

ADDRESS ALLOCATION 192.168.10.0/24 - LAB

	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15
.0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.16	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
.32	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
.48	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
.64	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
.80	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
.96	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
.112	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
.128	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
.144	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
.160	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
.176	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
.192	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
.208	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
.224	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
.240	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

statically assigned DHCP pool 192.168.10.100-192.168.10.149 free network / broadcast address

ADDRESS ALLOCATION 192.168.8.0/24 - OPAL-LAN

	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15
.0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.16	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
.32	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
.48	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
.64	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
.80	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
.96	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
.112	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
.128	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
.144	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
.160	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
.176	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
.192	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
.208	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
.224	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
.240	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

statically assigned DHCP pool 192.168.8.100-192.168.8.249 free network / broadcast address

ADDRESS ALLOCATION 10.100.136.0/24 - LABDA

	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11	+12	+13	+14	+15
.0	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
.16	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
.32	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
.48	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
.64	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79
.80	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95
.96	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111
.112	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127
.128	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143
.144	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
.160	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175
.176	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191
.192	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
.208	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223
.224	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239
.240	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255

 statically assigned  not tracked  network / broadcast address

IP ▲	HOSTNAME	CLUSTER	SYSTEM	DESCRIPTION
10.100.136.89	edge-tt-test1	edge	edge-tt-test1	LabDA vSphere VM (8 vCPU / 15Gi / 128Gi, Ubuntu 26.04), single-node k3s + Cilium + Flux; the first edge lab cluster and the reference for the others. Folder clusters/edge.
10.100.136.115	labda-dns	—	labda-dns	LabDA resolver, the only one that knows 4sthings.tiab.ssc.sva.de; the edge lab cluster's CoreDNS forwards that zone here.
10.100.136.223	edge-tt-test1-gat	edge	edge-tt-test1	Cilium L2 VIP of edge-gateway, internal names *.edge-tt-test1.4sthings.tiab.ssc.sva.de (LabDA Clusterbook), certificates from the edge CA.
10.100.136.226	edge-tt-test1-pla	edge	edge-tt-test1	Cilium L2 VIP of the players' Gateway. The public Hetzner record *.sthings-edge.com points here; on the sthings-edge box the Opal answers the same names with 192.168.8.21 instead.
192.168.8.1	opal	—	network	GL.iNet Opal (GL-SFT1200, OpenWrt 18.06). Gateway, DNS (dnsmasq) and DHCP for the table tennis network, own Wi-Fi `sthings-edge`, uplink as a Wi-Fi repeater.
192.168.8.10	sthings-edge	sthings-edge	sthings-edge	LattePanda Mu (N100, 8 GB, eMMC) on a LAN port of the Opal, static lease for enp1s0. Single-node k3s + Cilium + Flux (role `tt`) for the table tennis stack.
192.168.8.20	edge-gateway	sthings-edge	sthings-edge	Cilium L2 VIP of the Gateway `edge-gateway`, internal names *.edge.sthings.lab with certificates from the edge CA (OpenBao on the box). Resolves only inside the Opal LAN.
192.168.8.21	edge-play-gateway	sthings-edge	sthings-edge	Cilium L2 VIP of the players' Gateway `edge-play-gateway`, public name sthings-edge.com with a Let's Encrypt wildcard (DNS-01 at Hetzner). Inside the Opal LAN the router answers the name locally.
192.168.8.22	edge-redis	sthings-edge	sthings-edge	Cilium LB address of redis-stack-lb (clusters/sthings-edge/lan), own pool with exactly this IP. Only 6379, password-protected.

