Checkmk Monitoring & Troubleshooting Lab

Hack Manhattan | Session date: November 1, 2026 | Host investigated: donatello

Prepared as a hands-on lab record and draft for administrator review. No monitoring or Docker configuration changes were performed during this investigation.

Executive summary

Reviewed a Checkmk installation monitoring six hosts and 191 services. The donatello host was UP, but its Check_MK Discovery service initially reported CRITICAL with 30 vanished services, six vanished host labels, and "[Errno 113] No route to host." Read-only SSH, Linux, agent, Checkmk connection and Docker networking checks subsequently showed successful agent data retrieval from the monitoring server. The Discovery service later changed to WARNING, reporting one unmonitored interface (Interface 7), identified on the host as docker0. The original connectivity failure was not reproduced and its root cause remains undetermined.

Scope & environment

Monitoring platform	Checkmk; local site CheckMKSite
Monitored environment	6 hosts; 191 services at the time of the screenshots
Target host	donatello — Debian GNU/Linux 13; agent/controller 2.5.0p6
Observed IPv4 address	192.168.42.182
Access / tools	Checkmk Web UI, Git Bash SSH, systemctl, ss, cmk-agent-ctl, ip, docker
Investigation approach	Read-only verification; no changes activated or services reconfigured

Alert timeline and verified findings

Initial state	Host UP; Check_MK Discovery CRITICAL. Discovery output showed 30 vanished services, six vanished labels and "No route to host."
Linux verification	SSH key login succeeded. Hostname and address matched donatello / 192.168.42.182. Uptime was approximately 1 hour 22 minutes when checked.
Agent inspection	check-mk-agent.socket active; TCP *:6556 listening. Controller reported agent socket operational, legacy mode enabled and no registered connections.
Agent data	sudo cmk-agent-ctl dump generated expected agent sections. "Broken pipe" arose after output was truncated with head; this does not establish agent failure.
Server-side test	Checkmk Test agent connection successfully pinged 192.168.42.182 (2/2 packets, 0% loss) and returned agent data.
Later state	Check_MK Discovery changed to WARN, with "Services unmonitored: 1 (lnx_if: 1)" and "Interface 7." The Check_MK Agent TLS warning remained.

Interpretation

The initial "No route to host" indicates failure to communicate during an earlier discovery attempt, but the successful subsequent server-side ping and agent retrieval show that this path was working when retested. The host had restarted earlier that day; a causal link between reboot and recovery has not been established. The Agent warning is consistent with legacy/non-TLS operation, but it should not be treated as the demonstrated cause of the earlier routing error.

Docker interface investigation

The Linux command ip -o link show identified interface index 7 as docker0, administratively UP but operationally DOWN / NO-CARRIER. A running Flamenco-related container was found. Docker listed an app_network overlay network and docker_gwbridge. Container inspection showed the Flamenco container attached to app_network, not the default bridge. Thus docker0 may legitimately lack an active attachment; its unmonitored status is a discovery-policy question, not evidence by itself of a failed production network.

Open issues and recommendations

• Confirm with Stephen whether docker0 should be monitored or excluded from service discovery. Do not automatically accept or suppress the interface without reviewing intended Docker usage.

• Review Checkmk Agent legacy-mode/TLS registration policy and whether the current WARN is intentional; plan any security changes with the administrator.

• If the earlier communication error recurs, correlate check timestamps with host reboot and network events, DNS resolution, firewall/routing state, and agent logs from both host and monitoring server.

• Validate any new Checkmk discovery configuration in an approved change window; retain the before/after observations and screenshots.

Outcome and limits

Remote Checkmk-to-agent connectivity was confirmed at the time of testing, and the CRITICAL discovery alert later cleared to WARNING. No root cause for the historical outage was proven. No change was made to the Checkmk configuration, Docker network, or host services. This report should be reviewed for internal infrastructure details before wiki publication.

Evidence appendix — screenshots

The following screenshots were supplied during the lab and are ordered to follow the investigation. Terminal captures may contain internal hostnames, private addresses and infrastructure details; review before public sharing.

