

NAME

`gsc_prometheus.sh` – extract a Prometheus snapshot and run it in Docker or Podman

SYNOPSIS

`sudo gsc_prometheus.sh -s SR -c CUSTOMER -f PSNAP -b BASEDIR [options]`

DESCRIPTION

gsc_prometheus.sh extracts a Prometheus snapshot archive (*psnap_*.tar.xz*) into a working directory and starts a Prometheus container (using Docker or Podman, auto-detected) that serves the snapshot data.

It automatically selects the lowest free TCP port in the range **9090–9200** by scanning ports already bound by the system and mapped to running containers. The following ports are always excluded as they are reserved for common exporters: **9093** (Alertmanager), **9100** (node_exporter), **8080** (generic HTTP), **9115** (blackbox_exporter), **9116** (SNMP exporter), **9104** (mysqld_exporter).

When the container starts successfully the selected port is printed:

[OK] Prometheus for *CUSTOMER/SR* started on port *PORT*.

This port must be noted and supplied to **expand_hcpes_support.sh --healthcheck-only -u -p PORT** in Step 4 of the workflow. See **hcpes-health-check(7)**.

The container is named *gsc_prometheus_CUSTOMER_SR_PORT* and is started with **--rm** so it is removed automatically when stopped unless **--keep-container** is given.

OPTIONS**Required**

-c, --customer NAME

Customer name. Used to construct the container name and the working directory path under *BASEDIR*.

-s, --service-request SR

Service request or case number. Combined with *CUSTOMER* to form the unique working directory and container name.

-f, --snapshot-file PATH

Path to the Prometheus snapshot archive (*psnap_*.tar.xz*). Must be an existing file.

-b, --base-directory PATH

Base directory under which per-customer working directories are created. If it does not exist it will be created. The final data path is *BASEDIR/CUSTOMER/SR/prom/data*.

Optional

-C, --config-file PATH

Key=value config file. Supports the same keys as the CLI options: *customer*, *service_request*, *snapshot_file*, *base_directory*, *min_port*, *max_port*, *exclude_ports*, *engine*, *image*. CLI options take precedence over config file values.

--engine auto|docker|podman

Force the container engine. Default: **auto** (prefers Docker if both are present).

--image IMAGE

Prometheus container image to use. Default: *docker.io/prom/prometheus:latest*

--replace

Remove any existing container with the same name before starting.

--keep-container

Start the container without **--rm**; the container persists after it is stopped.

--min-port N

Lowest port to consider. Default: *9090*

- max-port N**
Highest port to consider. Default: 9200
- exclude-port N**
Exclude an additional port from selection. May be repeated.
- e, --estimate**
Check available disk space before extracting and warn or abort if insufficient.
- estimate-only**
Print space estimate and exit without extracting or starting the container.
- no-space-check**
Disable free-space checking even when **-e** was given.
- debug**
Enable verbose diagnostic output.
- no-color**
Disable ANSI colour output.
- version**
Print the script version and exit.
- h, --help**
Print a usage summary and exit.

EXIT STATUS

- 0** Container started successfully.
- 1** A required argument was missing, the snapshot file was not found, no free port was available, or the container failed to start.

ENVIRONMENT

- GSC_LIB_PATH**
Override the path to *gsc_core.sh* (default: same directory as the script).
- GSC_PROM_LOG_DIR**
Override the directory used to store the last-used-port file. Default: */var/log/gsc_prometheus*

FILES

- BASEDIR/CUSTOMER/SR/prom/data/*
Extracted snapshot data directory. Mounted into the container as */prometheus*.
- BASEDIR/CUSTOMER/SR/prom/prometheus.yml*
Minimal Prometheus configuration written by the script.
- /var/log/gsc_prometheus/vVERSION/last_used_port.txt*
Records the last allocated port so subsequent invocations start scanning from the next port rather than 9090.

EXAMPLES

Basic invocation (Step 3 of workflow)

```
sudo gsc_prometheus.sh \
-s 05304447 \
-c AcmeCorp \
-f psnap_2025-Nov-26_20-48-48.tar.xz \
-b /opt/prom_instances
```

Force Podman and a specific port range

```
sudo gsc_prometheus.sh \
-s 05304447 -c AcmeCorp \
-f psnap_2025-Nov-26_20-48-48.tar.xz \
-b /opt/prom_instances \
--engine podman --min-port 9150 --max-port 9160
```

Check space before extracting a large snapshot

```
sudo gsc_prometheus.sh \  
-s 05304447 -c AcmeCorp \  
-f psnap_2025-Nov-26_20-48-48.tar.xz \  
-b /opt/prom_instances --estimate-only
```

Replace an existing container for the same SR

```
sudo gsc_prometheus.sh \  
-s 05304447 -c AcmeCorp \  
-f psnap_2025-Nov-26_20-48-48.tar.xz \  
-b /opt/prom_instances --replace
```

SEE ALSO

expand_hcpes_support(1), runchk(1), hcpes-health-check(7), docker(1), podman(1)

AUTHORS

Hitachi Vantara GSC