Installing on Windows

For testing purpose you may want to install Prometheus Server on Windows.

The node exporter will be installed on both Linux and Windows.

Installing Prometheus server on Windows

1. Download the Prometheus server ZIP file from https://prometheus.io/download/
2. Extract the ZIP file. The server is implemented as prometheus.exe
3. The prometheus.yml file contains all configuration. The important configurations are:
    a. global:scrape_interval - determines how often prometheus goes to collect metrics
    b. scrape_configs:static_configs:targets - has the list of urls from where metrics are to be collected. Default entry is localhost:9090 which is prometheus itself exposing its own metrics. Remove this entry to avoid collecting metrics generated by Prometheus server itself.

The prometheus.yml should look like this:

```
# my global config
global:
  scrape_interval:     60s # Set the scrape interval to every 15 seconds. Default is every 1 minute.
  evaluation_interval: 15s # Evaluate rules every 15 seconds. The default is every 1 minute.
  # scrape_timeout is set to the global default (10s).

# Alertmanager configuration
alerting:
  alertmanagers:
  - static_configs:
    - targets:
      # - alertmanager:9093

# Load rules once and periodically evaluate them according to the global 'evaluation_interval'.
rule_files:
  # - "first_rules.yml"
  # - "second_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:
scrape_configs:
  - job_name: 'Monitoring CS for BOA'
    static_configs:
    - targets:
      - 'localhost:9182'
    metric_relabel_configs:
    - source_labels: [__name__]
      regex: "go_(.+)|windows_service_start_mode|windows_service_status|windows_service_info|windows_textfile_mtime_seconds"
      action: drop
```

Note: the target "localhost:9182' refers to the endpoint exposed by the Windows Node Exporter, the port must match the actual port of the the Windows Node Exporter.

Note: As a best practice, the value of "writer-interval" when using the Client Library should match the scrape interval specific for the Prometheus server to ensure all metrics reported by the Client are not missed for collection.

Installing the Windows Node Exporter

1. Download from https://github.com/prometheus-community/windows_exporter/releases
2. The windows_exporter-0.16.0-amd64.exe is a console application

Create a exporter.yml file having the following content:

```
collectors:
  enabled: service,textfile

collector:
  service:
    services-where: Name='AdobeARMservice' OR Name='MSSQL$SQL2017'

  textfile:
    directory: d://temp/prom-text-files

telemetry:
  addr: ":9182"
  path: /metrics
  max-requests: 50
```

The node exporters has a wide variety of collectors. Each collector reports a particular type of metrics. In the example above, we have only enabled collection of Windows Service metrics and the text file collector.

The text file collector is responsible to reading the .prom files generated by the client library and reporting the metrics to Prometheus.

Each collector has its own configuration. The service collector is configured to only monitor the "AdobeARMservice" and the "MSSQL$SQL2017" services, you can specify your services as needed.

The text file collector is configured to read .prom files from a particular directory, in the example its configured with d:\temp\prom-text-files. Change it to suit your machine configuration.

Note the "addr" value, this determines the port on which the Node Exporter exposes the metrics. Once the Node Exporter is running, you can see the metrics in a browser by hitting http://localhost:9182/metrics.

Running the server and the node exporter

The Prometheus server can be run as:

prometheus.exe --config.file="prometheus.yml" --web.listen-address="0.0.0.0:9090"

The Node Exporter can be run as:

windows_exporter-0.16.0-amd64.exe --config.file=exporter.yml