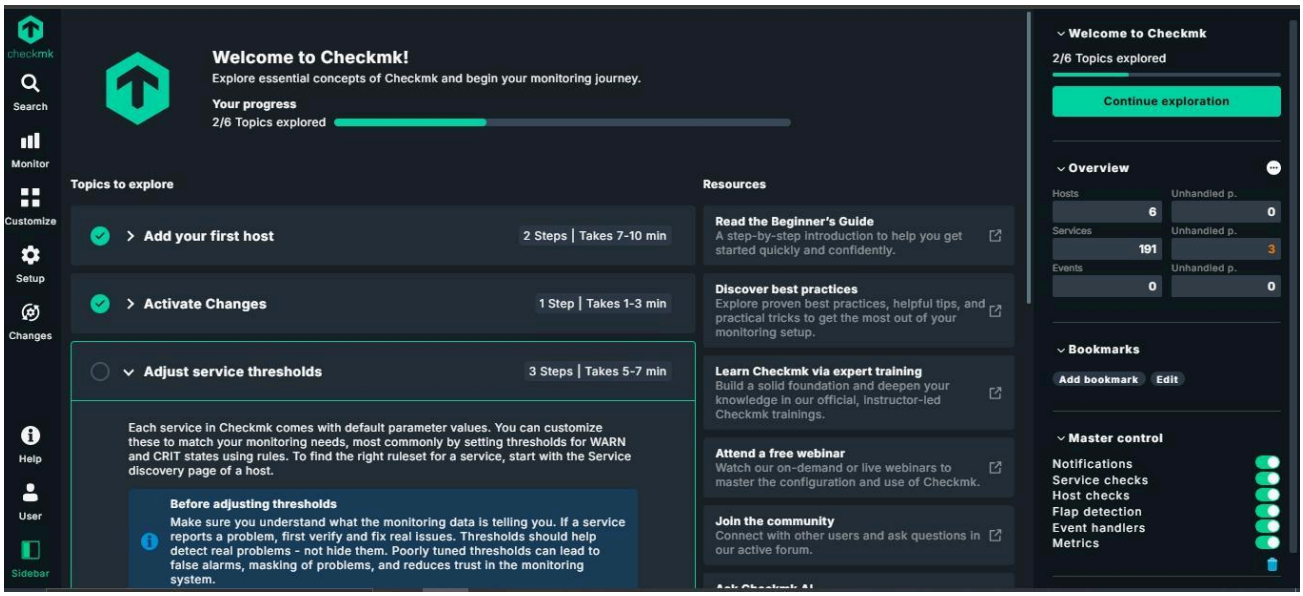


Figure 1. Checkmk site overview: 6 hosts / 191 services.

