240	Severe	Event(s) in Core-Weblogio-Servers root cause service(s) may impact transaction perform...	Upgraded	CoreBanking	62	2023-05-07 20:13	2023-05-07 18:44	2023-05-07 20:13	
EW	E-2-579-9-16834651...	Severe	Event(s) in Channel-CBC-Service root cause service(s) may impact transaction performa...	Upgraded	CoreBanking	82	2023-05-07 19:00	2023-05-07 18:43	2023-05-07 19:00	
EW	E-2-2-2-1683464750	Default	Event(s) in Core-Weblogio-Servers root cause service(s) may impact transaction perform...	Closed	CoreBanking	1	2023-05-07 18:36	2023-05-07 18:36	2023-05-07 18:51	
P	P-2-403-9-16833124...	Severe	Transactions at Channel-CBC-Service have been affected.	Closed	CoreBanking	12247	2023-05-07 18:04	2023-05-06 00:17	2023-05-07 18:19	
P	P-2-403-2-16833112...	Severe	Transactions at Core-Weblogio-Servers have been affected.	Closed	CoreBanking	2168	2023-05-07 17:52	2023-05-05 23:58	2023-05-07 18:07	

1. Lead Signals. Real-time Early Warnings and Problems on service behavior and transactions.

2. Info Signals. System changes that do not directly affect performance or availability.

3. Filter. Open the filter panel to narrow the list.

4. Download. Export the list as CSV.

5. Signal Type. P for Problem, EW for Early Warning.

6. Signal Id. Unique identifier for the signal.

7. Severity. Severe or Default.

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8. Description. The signal description with the affected applications and services.

9. Status. Open, Closed, or Upgraded.

10. Affected Applications. The application the affected service belongs to, plus applications of any downstream services.

11. Events Count. Total events inside the signal.

12. Last Event Timestamp. When the most recent event occurred.

13. Signal Occurrence Timestamp. When the signal was first generated.

14. Signal Closure Timestamp. When the signal closed.

15. Solution Recommendation. Top three suggested solutions for the root cause. Click to read them and rate them. See View Solution Recommendation.

Info Signals view

Pick **Info Signals** to see informational notifications.

Id	Description	Metric Category	Service	Applications	Total Events	Detected On
I-567423	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Config Watch	NB_Web_Service	Net Banking	3	21 Mar 2019 12:45
I-567894	Events detected on metric "KPI Name1:value" "KPI Name2:value"	Info Category 2	Ecommerce_app_service	ECommerce	3	21 Mar 2019 12:15
I-567672	Events detected on metric "KPI Name1:value"	Info Category 3	NB_Web_Service	Net Banking	1	21 Mar 2019 11:45

1. Info Signals. Notifications on system changes that do not directly affect performance or availability.

2. Lead Signals. Switch back to Problems and Early Warnings.

3. Filter. Open the filter panel.

4. Signal Id. Unique identifier for the signal.

5. Description. The signal description with affected applications and services.

6. Metric Category. Which performance or availability metric category the signal is tied to.

7. Service. The service affected by the signal.

8. Applications. Applications linked to the affected service and to any downstream services.

9. Total Events. Info events that make up the signal.

10. Detected On. When the signal was first detected.

Signal types

Lead Signals

Lead signals catch potential issues early. Two types:

Early Warning. Triggered when one or more services behave abnormally but transactions at entry-point services are still fine. Transaction or request volume breaches count as Early Warnings. The goal is to give you diagnostic data before a slowdown reaches end users. An Early Warning is severe if at least one of its anomalies is marked severe (admins set this in the Control Center).

Problem. Triggered when one or more services behave abnormally and transactions at entry-point services either fail or slow down (timed-out and unknown transactions count as failures). A Problem is a set of related incidents that may share a common cause or impact end users. Severe if at least one anomaly inside it is marked severe.

Info Signals

Info Signals are separate from Problems and Early Warnings. Info events do not show up in the timeline of a Problem or an Early Warning.

How they are generated. When HEAL raises an event on an Info KPI, that event becomes part of an Info Signal. Every user assigned to the application gets the notification. Info KPI changes are informational rather than performance-impacting.

Info metric categories. Set them up in the Control Center. Every metric in an Info category is an Info metric and feeds Info Signals. Other categories feed Lead Signals. Users can choose which Info alerts they want to receive.