192.168.8.23	edge-log-sink	sthings-edge	sthings-edge	Cilium LB address of the firmware's log sink (clusters/sthings-edge/log-sink), own pool with exactly this IP. The piezo board sends its diagnostic log here directly, without a name.
192.168.8.30	matrix-edge	—	matrix	The same LED matrix Pi (MAC b8:27:eb:d9:33:db) when it travels with the box: Wi-Fi `sthings-edge`, static lease on the Opal, Redis from edge-redis. matrix.sthings.lab points here via the Opal's dnsmasq.
192.168.8.31	wled-edge	—	wled-matrix	The same WLED (MAC d4:e9:f4:c3:e9:dc) when it travels with the box: WLED keeps both Wi-Fi networks and joins `sthings-edge` here, static lease on the Opal. wled-matrix.sthings.lab points here via the Opal's dnsmasq; driven by the box's light-catcher-tabletennis (clusters/sthings-edge/README.md, section 13).
192.168.10.1	ddwrt	—	network	DD-WRT router. Gateway, DNS (dnsmasq, *.sthings.lab) and DHCP for the lab.
192.168.10.50	geekom	—	jump-server	Mini PC. Entry point into the lab network and launch point for Ansible and Dagger runs.
192.168.10.105	machinery-hv	machinery-hv	machinery-hv	VM node of the RKE2 cluster machinery-hv (8 vCPU / 16Gi / 80Gi, static lease for MAC BE:64:F3:26:1A:60). Crossplane with the `machinery` profile and Tekton; orders whole clusters as ClusterStacks.
192.168.10.108	crossplane-mgmt	crossplane-mgmt	crossplane-mgmt	VM node of crossplane-mgmt (static lease for MAC BA:69:A8:A3:BA:28). Crossplane for the VM path (XVirtualMachine -> Harvester) and the RancherCluster order tablettennis; Argo CD on platform syncs clusters/crossplane-mgmt (showcase-crossplane-platform / -xrs).
192.168.10.110	harvester	harvester	harvester	Harvester node (enp5s0, MAC 58:47:ca:7d:34:f0), statically addressed. Hosts the VMs of every cluster.
192.168.10.111	sthings-edge-kiosk		sthings-edge	The sthings-edge box (MAC 00:e0:4c:0a:f6:ff) when it boots in SthingsNet: role `kiosk` (detected from the gateway), Firefox kiosk with the homerun2-dev tabs, k3s skipped. See clusters/sthings-edge/README.md.
192.168.10.114	tablettennis	tablettennis	tablettennis	Single node (tablettennis-pool1) built by Rancher on Harvester. The address is a DHCP lease from the dynamic pool, not a reservation. homerun2 and tablettennis come from the platform profiles via Argo CD on platform.
192.168.10.117	homerun2-dev	homerun2-dev	homerun2-dev	VM node of the RKE2 cluster homerun2-dev (12 vCPU / 12Gi / 50Gi, static lease for MAC BA:B3:3E:EA:51:F3; a rebuilt VM needs it updated). Flux syncs clusters/homerun2-dev. Runs the homerun2 and table tennis stacks of the lab.
192.168.10.120	matrix	—	matrix	Raspberry Pi 3B+ driving the homerun2 64x64 LED matrix (wlan0, MAC b8:27:eb:d9:33:db, static lease). No Kubernetes: homerun2-led-catcher runs under systemd, deployed by the sthings.container play. See hosts/matrix/README.md.
192.168.10.123	wled-matrix	—	wled-matrix	WLED on an ESP32, 36 LEDs. Fed by the light-catcher on homerun2-dev (clusters/homerun2-dev/homerun2-light-catcher-profile.yaml).
192.168.10.139	harvester-vip	harvester	harvester	Static cluster VIP for Harvester - UI and Kubernetes API. Must sit outside the DHCP pool .100-.149.
192.168.10.160	platform	platform	platform-sthings	Single-node k3s cluster `platform.sthings.lab` (Cilium LB VIP). Carries the developer-facing platform.
192.168.10.171	homerun2-dev-gate	homerun2-dev	homerun2-dev	Cilium LB VIP (Clusterbook 171:ASSIGNED:DNS:homerun2-dev) of the Gateway homerun2-dev-sthings-gateway; *.homerun2-dev.sthings.lab with certificates from the OpenBao PKI on platform.

192.168.10.173	app-dev-hv-gatewa	app-dev-hv	app-dev-hv	Cilium LB VIP (Clusterbook 173:ASSIGNED:DNS:app-dev-hv) of the Gateway app-dev-hv-gateway; *.app-dev-hv.sthings.lab with certificates from the OpenBao PKI on platform.
192.168.10.176	app-dev-hv	app-dev-hv	app-dev-hv	Cluster built by Rancher on a Harvester machine pool (rancher-k3s, 4 CPU / 8 GiB / 64 GiB), ordered as a ClusterStack on machinery-hv. Node address reserved in Clusterbook as app-dev-hv-node; Cilium, homerun2 and tabletennis come from the platform profiles via Argo CD on platform.
192.168.10.177	crossplane-mgmt-v	crossplane-mgmt	crossplane-mgmt	Clusterbook reservation of crossplane-mgmt with DNS (*.crossplane-mgmt.sthings.lab), made by the ClusterbookCluster on platform for the Argo CD registration.
192.168.10.178	machinery-hv-gate	machinery-hv	machinery-hv	Cilium LB VIP (Clusterbook 178:ASSIGNED:DNS:machinery-hv) of the cluster Gateway; *.machinery-hv.sthings.lab.
192.168.10.179	homerun2-dev-redi	homerun2-dev	homerun2-dev	Cilium LB address of redis-stack-lb (clusters/homerun2-dev/redis-lb.yaml), own pool with only this IP; Clusterbook 179:ASSIGNED:homerun2-dev-redis, deliberately without DNS.
192.168.10.180	tabletennis-gatew	tabletennis	tabletennis	Clusterbook reservation (180:ASSIGNED:DNS:tabletennis) for the Gateway tabletennis-gateway, *.tabletennis.sthings.lab. Not served: the cluster has no Cilium Gateway controller, so the Gateway stays Pending and the VIP never comes up (checked 2026-10-26).