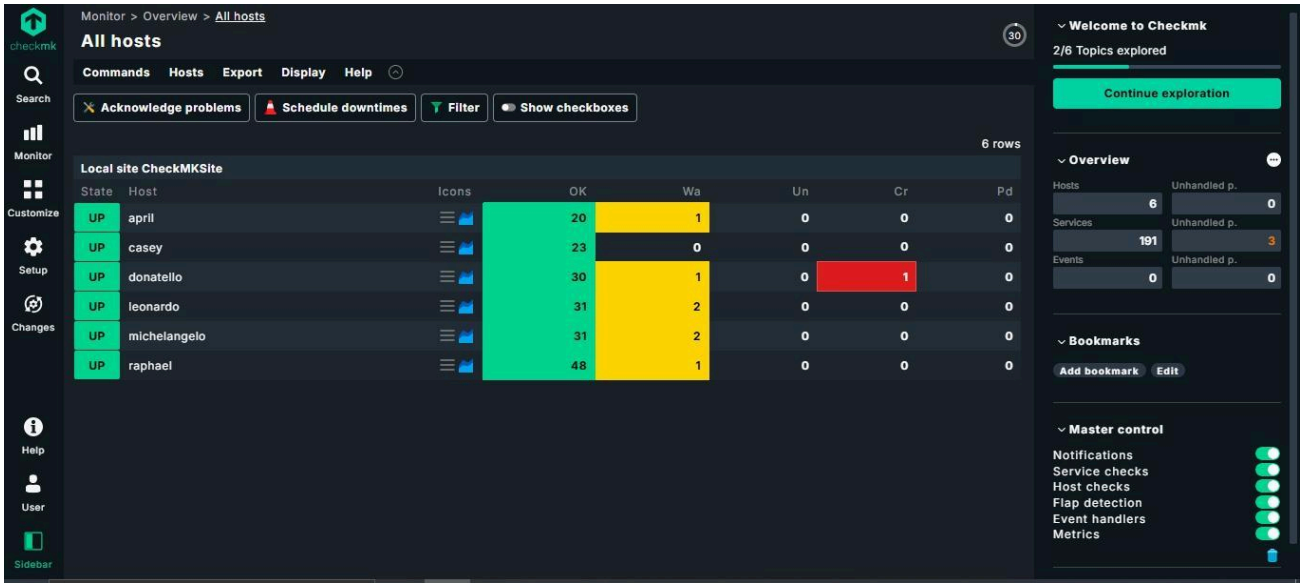


Figure 2. Host overview; donatello has CRITICAL discovery alert.

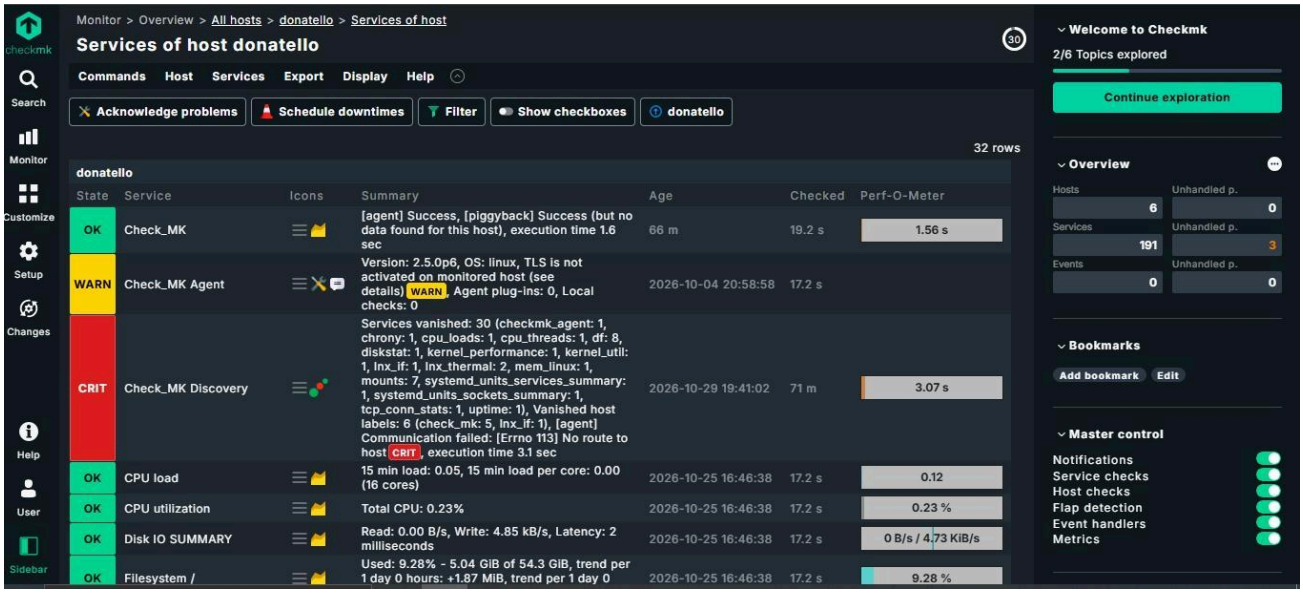


Figure 3. Donatello service list with initial CRITICAL discovery state.

