Interaction Server Private Edition Guide

Interaction Server (IXN) metrics and alerts

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Contents

Find the metrics Interaction Server (IXN) exposes and the alerts defined for Interaction Server (IXN).

Service	CRD or annotations?	Port	Endpoint/Selector	Metrics update interval
Interaction Server (IXN)	PodMonitor	13131, 13133, 13139	option **ixnServer.ports.health** - default port 13131 - Endpoint: “/health/prometheus/all” option **ixnNode.ports.default** - default port 13133 - Endpoint: “/metrics” option **ixnVQNode.ports.health** - default port 13139 - Endpoint: “/metrics” **Note**: The above options are references to ports that match endpoints. Use these options to perform the associated query.	Default

Metrics

This table includes IXN Server metrics and IXN Node metrics. IXN Node metrics begin with the prefix *ixnnode*.

Note: There are more metrics than the ones listed in the table. However, only the metrics listed in the table are supported.

Metric and description	Metric details	Indicator of
ixn_health_info_current_clients Indicates the number of clients that are connected to IXN at the moment.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:** 5	Workload
ixn_health_info_current_routers Indicates the number of 'connected to' IXN routers.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:** 1	Workload, Operability
ixn_health_info_client_count { client_type_name="Agent application" }	**Unit:** Amount **Type:** Gauge **Label:** client_type_name. See the metric description for more details.	Workload

Metric and description	Metric details	Indicator of

Indicates the number of clients with specified type, connected to IXN.
 	
Label descriptions:
 	
• client_type_name - type of connected clients. Possible values are:
  • Unknown
  • Proxy
  • Agent application
  • Media server
  • Reporting engine
  • Routing engine
  • Universal router
  • Third party client.
	Sample value: 101	

ixn_health_info_router_total_submitted { router_name="URServer" } Indicates the total number of interactions that have been submitted to the router. **Label descriptions**: router_name - the name of the router into which the interactions have been submitted.	**Unit:** Amount **Type:** Counter **Label:** router_name. See the metric description for more details. **Sample value:** 33	Workload, Operability
ixn_health_info_router_strategy_load_count { router_name="URServer", strategy_name="AAAstarterStrategy", strategy_tenant="1" } Indicates the number of strategies with specified name loaded into a specified router. **Label descriptions**: • router_name - the name of the router into which the interactions are loaded • strategy_name - name of strategy • strategy_tenant - tenant number	**Unit:** Amount **Type:** Gauge **Label:** router_name, strategy_name, strategy_tenant. See the metric description for more details. **Sample value:** 1	Workload

Metric and description	Metric details	Indicator of
ixn_health_info_router_current_capacity { router_name="URServer" } Indicates the current capacity of a specified router - the number of interactions, not including those already submitted, that can be submitted into the router. **Label descriptions**: router_name - name of router.	**Unit:** Amount **Type:** Gauge **Label:** router_name. See the metric description for more details. **Sample value:** 987	Workload, Operability
ixn_health_info_router_currently_submitted { router_name="URServer" } Indicates the number of interactions that are in a specified router. **Label descriptions**: router_name - name of router.	**Unit:** Amount **Type:** Gauge **Label:** router_name. See the metric description for more details. **Sample value:** 13	Workload, Operability
ixn_health_info_current_strategies Indicates number of strategies which are associated with active submitters.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:** 11	Workload
ixn_health_info_router_max_submitted { router_name="URServer" } Indicates the maximum capacity of specified router - the number of interactions, that can be submitted into the router. **Label descriptions**: • router_name - name of router. *ixn_health_info_router_max_submitted = ixn_health_info_router_currently_submitted + ixn_health_info_router_current_capacity*	**Unit:** Amount **Type:** Gauge **Label:** router_name. See the metric description for more details. **Sample value:** 1000	Workload, Operability
ixn_health_info_current_database_requests Indicates the current database requests queue length.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:** 0	Workload, Operability
ixn_health_info_total_database_requests Indicates the number of processed database requests from IXN application start till current moment.	**Unit:** Amount **Type:** Counter **Label:** None **Sample value:** 75	Workload, Operability
ixn_health_info_current_database_connections Indicates the current number of DB connections.	**Unit:** Amount **Type:** Gauge **Label:** None	Workload, Operability

