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Markley Network Fabric—Interface Monitoring and Alarming

Front-ended by <u>Grafana</u>, an open source analytics and monitoring application, customers can view statistics about their provisioned interfaces on the Markley Network Fabric, including:

- Admin status
- Operational status
- Throughput
- Discards
- Errors

Basic dashboards for all available metrics have been created for you, but you have the ability to customize your dashboard according to your preferences. You may wish to change the way data are presented, choosing different graph styles, tables, or time frames.

By default, the interface names (such as xe-0/0/10 for a 10G interface, or ge-0/0/25 for a 1G interface) are displayed, along with the Fabric device they are associated with. You may opt to change this so that interface names are more descriptive, renaming something like "xe-0/0/10" to "DIA Access," for example, or to append a carrier or Markley circuit ID. For information on how to customize the panels on your dashboard, start with the Grafana documentation, available here.

In addition to viewing interface metrics, you can also create and manage alarms and receive alerts for thresholds you define. This allows you to receive notification when an interface utilization exceeds 85%, for example, or if any of your links go down or start throwing errors. Information on how to set up, configure, and manage alerts can be <u>found here</u>.

Finally, account administrators can invite and manage additional users for their accounts, expanding access to whom they choose. For more information, see Grafana's documentation on <u>user</u> management.

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Basic and Enhanced

Basic monitoring is available to Fabric users for free, and includes:

- Metrics for physical interfaces
- 15-minute data fidelity

You are able to see utilization, set thresholds, create alarms, and monitor other metrics for all of the physical interfaces you have been assigned, providing a high-level view of your traffic traversing the Fabric

A 15-minute fidelity (datapoints post every 15 minutes) is useful for a summary-view of how you are using the Fabric.

Enhanced monitoring extends this capability by including:

- Metrics for physical interfaces, logical interfaces (LAGs), and sub-interfaces
- 1-minute data fidelity

Enhanced monitoring allows you to see utilization across your aggregated interfaces (if present), as well as any sub-interfaces that you have configured. This allows for a more detailed look at how you are using the Fabric. For instance, you may have DIA (Direct Internet Access), AWS Direct Connect, Microsoft Express Route, or other services configured atop your physical interfaces. Monitoring these sub-interfaces provides additional visibility into your overall Fabric utilization, allowing you to see not only statistics for your physical interfaces, but the services provisioned over them.

A 1-minute fidelity (datapoints post every minute) is suitable for granular monitoring, catching details that may be obscured by longer fidelities, and allowing you to view metrics in near real-time.