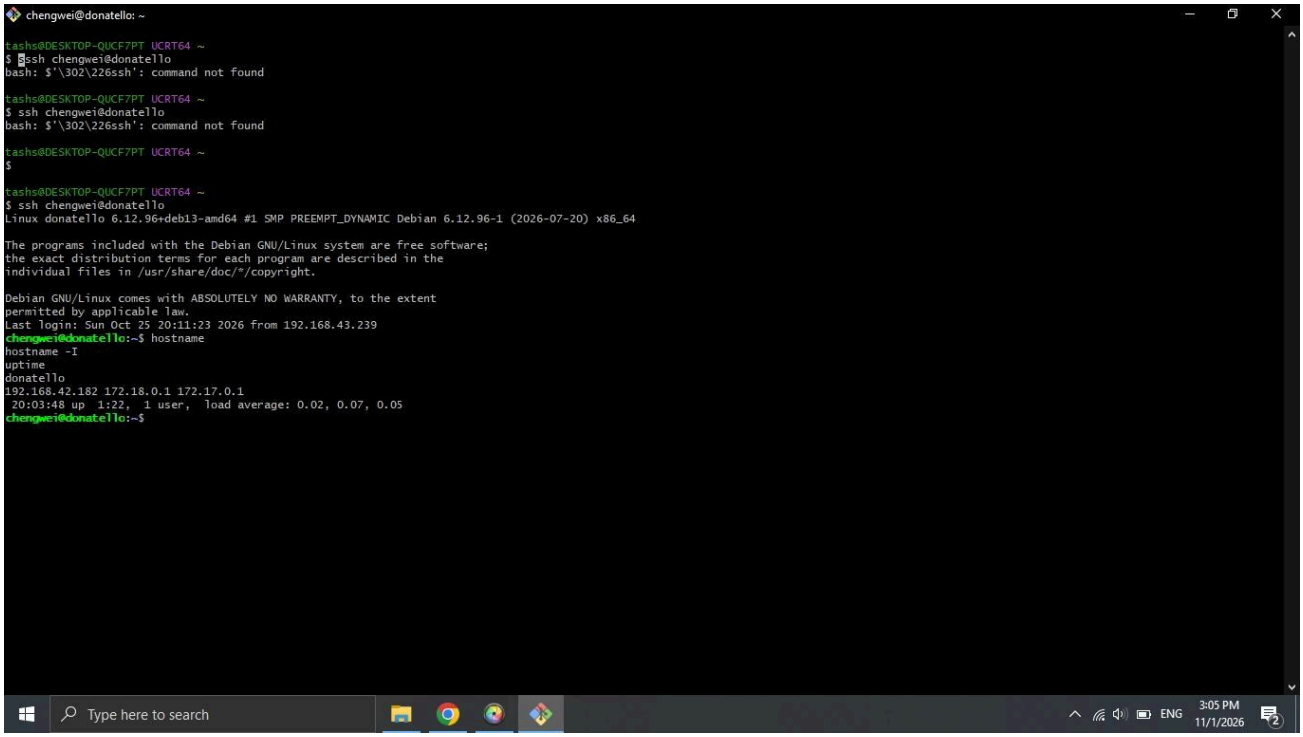


Figure 4. SSH login, hostname, network addresses and uptime.

