CrackLord
Maximizing Password Cracking Boxes

(and other things too)

Agenda

- Introduction
- Resource Intensity and Laziness
- Our Solution
- Demo Time

Who Are We?

Michael McAtee

- Manager
- Pentester
- SysAdmin
- [something funny here]

Lucas Morris

- Senior Manager
- “Manager”
- Pentester
- Code Monkey

Crowe Horwath™

Introduction

- Centralized Resources
  - In addition to purpose built tools, we now sometimes have purpose built hardware for them
- But how do we share this hardware?
  - Cracked ended (not paused)
  - No idea where the output is
  - Did they even ask?

Resources and Laziness

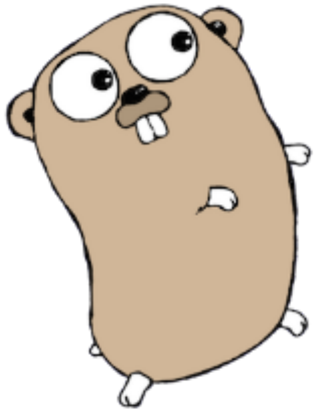
- To share, we may have to break some rules:
  - Shared Accounts
  - Shared GNU Screens
  - Manual Data Cleanup
- Did your co-worker use the right options?
  - Can you even resume their work when you're done?

Resources and Laziness

- We also spent all this money:
  - What happens if the box is sitting idle?
  - How do we prove to management we're using this expensive "toy"?
  - Are we using all of the resources (CPU in addition to GPU)?

Our Solution: CrackLord

- A distributed system of daemons to manage all of these resources and our queue
  - Input to Output are all modular and generic, anyone can write a plugin to wrap tools
  - Will manage jobs between multiple systems
  - Can use Cloud based systems (AWS!)
  - RESTful API that can be scripted into your workflow



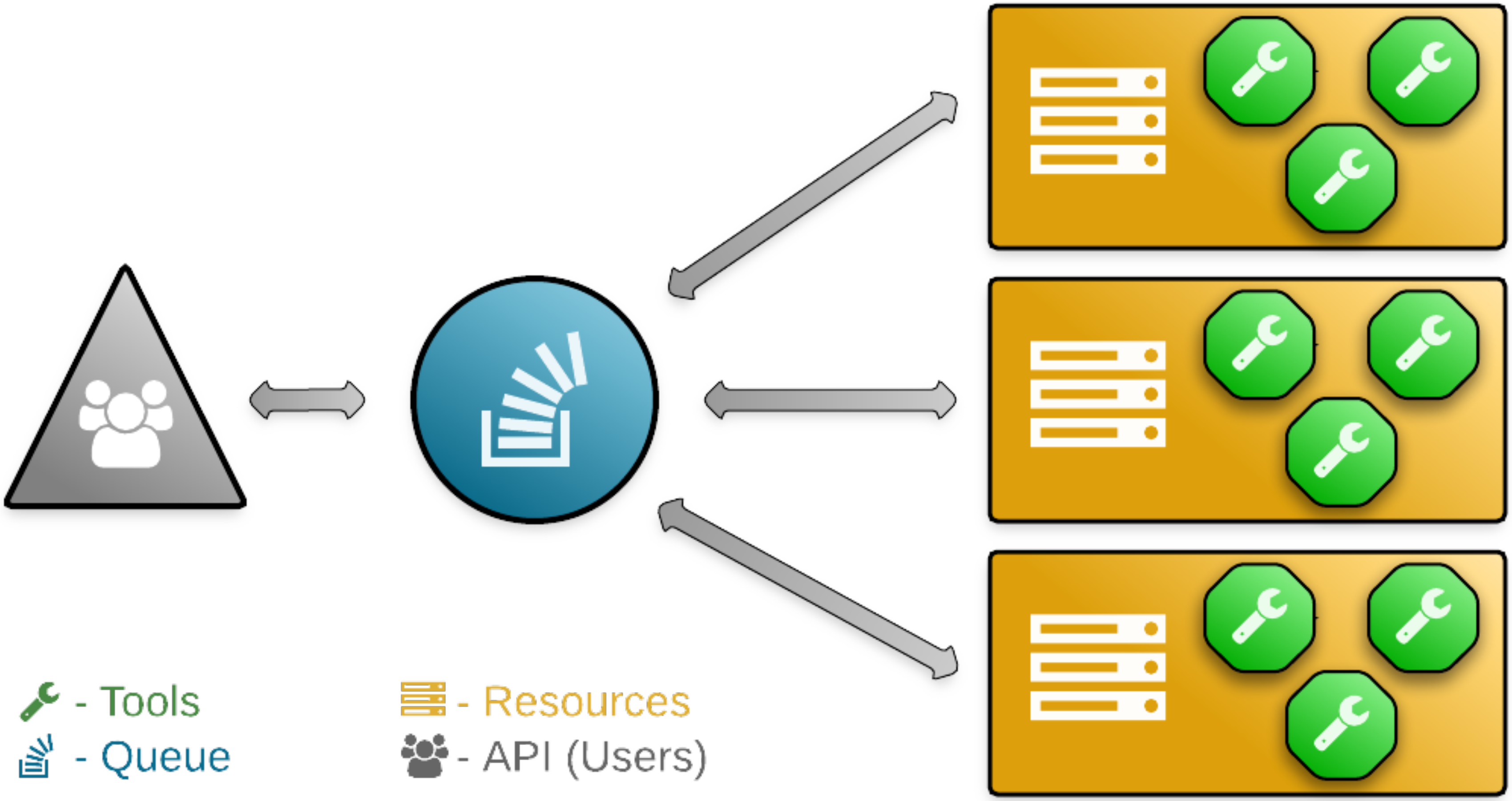
Resources and Tools

- Resources are the server running on the hardware where the magic happens:
  - Can allow tools to use CPU, GPU, Network, or anything else.
  - Works on both Windows and Linux
- Tools are the Go packages that wrap industry tools.
  - Extensible, you can wrap / do just about anything
  - Tools define the resources they use, and can be configured on individual resources if desired

Queue and API

- The centralized point where everything is managed:
  - API is extensible, tools define what data is requested and what output looks like.
  - Can be reordered easily (drag and drop!)
  - Jobs automatically pause / resume
  - Uses TLS and cert based authentication between resources
  - The API and default GUI are designed to be tool generic, allowing the plugins to define input form and output.

CrackLord: Design



🔧 - Tools

≡ - Queue

☰ - Resources

👥 - API (Users)

Demo Time

Black Hat Sound Bytes

- CrackLord is extensible to your needs
- Maximize your hardware investments
- BUILD PLUGINS!

Thank You!

https://github.com/jmmcatee/cracklord

- **Michael McAtee**
  - ✉ => jmmcatee@gmail.com
  - 🐦 => @michaelmcatee
  - 🐙 => github.com/jmmcatee
- **Lucas Morris**
  - ✉ => emperorcow@gmail.com
  - 🐦 => @lucasjmorris
  - 🐙 => github.com/emperorcow