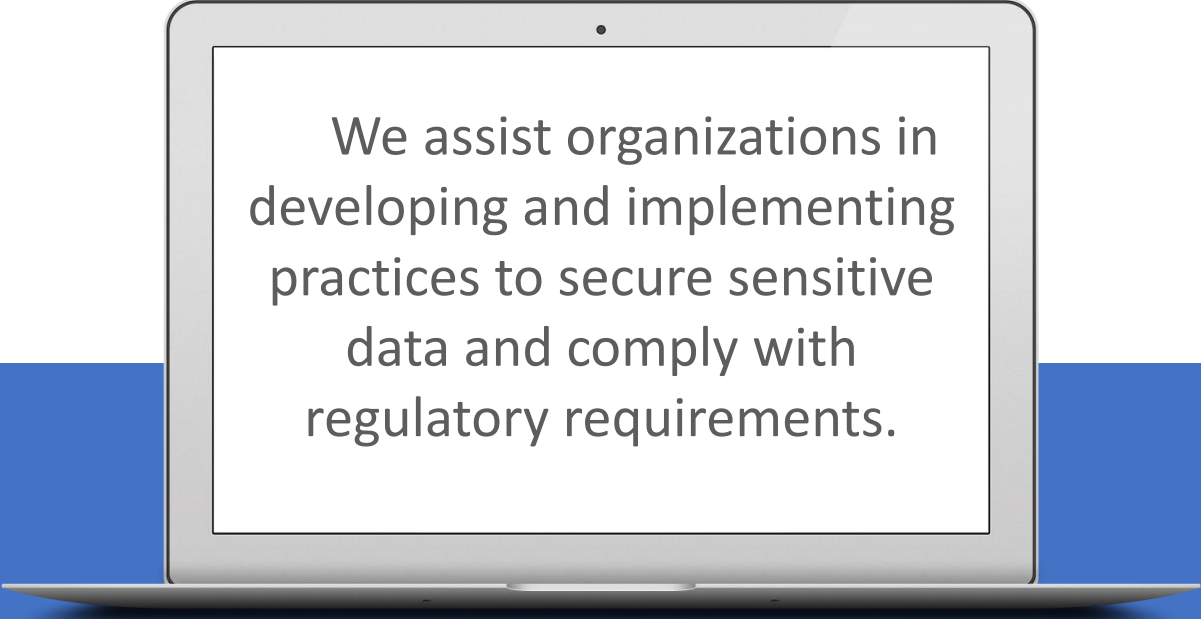


Security Hardening for Azure Cloud Hosting



databrackets
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866-276-8309

WHO WE ARE ...



We assist organizations in developing and implementing practices to secure sensitive data and comply with regulatory requirements.



DIY TOOLKIT

DIY assessment, training, customized policies & procedures and much more ...



CONSULTING

Professional services to help you with your Compliance needs



MANAGED SERVICES

Managed compliance and security services to focus on your key business outcome.

DISCLAIMER

Consult your attorney

This webinar has been provided for educational and informational purposes only and is not intended and should not be construed to constitute legal advice.

Please consult your attorneys in connection with any fact-specific situation under federal law and the applicable state or local laws that may impose additional obligations on you and your company.



Bhuvan's Background



Bhuvan Pasham

Chief Executive Officer - appScience

Bhuvan have been in technology Executive with over 20 years of experience in developing, implementing and managing systems for various industries. Developed highly productive IT teams over his career and can see thru platform agnostic the optimal technology implementations to maximize business potential of companies. Bhuvan have been Implementing Artificial Intelligence (AI), Machine Learning (ML) and Automations for over 20 years, even before these terms became mainstream.

Why Cloud is Important Today

- World has changed in the last 45 days
- Work from home
- Accelerated cloud migrations
- Your Business is running out of cloud
- Locking Physical Assets vs Keeping it in the cloud

Regulatory

1. HIPAA -1996
2. COPPA – 2000 (Children's Online Privacy Protection Act)
3. HITECH ACT - 2009
4. Gramm-Leach-Bliley – for Financial Transactions - 1999
5. State Regulations
 - California Consumer Privacy Act - 2018

Security >

How much would a data breach cost your business?

The 2019 Cost of a Data Breach Report explores financial impacts and security measures that can help your organization mitigate costs

Register for report and calculator

Cost of a Data Breach Report highlights

**USD 3.92 million**

Average total cost of a data breach

United States

Most expensive country: USD 8.19

Healthcare

Most expensive industry: USD 6.45

25,575 records

Average size of a data breach

10 Common Issues

1. Data Breaches
2. Misconfiguration & Inadequate Change Control
3. Lack of Cloud Security Strategy
4. Insufficient Identity, Credential, Access and Key Management
5. Account Hijacking
6. Insider Threat
7. Insecure Interfaces and APIs
8. Weak Control Plane
9. Limited Cloud Usage Visibility
10. Metastructure and Applistructure Failures