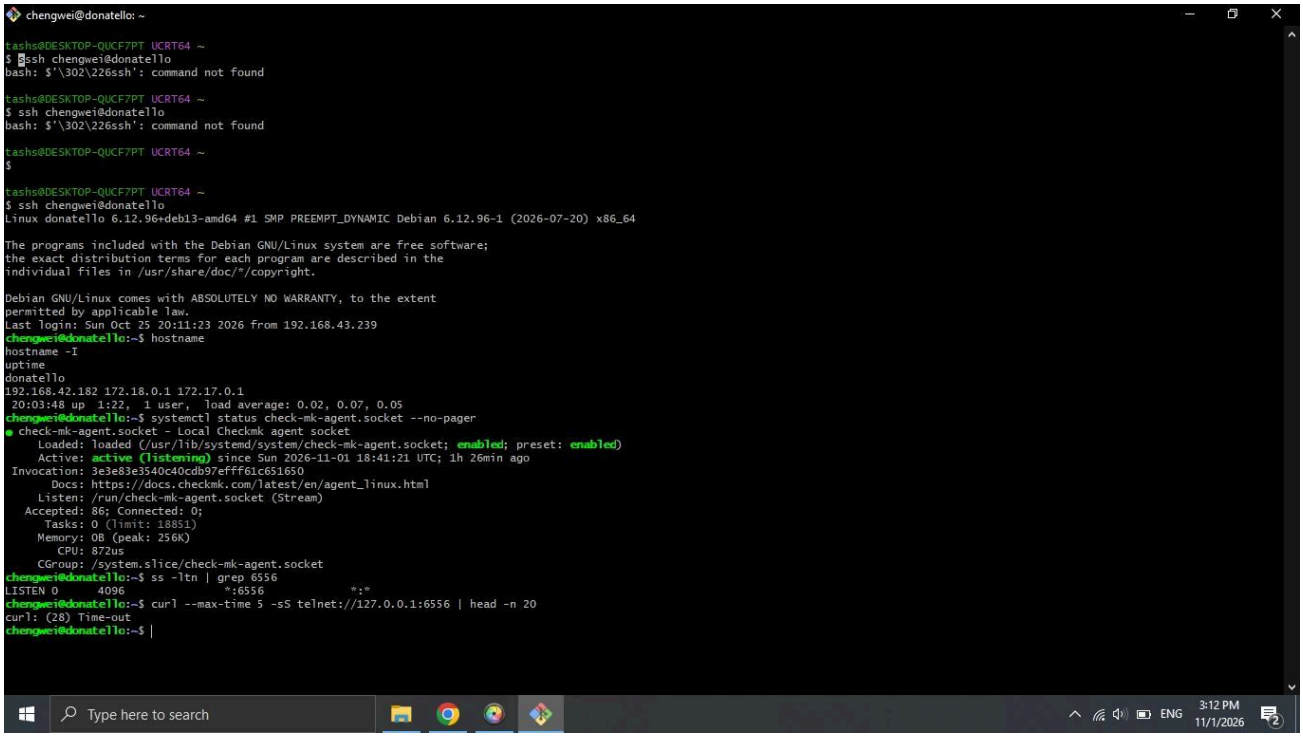


Figure 5. Agent socket status, port 6556 and local TCP timeout.