Metric and description	Metric details	Indicator of
	Sample value: 5	
ixn_health_info_total_database_deadlocks Indicates the total number of database queries that end up with a deadlock for all the time since IXN started.	**Unit:** Amount **Type:** Counter **Label:** None **Sample value:** 0	Workload, Operability
ixn_health_info_router_strategy_last_submitted_at { router_name="URServer", strategy_name="AAAStarterToAgent", strategy_tenant="1" } Indicates the Unix timestamp when last interaction has been submitted to router for specified strategy. **Label descriptions**: • router_name - name of router; • strategy_name - name of strategy; • strategy_tenant - tenant number.	**Unit:** Unix timestamp **Type:** Gauge **Label:** router_name, strategy_name, strategy_tenant. See the metric description for more details. **Sample value:** 1618322383	Workload, Operability
ixn_health_info_queue_media_waiting_processing { queue_name="AAAstarterQueue", queue_tenant="1", media_name="chat" } Indicates the current number of interactions with specified media type that are waiting for processing in a specified queue. **Label descriptions**: • queue_name - name of queue; • queue_tenant - tenant number; • media_name - media type. Note: This value is provided in Pulse as well.	**Unit:** Amount **Type:** Gauge **Label:** queue_name, queue_tenant, media_name. See the metric description for more details. **Sample value:** 0	Workload
ixn_health_info_agent_logged_in_count { agent_tenant="1" } Indicates the current number of logged in agents. **Label descriptions**:	**Unit:** Amount **Type:** Gauge **Label:** agent_tenant. See the metric description for more details. **Sample value:** 565	Workload

Metric and description	Metric details	Indicator of
agent_tenant - tenant number.		
ixn_health_info_queue_media_in_router { queue_name="toAgent", queue_tenant="1", media_name="chat" } Indicates the number of the interactions with specified media type from a specified queue being routed. **Label descriptions**: • queue_name - name of queue • queue_tenant - tenant number • media_name - media type	**Unit:** Amount **Type:** Gauge **Label:** queue_name, queue_tenant, media_name. See the metric description for more details. **Sample value:** 10	Workload, Operability
ixn_health_info_queue_media_on_agent { queue_name="toAgent", queue_tenant="1", media_name="chat" } Indicates the number of the interactions with specified media type from specified queue being handled by agents. **Label descriptions**: • queue_name - name of queue • queue_tenant - tenant number • media_name - media type	**Unit:** Amount **Type:** Gauge **Label:** queue_name, queue_tenant, media_name. See the metric description for more details. **Sample value:** 5	Workload, Operability
ixn_health_info_queue_media_current_length { queue_name="toAgent", queue_tenant="1", media_name="chat" } Indicates the number of interactions with specified media type that are waiting processing in specified queue and were never delivered to agent. **Label descriptions**: • queue_name - name of queue • queue_tenant - tenant number • media_name - media type **Note**: This value is provided in Pulse as well.	**Unit:** Amount **Type:** Gauge **Label:** queue_name, queue_tenant, media_name. See the metric description for more details. **Sample value:** 2	Workload, Operability
ixn_health_info_queue_media_in_processing	**Unit:** Amount	Workload, Operability

Metric and description	Metric details	Indicator of
{ queue_name="toAgent", queue_tenant="1", media_name="chat" } Indicates the sum of the interactions with specified media type from specified queue being routed by routers and being handled by agents. **Label descriptions**: • queue_name - name of queue • queue_tenant - tenant number • media_name - media type *ixn_health_info_queue_media_in_processing = ixn_health_info_queue_media_in_router + ixn_health_info_queue_media_on_agent* **Note**: This value is provided in Pulse as well.	**Type:** Gauge **Label:** queue_name, queue_tenant, media_name. See the metric description for more details. **Sample value:** 15	
ixn_health_info_router_strategy_currently_submitted { router_name="URServer", strategy_name="AAAStarterToAgent", strategy_tenant="1" } Indicates the number of interactions which are submitted to specified router by specified strategy at the moment. **Label descriptions**: • router_name - name of router • strategy_name - name of strategy • strategy_tenant - tenant number	**Unit:** Amount **Type:** Gauge **Label:** router_name, strategy_name, strategy_tenant. See the metric description for more details. **Sample value:** 3	Workload, Operability
ixn_health_info_router_strategy_current_capacity { router_name="URServer", strategy_name="AAAStarterToAgent", strategy_tenant="1" } Indicates the number of interactions that can be submitted more to specified router by specified strategy. **Label descriptions**: • router_name - name of router • strategy_name - name of strategy • strategy_tenant - tenant number	**Unit:** Amount **Type:** Gauge **Label:** router_name, strategy_name, strategy_tenant. See the metric description for more details. **Sample value:** 197	Workload, Operability

