Claims

1. A method comprising:

defining, by an asset configurator of a central infrastructure monitoring system, templates of standard attributes for a plurality of physical infrastructure assets based on a plurality of asset data points that are common across the plurality of physical infrastructure assets, wherein each of the plurality of physical infrastructure assets enables system operation within one or more of a plurality of data centers;

generating, by the asset configurator, infrastructure asset data that logically represents the plurality of physical infrastructure assets based only on the plurality of asset data points that are common for the defined templates by adding or removing asset data points for one or more of the plurality of physical infrastructure assets so that only the plurality of asset data points that are common across the plurality of infrastructure assets of the same type are included in the infrastructure asset data;

associating, by the asset configurator, the infrastructure asset data within an infrastructure asset hierarchy indicating at least one of how the plurality of physical infrastructure assets are connected and interdependencies between the plurality of physical infrastructure assets; and

monitoring, by the central infrastructure monitoring system, data received from the plurality of infrastructure assets via respective data center infrastructure monitoring systems associated with the respective data center of the plurality of data centers, the data associated with one or more of the common asset data points.

2. The method of claim 1, wherein the one or more physical infrastructure assets comprise one or more of a temperature sensor, a heating ventilation and air conditioning unit, a computer room air conditioning unit, an uninterruptible power supply, a generator, a power distribution unit, an air handling unit, a chiller unit, a power unit, or switchgear.

3. The method of claim 1, further comprising:

defining, for each of the templates, one or more asset points associated with readings to be recorded for the infrastructure asset associated with the respective template.

4. The method of claim 1, further comprising:

detecting presence of a physical infrastructure asset of the plurality of physical infrastructure assets;

selecting a communication protocol for receiving data associated with the detected physical infrastructure asset; and

receiving the data associated with the detected physical infrastructure asset using the selected communication protocol.

5. The method of claim 4, further comprising selecting a template of the defined templates for the detected physical infrastructure asset in response to the received data associated with the detected physical infrastructure asset, and populating the selected template using asset points defined by the selected template, wherein the selected template specifies a communication protocol for communicating with the detected physical infrastructure asset.

6. The method of claim 1, further comprising scheduling system resources for receiving data associated with the one or more physical infrastructure assets of the plurality of physical infrastructure assets, based on a type of each of the one or more physical infrastructure assets and a respective polling frequency associated with the respective type.

7. The method of claim 1, further comprising:

detecting a physical infrastructure asset of the plurality of physical infrastructure assets; and

selecting a template from the defined templates in response to the detected physical infrastructure asset.

8. The method of claim 1, further comprising:

normalizing configurations for defining asset models;

defining how to populate the plurality of physical infrastructure assets; and

defining data to normalize asset readings to be recorded for the plurality of physical infrastructure assets.

9. The method of claim 1, further comprising:

processing data associated with one or more first physical infrastructure assets of a first data center of the plurality of data centers and one or more first physical infrastructure assets of other respective data centers of the plurality of data centers;

detecting alarm-worthy events based on configured rules and the processed data;

provisioning an application programming interface (API) endpoint for communicating real-time data from the one or more first physical infrastructure assets;

receiving, at the API endpoint, the data associated with the one or more first physical infrastructure assets; and

processing the data associated with the one or more first physical infrastructure assets.

10. A monitoring system, comprising:

a central infrastructure monitoring system comprising an asset configurator; and

a plurality of data center infrastructure monitoring systems each associated with a respective data center of a plurality of geographically distributed data centers, each of the plurality of distributed data centers comprising one or more physical infrastructure assets of a plurality of physical infrastructure assets for enabling system operation within the respective data center, each of the plurality of data center infrastructure monitoring systems communicatively coupled to the central infrastructure monitoring system,

wherein the asset configurator is configured to define templates of standard attributes for the plurality of physical infrastructure assets based on a plurality of asset data points that are common across the plurality of physical infrastructure assets of the plurality of data centers, generate infrastructure asset data that logically represents the plurality of physical infrastructure assets based only on the plurality of asset data points that are common for the defined templates by adding or removing asset data points for one or more of the plurality of physical infrastructure assets so that only the plurality of asset data points that are common across the plurality of infrastructure assets of the

same type are included in the infrastructure asset data, and associate the infrastructure asset data within an infrastructure asset hierarchy indicating at least one of how the plurality of infrastructure assets are connected and interdependencies between the plurality of infrastructure assets, and

wherein the central infrastructure monitoring system is configured to monitor data received from each of the plurality of infrastructure assets via a respective data center infrastructure monitoring system of the plurality of data center infrastructure monitoring systems, the data associated with one or more of the common asset data points.

11. The system of claim 10, wherein at least one of the plurality of data center infrastructure monitoring systems is configured to detect presence of a physical infrastructure asset of the one or more physical infrastructure assets, select a communication protocol for receiving data associated with the detected physical infrastructure asset, and receive the data associated with the detected physical infrastructure asset using the selected communication protocol.

12. The system of claim 11, wherein the at least one of the plurality of data center infrastructure monitoring systems is configured to select a template of the defined templates for the detected physical infrastructure asset in response to the received data associated with the detected physical infrastructure asset, and populate the selected template using asset points defined by the selected template, wherein the selected template specifies a communication protocol for communicating with the detected physical infrastructure asset.

13. The system of claim 10, wherein at least one of the plurality of data center infrastructure monitoring systems is configured to detect an infrastructure asset of the one or more assets, and select a template from the defined templates in response to the detected infrastructure asset.

14. The system of claim 10, further comprising:

a central hub configured to process data associated with one or more first infrastructure assets of a first data center of the plurality of data centers and one or more

first infrastructure assets of other respective data centers of the plurality of data centers, and detect alarm events based on configured rules and the processed data; and

a gateway device in communication with the central hub and configured to provision an application programming interface (API) endpoint for communicating real-time data from the one or more first infrastructure assets, receive, at the API endpoint, the data associated with the one or more first infrastructure assets, and process the data associated with the one or more first infrastructure assets.

15. A non-transitory computer-readable storage medium comprising instructions that, when executed by at least one programmable processor of at least one computing device, cause the at least one computing device to perform the method recited by any of claims 1–9.