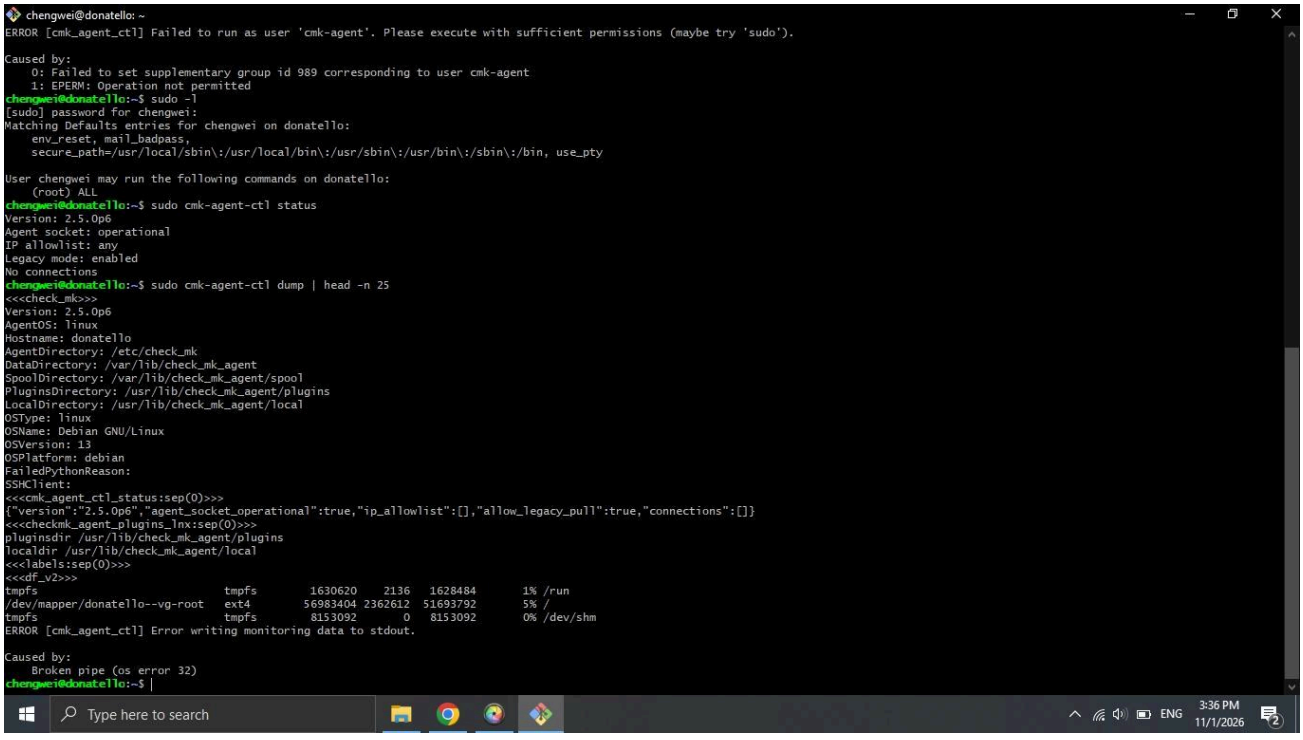


Figure 6. Agent status, agent data and Linux interface observations.

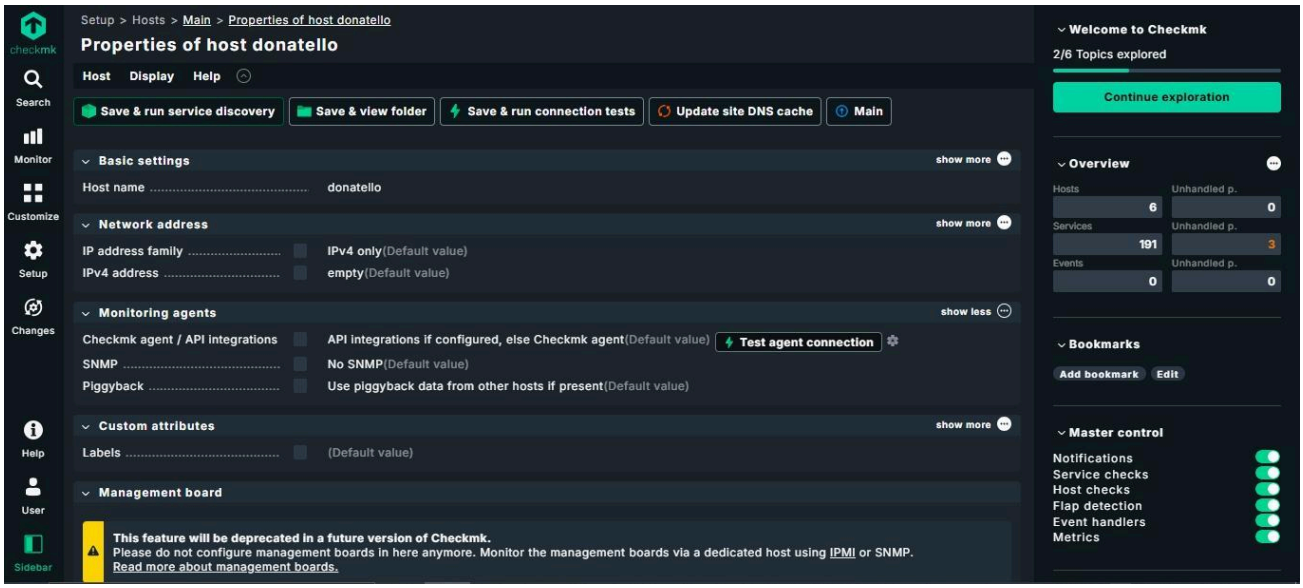


Figure 7. Host properties; IPv4 left at default/empty.