SERVICES

CLUSTER ▲	SERVICE	ENDPOINT	DESCRIPTION
app-dev-hv	core-catcher on app-dev-hv-gateway	core-catcher.app-dev-hv.sthings.lab	homerun2 core catcher.
app-dev-hv	homerun2 + tabletennis on app-dev-hv	—	Platform profiles: homerun2 stack, schmetterpause (CNPG, backup to s3://app-dev-hv-schmetterpause-cnpg on platform's MinIO) and zaehlwerk.
app-dev-hv	Kubernetes API on app-dev-hv	port 6443	k3s API server, registered in Argo CD on platform.
app-dev-hv	led-catcher on app-dev-hv-gateway	led-catcher.app-dev-hv.sthings.lab	homerun2 LED catcher with its web simulator.
app-dev-hv	omni-pitcher on app-dev-hv-gateway	omni-pitcher.app-dev-hv.sthings.lab	homerun2 omni pitcher (API).
app-dev-hv	schmetterpause on app-dev-hv-gateway	schmetterpause.app-dev-hv.sthings.lab	Table tennis app, admin side.
app-dev-hv	scout on app-dev-hv-gateway	scout.app-dev-hv.sthings.lab	homerun2 scout.
app-dev-hv	Zählwerk on app-dev-hv-gateway	zaehlwerk.app-dev-hv.sthings.lab	Score counter.
crossplane-mgmt	Crossplane	—	RancherCluster, XVirtualMachine and AnsibleRun claims; reached through the Kubernetes API, no ingress.
crossplane-mgmt	Kubernetes API	port 6443	API server; also the Argo CD cluster server URL (useFQDNAsServer: false).

edge	config-viewer on edge-tt-test1-gateway	config-viewer.edge-tt-test1.4sthings.tiab.ssc.sva.de	homerun2 config viewer.
edge	demo-pitcher on edge-tt-test1-gateway	demo-pitcher.edge-tt-test1.4sthings.tiab.ssc.sva.de	homerun2 demo pitcher.
edge	Kubernetes API on edge-tt-test1	port 6443	k3s API server; kubeconfig in secrets/edge (SOPS).
edge	led-catcher on edge-tt-test1-gateway	led-catcher.edge-tt-test1.4sthings.tiab.ssc.sva.de	homerun2 LED catcher.
edge	light-catcher-tabletennis on edge-tt-test1-gateway	light-catcher-tabletennis.edge-tt-test1.4sthings.tiab.ssc.sva.de	homerun2 light catcher for the table.
edge	MinIO console on edge-tt-test1-gateway	minio-console.edge-tt-test1.4sthings.tiab.ssc.sva.de	Web UI for MinIO.
edge	OpenBao on edge-tt-test1-gateway	openbao.edge-tt-test1.4sthings.tiab.ssc.sva.de	Edge PKI and ACME directory.
edge	schmetterpause on edge-tt-test1-gateway	schmetterpause.edge-tt-test1.4sthings.tiab.ssc.sva.de	Table tennis app, admin side.
edge	schmetterpause (players, public) on edge-tt-test1-play	schmetterpause.sthings-edge.com	Players' side via the public sthings-edge.com record, Let's Encrypt (DNS-01 at Hetzner). FQDN listed under edge-play-gateway.
edge	wled-mock on edge-tt-test1-gateway	wled-mock.edge-tt-test1.4sthings.tiab.ssc.sva.de	Stand-in for the WLED strip.
edge	Zählwerk on edge-tt-test1-gateway	zaehlwerk.edge-tt-test1.4sthings.tiab.ssc.sva.de	Score counter.
harvester	Harvester UI on harvester	harvester.sthings.lab	Web UI, TLS certificate issued by openbao-pki on the platform cluster.
harvester	Kubernetes API on harvester-vip	port 6443	RKE2 API server of the Harvester cluster. Source of the kubeconfig fetched during install.
homerun2-dev	config-viewer on homerun2-dev-gateway	config-viewer.homerun2-dev.sthings.lab	homerun2 config viewer.
homerun2-dev	core-catcher on homerun2-dev-gateway	core-catcher.homerun2-dev.sthings.lab	homerun2 core catcher.
homerun2-dev	demo-pitcher on homerun2-dev-gateway	demo-pitcher.homerun2-dev.sthings.lab	homerun2 demo pitcher.
homerun2-dev	Flux web on homerun2-dev-gateway	flux.homerun2-dev.sthings.lab	Flux UI.
homerun2-dev	Headlamp on homerun2-dev-gateway	headlamp.homerun2-dev.sthings.lab	Kubernetes UI.
homerun2-dev	Kubernetes API on homerun2-dev	port 6443	RKE2 API server.