Mutually exclusive. Info and Lead Signals do not overlap. There can be one Info Signal per Info metric category per service at a time. If multiple events hit the same metric category and service at 12:00 PM, they all become part of one signal. New events at 12:01 PM start a new signal.

Signal severity

Problem signals

Severe Problem. Transactions at entry-point services are failing. Events appear in **Failed**, **Timed-Out**, or **Unknown** transaction metrics.

Default Problem. Transactions at entry-point services are slowing down but failures are still inside normal limits.

Early Warning signals

Severe Early Warning. Same as Default, but at least one event inside is marked severe.

Default Early Warning. Related events affect one or more services in an application. None of them are marked severe.

Signal status

Problem status

Open. Set when the Problem is created.

Closed. Set when every transaction metric with events returns to normal.

Early Warning status

Open. Set when the Early Warning is created.

Closed. Set when the Early Warning is resolved before becoming a Problem.

Upgraded. Set when requests on an entry-level service in the path are affected, signaling a possible escalation to a Problem.

Filter signals

Filter Lead Signals

1. Click the filter icon in the Lead Signals section.

The screenshot shows the HEAL Signals interface. At the top, there are tabs for Services, Signals (active), ML Insights, and Reports. Below the tabs, there are buttons for Lead Signals and Info Signals. A search bar is present with the text "Search By ID/Description". To the right, there are filters for "Last 1 hour", "from 2023-05-09 11:00", and "IST". A table of signals is displayed with columns: Type, Id, Severity, Description, Status, Applications, Events Count, and Last Event Time. A filters sidebar is open on the right, showing options for Started/Ended On, Type, Severity, Status, and Applications. The table contains 6 rows of data.

Type	Id	Severity	Description	Status	Applications	Events Count	Last Event Time
P	P-2-403-9-16836094...	Severe	Transactions at Channel-CBC-Service ha...	Open	CoreBanking	118	2023-05-09 11:00
EW	E-2-6-9-1683608820	Severe	Event(s) in Channel-CBC-Service root ca...	Upgraded	CoreBanking	69	2023-05-09 11:00
P	P-2-403-2-16836074...	Severe	Transactions at Core-Weblogic-Servers ...	Open	CoreBanking	47	2023-05-09 11:00
EW	E-2-409-10-1683607...	Severe	Event(s) in FinApp-Coresession-Service ...	Upgraded	CoreBanking	8	2023-05-09 11:00
EW	E-2-2-2-1683606480	Severe	Event(s) in Core-Weblogic-Servers root c...	Upgraded	CoreBanking	12	2023-05-09 11:00
EW	E-2-6-9-1683606420	Severe	Event(s) in Channel-CBC-Service root ca...	Upgraded	CoreBanking	151	2023-05-09 11:00

Filters sidebar:

- Started/Ended On: 2023-05-09 10:00 to 2023-05-09 11:00
- Type: Select Type
- Severity: Select Severity
- Status: Select Status
- Applications: Select Applications
- Buttons: Apply, Reset

2. Fill in the filters and click Apply.

- **Timestamp.** Start and end date and time.
- **Signal Type.** Problem or Warning.
- **Severity.** Severe or Default.
- **Status.** Open, Closed, or Upgraded.
- **Applications.** One or more applications.

Filter Info Signals

1. Click the filter icon in the Info Signals section.

The screenshot shows the HEAL Signals interface. At the top, there are navigation tabs: Services, Signals (active), ML Insights, and Reports. On the right, there's a user profile 'XR Travels' and a menu icon. Below the navigation, there's a search bar for applications and a date range filter set to 'Last 24 Hours' from '21 Mar 2019 13:00' IST. The main area displays a table of signals with columns: Id, Description, Metric Category, and Service. A 'Filters' modal is open on the right, allowing users to filter by Severity (Default), Metric Category (Select Metric Category), Service (Select Service), and Applications (Select Applications). The table shows three signals, all with descriptions starting with 'Events detected on metric "KPI Name1:value" "KPI Name2:value" ...'.

Id	Description	Metric Category	Service
I-567423	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Config Watch	NB_Web_Service
I-567894	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Info Category 2	Ecommerce_app_service
I-567672	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Info Category 3	NB_Web_Service

2. Fill in the filters and click Apply.

- **Severity.** Severe or Default.
- **Metric Category.** Specific performance or availability metric category.
- **Service.** One or more services.
- **Applications.** One or more applications.