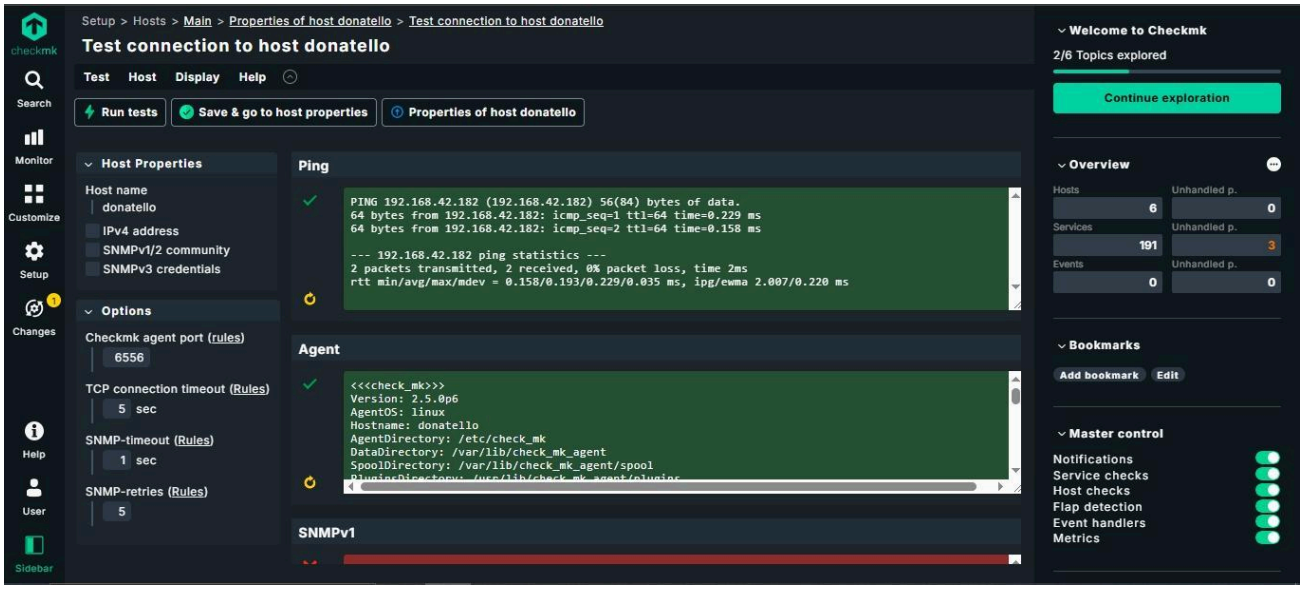


Figure 8. Checkmk server-side ping and agent connection test succeeded.

