

Labtainers – Create a Cyber Range on a Laptop



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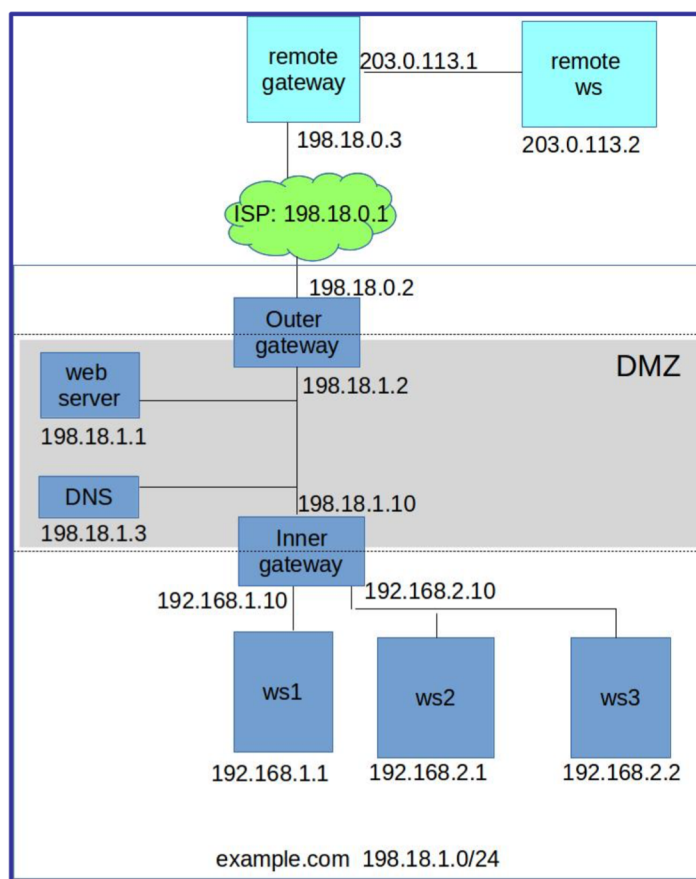
Linux-based cyber exercises

- Multi-component network topologies
- Docker containers for consistent provisioning
- Automated assessment of student performance
- Individualized exercises to deter “sharing”
- Reuse labs year-to-year

“... the Labtainer Project can offer any school and every student the ability to build hands-on skills”

Run this network on a laptop!

- Over 45 exercises
 - Software exploits
 - Network security
 - Web security
 - Cyber physical
 - Crypto
- Like VMs, but light weight
- Student sees virtual terminals
- Supports GUI apps, e.g., Wireshark
- Authoring tools to create new exercises
- Freely available
- Already used by many universities
- New labs & enhancements in progress (current grant)



This is the world Labtainers builds

Easy deployment →
less student frustration →
fewer students quit class →
more graduates with
cybersecurity skills →
stronger cyber workforce

Simplified lab creation →
more labs →
better labs everywhere →
better cybersecurity
education at resource-limited
institutions

Easy to use labs →
more use of labs →
more students use quality labs

Reusable labs →
reduced instructor burnout