View Info Signals

1. Pick Info Signals from the Signals List.

HEAL Services Signals ML Insights Reports XR Travels FC

Lead Signals Info Signals

Last 24 Hours from 21 Mar 2019 13:00 IST

Search for Application ...

Total 0 < 1 > T

Id	Description	Metric Category	Service	Applications	Total Events	Detected On
I-567423	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Config Watch	NB_Web_Service	Net Banking	3	21 Mar 2019 12:45
I-567894	Events detected on metric "KPI Name1:value" "KPI Name2:value"	Info Category 2	Ecommerce_app_service	ECommerce	3	21 Mar 2019 12:15
I-567672	Events detected on metric "KPI Name1:value"	Info Category 3	NB_Web_Service	Net Banking	1	21 Mar 2019 11:45

My Profile preference. If a user has selected only Info Signals in My Profile, the Signals List opens on the Info Signals view by default.

2. Click the events count in any row to see the Info events for that signal. Click the instance name to open Service Details.

HEAL Services Signals ML Insights Reports XR Travels FC

Last 24 Hours from 21 Mar 2019 13:00 IST

Info events for signal : I-567894

Search for Metric...

Metric Name	Instance	Type	Group Name	Attribute	Old Value	Value	Threshold	Operation
Info Metric1	Host Instance 1	Core	---	---	---	475 GB	0-400GB	---
Info Metric 2	Host Instance 2	Core	---	---	---	30%	0-20%	---
Info Metric3	Host Instance 3	Core	---	---	---	50%	0-40%	---

Total 0 < 1 > T

Id	Description	Metric Category	Service	Applications	Total Events	Detected On
I-567423	Events detected on metric "KPI Name1:value" "KPI Name2:value" ...	Config Watch	NB_Web_Service	Net Banking	3	21 Mar 2019 12:45
I-567894	Events detected on metric "KPI Name1:value" "KPI Name2:value"	Info Category 2	Ecommerce_app_service	ECommerce	3	21 Mar 2019 12:15
I-567672	Events detected on metric "KPI Name1:value"	Info Category 3	NB_Web_Service	Net Banking	1	21 Mar 2019 11:45

Solution Recommendation

When HEAL raises a Problem or Early Warning, it suggests the top three solutions for the root cause. The recommendations are based on historical tickets HEAL has organized into categories like disk issues or database out-of-memory errors.

Click the message icon in the **Solution Recommendation** column to open the recommendations.

The screenshot shows the HEAL interface with a table of signals and a detailed view of a solution recommendation.

Type	Id	Severity	Description	Status	Applications
EW	E-7-370-61-1682340...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-2-60-1682340300	Severe	Event(s) in Web_server root cause ser...	Closed	Solution_Recom
EW	E-7-2-60-1682336220	Severe	Event(s) in Web_server root cause ser...	Closed	Solution_Recom
EW	E-7-370-61-1682336...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-370-61-1682328...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-2-60-1682327700	Severe	Event(s) in Web_server root cause ser...	Closed	Solution_Recom
EW	E-7-411-61-1682291...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-171-61-1682113...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-171-61-1682111...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-59-60-16821118...	Severe	Event(s) in Web_server root cause ser...	Closed	Solution_Recom
EW	E-7-370-61-1682039...	Severe	Event(s) in DB_server root cause servi...	Closed	Solution_Recom
EW	E-7-1-60-1682039940	Severe	Event(s) in Web_server root cause ser...	Closed	Solution_Recom
EW	E-7-411-61-1682030	Definite	Event(s) in DB_server root cause servi...	Closed	Solution_Recom

The detailed view shows a solution recommendation for the selected signal. It includes the following information:

- Solution Recommendation:** Modify the program to use fewer cursors. If this error occurs often, shut down Oracle, increase the value of OPEN_CURSORS, and then restart Oracle.
- Confidence Score:** 0.14
- Useful or Not Useful:** Buttons to provide feedback.
- Feedback:** A text box for providing feedback to improve the recommendation.

Each recommendation includes:

- **Solutions.** The proposed fix for the Problem or Early Warning.
- **Confidence Score.** How confident HEAL is in the suggestion.
- **Useful or Not Useful.** Thumbs up if the solution worked, thumbs down if it did not.
- **Feedback.** Free-text feedback to improve future recommendations.

For more on suggested solutions, see View Solution Recommendation.

Next

- View Early Warning Report . open one Early Warning.
- View Problem Report . open one Problem.
- Root Cause Analysis . see the Root Cause Walk for a signal.