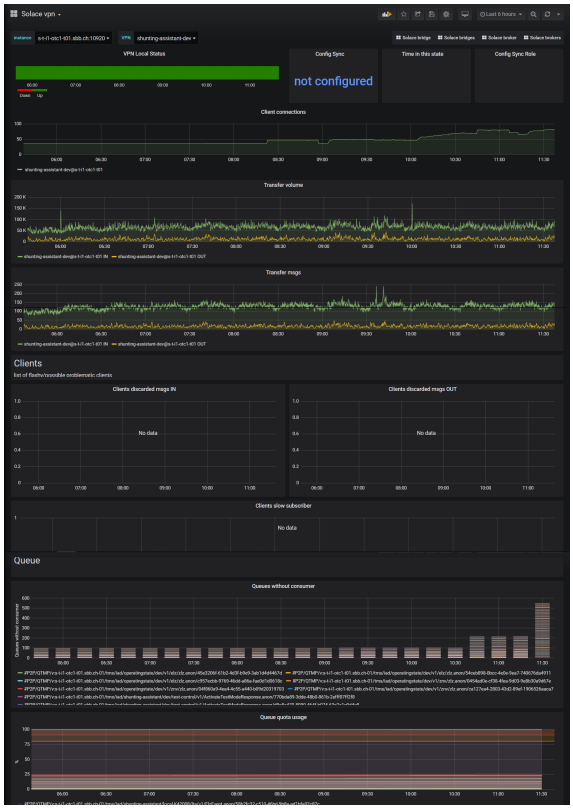
Solace Monitoring Dashboard: Vpn

The vpn is the application level configuration of a message broker. Dashboard "Solace broker" lists details on a particular vpn of one broker.

The broker and vpn can be selected at any time from the top level dropdowns.

Details on vpn configuration can be found at the Solace doc page https://docs.solace.com/Configuring-and-Managing/Managing-Message-VPNs.htm



Metric	Possible Values	Description	Typical Actions
VPN Local Status	Up (green) Down (red)	Up means the message vpn is administratively enabled and external clients are allowed to connect. Down means the message vpn is administratively enabled, but external clients are not yet allowed to connect because the internal client of the Message vpn (that is, #client) has not yet connected and loaded the required subscriptions.	Status "Up" would be the regular expected status on a vpn. A "Down" would be required on rare application purpose only. If a temporary/planned stop on message delivery or consuption is required by the application, the Queue Client Access configuration should be considered instead of vpn shutdown. WARNING: The shutdown VPN CONFIG command will disconnect all clients connected to the specified message vpn, and any new connection requests to that message vpn are rejected until it's enabled again through the no shutdown VPN CONFIG command. https://docs.solace.com/Configuring-and-Managing/Configuring-Queues.htm#managing_guaranteed_messaging_18100 20758_409504
Config Sync	Up (green) Down (red) Not HA (blue)	In case of a HA pair, an indicator for config sysnc service being up and running. This is Config-Sync on vpn level, not to be confused with Config-Sync on broker level. https://docs.solace.com/Overviews/Config-Sync-Overview.htm https://docs.solace.com/Configuring-and-Managing/Config-Sync.htm	In case of an HA setup and Config-Sync down, the config sync would need to be re-established by an administrator. https://docs.solace.com/Overviews/Config-Sync-Overview.htm https://docs.solace.com/Configuring-and-Managing/Configuring-Config-Sync.htm

Time in this state	Time value (blank)	In case of Config-Sync being configured, it lists the time since when the current Config-Sync state is present. Blank if not in Config-Sync.	
Config Sync Role	Master Slave (blank)	In case of Config-Sync being up, the role this broker instance is taking in the HA pair for Config-Sync. Blank if not in Config-Sync.	Master/Master with mate in a HA setup of active pair Master/Slave or Slave/Master with mate in a HA replication setup
Client Connections	Line on time graph	The number of current, concurrent connections from clients, either publishing or subscribing towards this vpn, as a time series graph. Hovering over the line would provide the measurement value at a given point in time.	The number of connected clients should match the planned number of clients. An steadily increasing number of conencted clients may indicate a "Client connection leak" that would need to be addressed by the application.
Transfer volume	Lines for IN and OUT on time graph	The amount of data per second, as it is published and delivered on the vpn. Hovering over the line would provide the measurement value at a given point in time. No capacity max is provided, as it depends on other vpn on the same broker (shared resource consumption)	Applications reaching the limits of data transfer have either reconsider the data sent or will need to scale out over more message broker instances. Solace message broker is capable of handling 2x as much data for direct messages vs. guaranteed delivery, which should be taken in consideration for application design and capacity planning.
Transfer msg	Lines for IN and OUT on time graph	The count of messages per second, as they are published and delivered on the vpn. Hovering over the line would provide the measurement value at a given point in time. No capacity max is provided, as it depends on other vpn on the same broker (shared resource consumption), message types and sizes.	Applications reaching the limits of message count have either reconsider the design on data in transit, or will need to scale out over more message broker instances. Solace message broker is capable of handling 2x as much messages for direct messages vs. guaranteed delivery, which should be taken in consideration for application design and capacity planning.
Client discarded msg	Lines for IN and OUT on time graph	Discarded (dropped) messages for inbound or outbound channel	Message discards usually indicate a capacity problem with the application and can happen for various reasons: • due to the use of the message eliding function, most likely in case of a slow consumers https://docs.solace.com/Solace-JMS-API/Setting-Message-Properties.htm#Eliding • guaranteed messages arriving faster than they can be spooled (disk I/O) or delivered (slow consumers filling spool) • due to expired TTLs or administrative deletion or messages
Client Slow Subscribers	Indicator on time graph	Slow subscribers are clients that consistently fail to consume their messages at the offered message rate. To determine how slow a subscriber is, the event broker measures the number of seconds in the last minute when it had data to send but could not, typically because the client's TCP window was closed. An additional penalty is applied to the slowness measurement for TCP problems such as retransmissions and missed TCP Keepalives. Slowness is expressed as a percentage. https://docs.solace.com/PubSub-Basics/G-Msg-Use-Cases.htm#Slow_Consumers	Reconsider application architecture to increase speed of message consumptions, e.g. by availability or parallelization of consumers.
Queues without consumers	Bar Stack over time	Queues for which the vpn does not know a consumer.	Queues without consumers may lead to a spool full situation, which is critical to the availability of the broker and has to be avaoided. Queues without consumers whould be a rare and short lived situation only, e.g. during application maintainance or planned down time.
Queue Quota usage	Lines per queue on time graph	Queues are configured with a max imum amount of spool they may use, which is shown. https://docs.solace.com/PubSub-Basics/G-Msg-Queueing-Limits.htm https://docs.solace.com/Configuring-and-Managing/Configuring-Queues.htm#Configur16 https://docs.solace.com/Configuring-and-Managing/Monitoring-Guaranteed-Messaging.htm#Viewing-msg-spool-info	Applications to control whether the spool quota for a given queue may be exceeded, and adjust.