Metric and description	Metric details	Indicator of
ixn_health_info_router_strategy_total_submitted { router_name="URServer", strategy_name="AAAStarterToAgent", strategy_tenant="1" } Indicates the number of interactions that were submitted to specified router by specified strategy since IXN app start till now. **Label descriptions**: • router_name - name of router • strategy_name - name of strategy • strategy_tenant - tenant number	**Unit:** Amount **Type:** Counter **Label:** router_name, strategy_name, strategy_tenant. See the metric description for more details. **Sample value:** 9	Workload, Operability
ixnnode_interactions_pulled_total Indicates the total number of the interactions pulled for the specific strategy. **Label descriptions**: strategy - The name of the strategy for which interactions are pulled.	**Unit:** Amount **Type:** Counter **Label:** strategy. See the metric description for more details. **Sample value:**	Workload, Operability
ixnnode_routing_sessions_current Indicates the current number of the routing sessions in routing.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:**	Workload
ixnnode_all_instructions_received_total Indicates the total number of instructions (of any type) received from ORS service.	**Unit:** Amount **Type:** Counter **Label:** None **Sample value:**	Workload, Operability
ixnnode_routing_instructions_received_total Indicates the total number of received routing instructions. **Label descriptions**: • strategy - The name of the strategy for which routing instructions is received. • type - The type of the instruction. It takes values "terminal" and "non-terminal". Terminal instructions are RequestDeliver, RequestPlaceInQueue,	**Unit:** Amount **Type:** Counter **Label:** strategy, type. See the metric description for more details. **Sample value:**	Workload, Operability

Metric and description	Metric details	Indicator of
RequestPlaceInWorkbin, RequestStopProcessing.		
ixnnode_redis_client_status Indicates the status of Redis client. **Label descriptions**: redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer". Value: 0 - Not Ready 1 - Ready	**Unit:** Status **Type:** Gauge **Label:** redis_client. See the metric description for more details. er". **Sample value:**	Operability
ixnnode_redis_client_errors_total Indicates the total number of errors occurred on Redis client. **Label descriptions**: redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer".	**Unit:** Amount **Type:** Counter **Label:** redis_client. See the metric description for more details. **Sample value:**	Error
ixnnode_redis_client_node_status Indicates the status of connection to individual nodes of Redis server (in singleton mode matches to ixnnode_redis_client_status). **Label descriptions**: • redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer". • node - The node of Redis server for which the metric is present as "host:port". Value: 0 - Ready 1 - Not Ready 2 - Wait (so far there have been no connection attempts)	**Unit:** Status **Type:** Gauge **Label:** redis_client, node. See the metric description for more details. **Sample value:**	Operability
ixnnode_redis_client_node_errors_total Indicates the total number of errors occurred on individual nodes of Redis client (in singleton mode matches to	**Unit:** Amount **Type:** Counter **Label:** redis_client, node. See the metric description for more details.	Error

Metric and description	Metric details	Indicator of
ixnnode_redis_client_errors_total). **Label descriptions**: • redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer". • node - The node of Redis server for which the metric is present as "host:port".	**Sample value:**	
ixnnode_redis_commands_completed_total Indicates the total number of successfully completed redis commands. **Label descriptions**: • redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer". • command - The Redis command for which the metric is present. It takes values "xadd", "xread", "xdel".	**Unit:** Amount **Type:** Counter **Label:** redis_client, command. See the metric description for more details. **Sample value:**	Workload, Operability
ixnnode_redis_commands_failed_total Indicates the total number of failed redis commands. **Label desriptions**: • redis_client - The Redis client instance for which the metric is present. It takes values "reader" and "writer". • command - The Redis command for which the metric is present. It takes values "xadd", "xread", "xdel".	**Unit:** Amount **Type:** Counter **Label:** redis_client, command. See the metric description for more details. **Sample value:**	Error
ixnnode_rq_client_status Indicates the status of connection to RQ Service nodes. **Label descriptions**: rq_node - RQ Service node for which the metric is present.	**Unit:** Status **Type:** Gauge **Label:** rq_node. See the metric description for more details. **Sample value:**	Operability