homerun2-dev	led-catcher on homerun2-dev-gateway	<code>led-catcher.homerun2-dev.sthings.lab</code>	homerun2 LED catcher with its web simulator; switches between the `messages` and `tabletennis` streams.
homerun2-dev	light-catcher on homerun2-dev-gateway	<code>light-catcher.homerun2-dev.sthings.lab</code>	homerun2 light catcher, drives the WLED strip (wled-matrix).
homerun2-dev	omni-pitcher on homerun2-dev-gateway	<code>omni-pitcher.homerun2-dev.sthings.lab</code>	homerun2 omni pitcher; zaehlwerk pitches scores here.
homerun2-dev	Redis on homerun2-dev-redis	port 6379	The `messages` stream the LED matrix Pi reads in SthingsNet (consumer group homerun2-led-matrix).
homerun2-dev	schmetterpause on homerun2-dev-gateway	<code>schmetterpause.homerun2-dev.sthings.lab</code>	Table tennis league app; CNPG database backed up to MinIO on platform.
homerun2-dev	scout on homerun2-dev-gateway	<code>scout.homerun2-dev.sthings.lab</code>	homerun2 scout.
homerun2-dev	wled-mock on homerun2-dev-gateway	<code>wled-mock.homerun2-dev.sthings.lab</code>	Stand-in for a WLED device.
homerun2-dev	Zählwerk on homerun2-dev-gateway	<code>zaehlwerk.homerun2-dev.sthings.lab</code>	Scoring API and panel.
machinery-hv	Crossplane on machinery-hv	–	ClusterStack API; reached through the Kubernetes API, no ingress.
machinery-hv	Flux web on machinery-hv-gateway	<code>flux.machinery-hv.sthings.lab</code>	Flux UI.
machinery-hv	Headlamp on machinery-hv-gateway	<code>headlamp.machinery-hv.sthings.lab</code>	Kubernetes UI.
machinery-hv	Kubernetes API on machinery-hv	port 6443	RKE2 API server.
machinery-hv	machinery on machinery-hv-gateway	<code>machinery.machinery-hv.sthings.lab</code>	Dashboard over the cluster's Crossplane claims (ClusterStack, RancherCluster, ...).
platform	Argo CD	<code>argocd.platform.sthings.lab</code>	Deploys the platform apps of this cluster.
platform	Backstage	<code>backstage.platform.sthings.lab</code>	Developer portal. Catalog entries come from the catalog-info.yaml files in this repo.
platform	claim-machinery-api	<code>claims.platform.sthings.lab</code>	Claim rendering API that Backstage calls for self-service provisioning.
platform	Clusterbook	<code>clusterbook.platform.sthings.lab</code>	Reserves IP and FQDN for new clusters and writes the DNS records to the DD-WRT router. Moved here from the infra cluster.
platform	Clusterbook operator	–	Reconciles ClusterbookCluster resources against the Clusterbook API on this cluster. No ingress.
platform	clusterscope	<code>clusterscope.platform.sthings.lab</code>	Map of the lab's clusters from clusters/ in this repo, with live status and endpoint probes for platform itself.
platform	Harbor	<code>harbor.platform.sthings.lab</code>	Container registry including the project proxy for upstream images.
platform	MinIO (S3)	<code>artifacts.platform.sthings.lab</code>	S3 endpoint for the Packer golden images. Served by the sthings-lab private CA, referenced by harvester-images/golden-images.yaml.
platform	MinIO console	<code>artifacts-console.platform.sthings.lab</code>	Web UI for the artifact bucket.