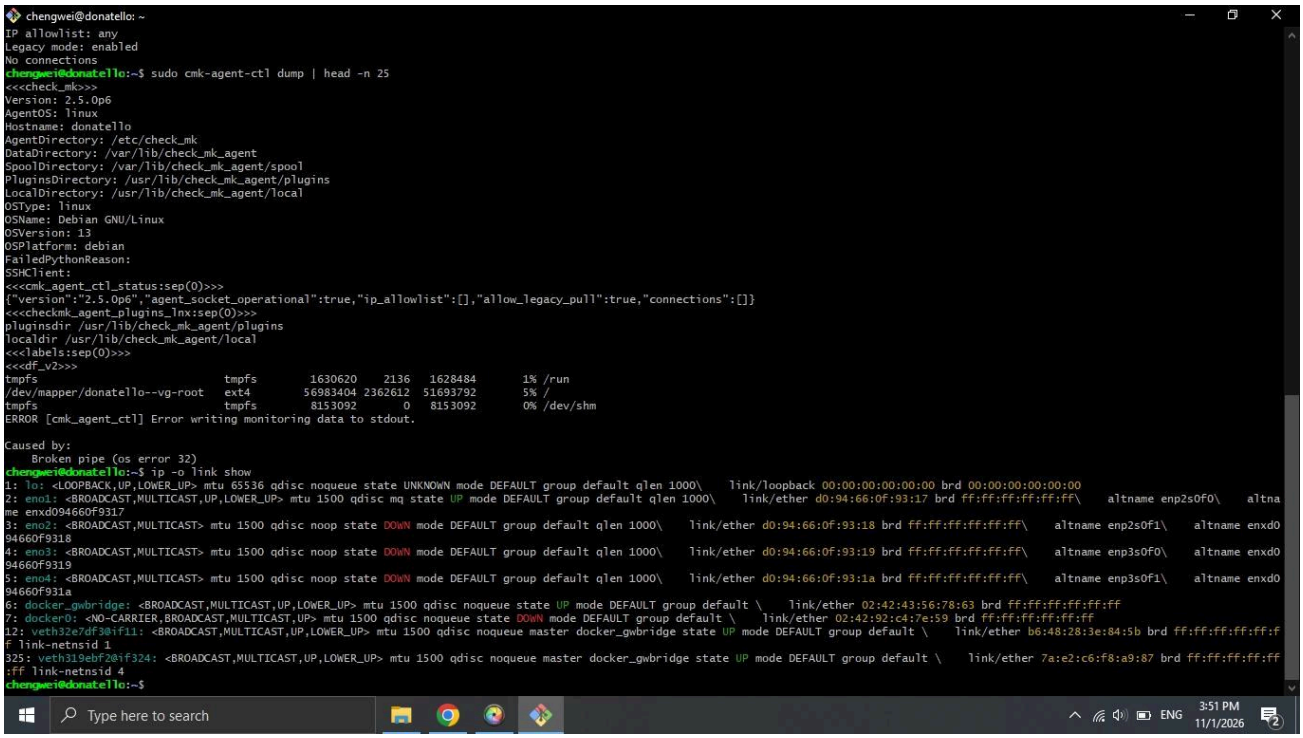


Figure 9. Linux network interfaces including docker0 at index 7.

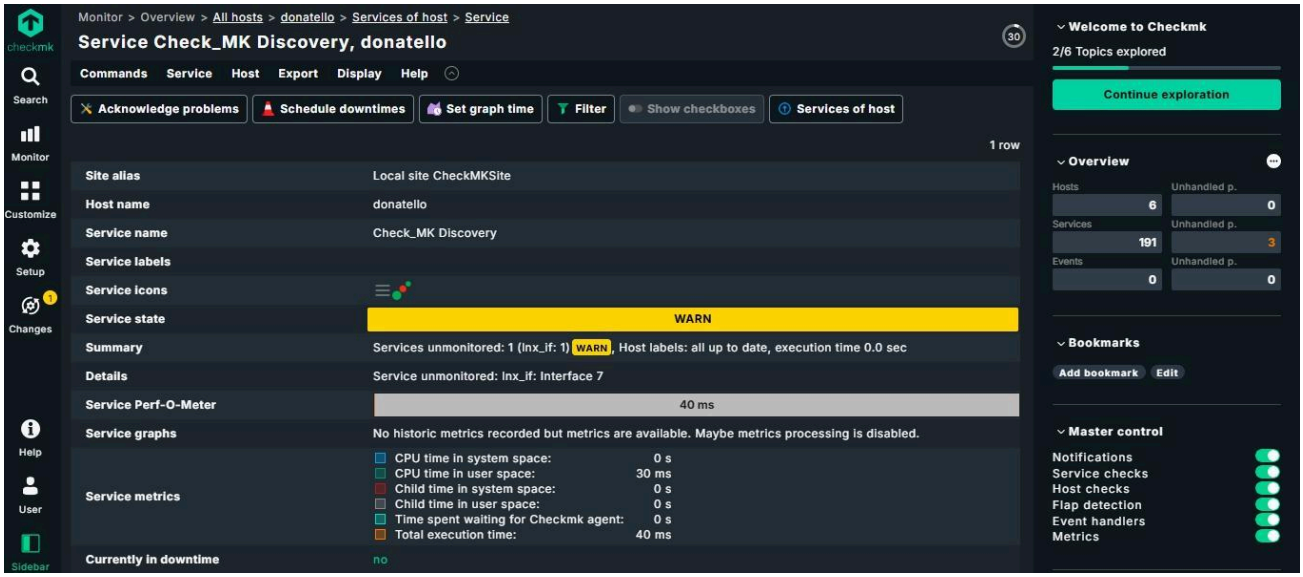


Figure 10. Later Discovery WARNING: Interface 7 unmonitored.