Metric and description	Metric details	Indicator of
ixnnode_rq_requests_failed_total Indicates the total number of failed requests to RQ Service. **Label descriptions**: type - The type of the failed requests. It takes values "isp_event" - interaction protocol evnts and "ixn_ping" - health check messages.	**Unit:** Amount **Type:** Counter **Label:** type. See the metric description for more details. **Sample value:**	Error
ixnnode_instructions_processing_queue_concurrency_limit Indicates the maximum number of routing instructions that can be processed in parallel.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:**	n/a
ixnnode_instructions_processing_queue_size Indicates the number of instructions received from ORS currently being processed. **Label descriptions**: type - The type of the instruction. It takes values "isp_request" - routing instruction and "ixn_ping" - reply to health check message.	**Unit:** Amount **Type:** Gauge **Label:** type. See the metric description for more details. **Sample value:**	Workload, Operability
ixnnode_pull_request_total Indicates the total number of RequestPull requests successfully completed by InteractionServer. **Label descriptions**: strategy - The strategy for which interactions are pulled.	**Unit:** Amount **Type:** Counter **Label:** strategy. See the metric description for more details. **Sample value:**	Workload, Operability
ixnnode_route_request_sent_total Indicates the total number of route requests successfully sent to ORS. **Label descriptions**: strategy - The strategy to which requests are sent.	**Unit:** Amount **Type:** Counter **Label:** strategy. See the metric description for more details. **Sample value:**	Workload, Operability
ixnnode_route_request_failed_total Indicates the total number of route requests failed to send to ORS. **Label descriptions**: strategy - The strategy to which requests are sent.	**Unit:** Amount **Type:** Counter **Label:** strategy. See the metric description for more details. **Sample value:**	Error
ixnnode_instructions_processed_by_ixn_current	**Unit:** Amount	Workload

Metric and description	Metric details	Indicator of
Indicates the number of routing instructions currently being processed by IXN Server.	**Type:** Gauge **Label:** None **Sample value:**	
ixnnode_interactions_placed_back_total Indicates the total number of times an interaction was placed back in queue. **Label descriptions**: • reason - The reason of placing back in queue. It takes values: "StrategyOldQueueRequest" - Strategy explicitly requested to place to valid queue with name (not "BACK") matching the name of queue interaction was pulled from. Set by ORS. "StrategyBackRequest" - Strategy requested placing interaction "BACK" explicitly. Set by ORS. "Implicit" - Strategy did nothing and ORS places interaction back cause there are no instructions for it. Set by ORS. "Error" - ORS places interaction back into queue due to some error regardless of the error source be it strategy itself or any other reason. Set by ORS. "SubmitError" - IXN Node failed to send interaction to ORS and places it back into queue. "Unknown" - The reason was not specified by ORS. • strategy - The strategy which routed interactions.	**Unit:** Amount **Type:** Counter **Label:** reason, strategy. See the metric description for more details. **Sample value:**	Workload, Error, ORS Error
ixnnode_running_strategies_current Indicates the number of the strategies for which interactions currently are being pulled.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:**	Operability
ixnnode_configured_strategies_current Indicates the number of the strategies read from configuration for which interactions should be pulled.	**Unit:** Amount **Type:** Gauge **Label:** None **Sample value:**	Operability

Metric and description	Metric details	Indicator of
ixnnode_configuration_fetch_errors_total Indicates the total number of error occurred while fetching configuration from Configuration Service.	**Unit:** Total Amount **Type:** Counter **Label:** None **Sample value:**	Error
ixnnode_last_fetched_configuration_timestamp Indicates the last time the configuration was successfully fetched from Configuration Service as the number of seconds since January 1 1970 UTC.	**Unit:** Timestamp **Type:** Gauge **Label:** None **Sample value:**	Operability

Alerts

No alerts are defined for Interaction Server.