platform	OpenBao	openbao.platform.sthings.lab	PKI for sthings-lab (root CN=sthings.lab) and the Vault API the clusters use: openbao-pki ClusterIssuers log in with Kubernetes auth, Crossplane with AppRoles. Replaced the infra Vault (#152).
platform	Rancher	rancher.platform.sthings.lab	Cluster management UI.
sthings-edge	config-viewer on edge-gateway	config-viewer.edge.sthings.lab	homerun2 config viewer.
sthings-edge	core-catcher on edge-gateway	core-catcher.edge.sthings.lab	homerun2 core catcher.
sthings-edge	demo-pitcher on edge-gateway	demo-pitcher.edge.sthings.lab	homerun2 demo pitcher.
sthings-edge	Kubernetes API on sthings-edge	port 6443	k3s API server; kubeconfig ~/.kube/sthings-edge, or through an SSH tunnel to 127.0.0.1:6443.
sthings-edge	led-catcher on edge-gateway	led-catcher.edge.sthings.lab	homerun2 LED catcher.
sthings-edge	light-catcher on edge-gateway	light-catcher.edge.sthings.lab	homerun2 light catcher.
sthings-edge	light-catcher-tabletennis on edge-gateway	light-catcher-tabletennis.edge.sthings.lab	homerun2 light catcher for the table (stream `tabletennis`); drives the WLED at wled-matrix.sthings.lab (.31).
sthings-edge	log sink (UDP) on edge-log-sink	port 9000	One JSON line per event over UDP (zaehlwerk-firmware ADR-0004); one file per session and per game. The viewer is log-sink.edge.sthings.lab on edge-gateway.
sthings-edge	log-sink on edge-gateway	log-sink.edge.sthings.lab	Viewer of the firmware's log sink: sessions and games the board sent to edge-log-sink (.23), read-only, no login.
sthings-edge	MinIO (S3) on edge-gateway	minio.edge.sthings.lab	S3 API; bucket for the CNPG backups of schmetterpause.
sthings-edge	MinIO console on edge-gateway	minio-console.edge.sthings.lab	Web UI for MinIO.
sthings-edge	omni-pitcher on edge-gateway	omni-pitcher.edge.sthings.lab	homerun2 omni pitcher (API only, no page on /).
sthings-edge	OpenBao on edge-gateway	openbao.edge.sthings.lab	PKI of the edge (intermediate signed by the edge root) and ACME directory under /v1/pki/acme/directory.
sthings-edge	Redis on edge-redis	port 6379	The `messages` stream the LED matrix Pi consumes when it is in the table tennis network.
sthings-edge	schmetterpause on edge-gateway	schmetterpause.edge.sthings.lab	Table tennis app, admin side.
sthings-edge	schmetterpause (players) on edge-play-gateway	schmetterpause.sthings-edge.com	The players' side of schmetterpause, from their phones.
sthings-edge	scout on edge-gateway	scout.edge.sthings.lab	homerun2 scout.
sthings-edge	wled-mock on edge-gateway	wled-mock.edge.sthings.lab	Stand-in for the WLED strip.
sthings-edge	Zählwerk on edge-gateway	zaehlwerk.edge.sthings.lab	Score counter (redirects to its login).
tabletennis	Kubernetes API	port 6443	k3s API server, registered in Argo CD on platform.
–	DHCP on ddwrt	port 67	Dynamic pool .100-.149 plus the static reservation for the Harvester node.
–	DHCP on opal	port 67	Dynamic pool .100-.249 plus static leases for the box (.10), the LED matrix Pi (.30) and the WLED (.31).
–	DNS on labda-dns	port 53	Zone 4sthings.tiab.ssc.sva.de.

–	dnsmasq on ddwrt	port 53	DNS for *.sthings.lab. Clusterbook writes its host records here.
–	dnsmasq on opal	port 53	Local domain edge.sthings.lab: one address line per service name to the Gateway VIP .20, sthings-edge.com to the players' VIP .21, and matrix.sthings.lab to the LED matrix Pi.
–	LED matrix demo UI and /display API on matrix	matrix.sthings.lab	Caddy on 443 in front of homerun2-led-catcher (standalone mode), certificate from the OpenBao PKI on platform (role sthings-lab).
–	led-catcher (plain HTTP) on matrix	port 8080	The catcher itself, also reachable without TLS on the LAN.
–	WLED UI on wled-edge	192.168.8.31	The device's own web UI and JSON API.
–	WLED UI on wled-matrix	wled-matrix.sthings.lab	The device's own web UI and JSON API.