Traditional Models

- We tend to apply traditional knowledge to securing cloud
 - It is not the same
 - A person in Philippines or Romania or Vietnam to get to your door is very super unlikely
 - We hear about Raspberry Pi 4 costs
- Exponentially high exposure to the world
- We tend to take larger measures and overlook basics

4G DDR3 RAM / **32G** ROM



+

wireless keyboard

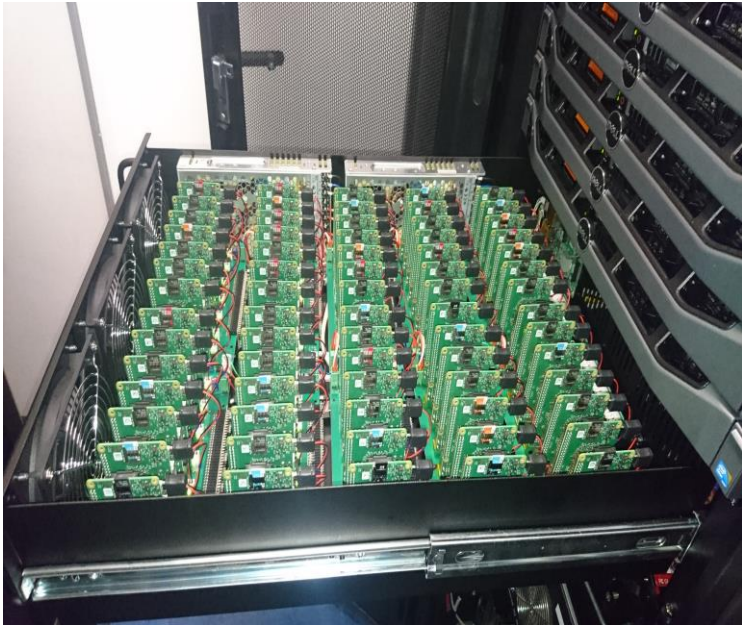
Incredibly Powerful Hardware

English/
Russian/
Others ver.



Cost: \$35

Can you guess what this is?



Server Rack

Holds 1350 Raspberry Pi

Costs < \$1000 USD

+ \$45 per board

Can scale a commercial hacker farm in
no time

Goals



PROTECT

Discover how you can prevent a data breach.



IDENTIFY

Build a secure enterprise with increased visibility.



RESPOND

Automate and orchestrate your response.



REMEDiate

Remediate and recover after a breach.

Goals of Any Security

Enable business to
be viable

Protect the business

Satisfy Regulatory &
compliance
requirements

Don't compromise
on operational
efficiency

Improve user
productivity

Shit happens - have
a good incident
response plan –
enable resiliency

Understand
Business Goals



Security Basics

Systems Engineering

1. Inside Out Approach
2. Design Systems to address Process Efficiencies
3. Security consideration is inherent
4. Understanding of Business Processes and Goals are important

Information Security Team

1. Focus exclusively on security
2. Various approaches, risks and solutions are needed

OUR FOCUS IS ON THE ENGINEERING SIDE

1. Make sure you are using AAD
2. MFA enabled
3. Correct plan - so you can review logs (I recommend P2)
4. Use integrated authentication
5. Minimize Password changes and Password complexity rules
6. Try to use GeoFence
7. Conditional Access
8. Device Registration Policies

Secure Cloud Resources



Implement Temporary Access model

Admins request temporary revocable access



Scripts and Audits – Extremely important

Use Idempotent Scripts
Avoid Manual click thru changes
Source Control – and audit changes periodically



Use Process systems

Service Now
Office365 task management is good enough most of the times



Azure – Harden network security

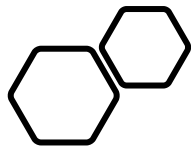
Make it contextual



Use tools like Azure Sentinel – Security Monitoring



Compliance Tooling - Data Discovery & Classification



Detect & Respond



SETUP AZURE
MONITOR ALERTS –
USE THE TOOLS AT
YOUR DISPOSAL



SETUP AZURE
COMPLIANCE
MONITORING



DATABASES – USE
DATA
CLASSIFICATIONS
(MINIMIZE RISK)



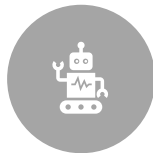
PERFORM SECURITY
CHECKS ON
APPLICATIONS



APPLICATION
DEVELOPMENT –
IMPLEMENT
SECURITY REVIEW
POLICIES ON
EXTERNAL
LIBRARIES



SETUP PROPER
BACKUP AND
RECOVERY POLICIES



AUTOMATE
DEPLOYMENTS



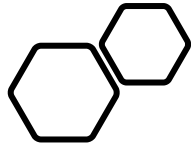
SETUP BEHAVIOR
TRIP WIRE

Contextualizing Security

Your Advantages

- Setup behavior trip wire
- Only you know the business
- So you have an upper hand

use these to protect!



Detect & Respond



**Setup proper incident response
mechanism**



DevOps can help faster healing

It's inexpensive and simpler than you think

Detect & Respond



User Training

USER TRAINING

- Nothing supplements good user training
- Do mock click tests and educate vulnerable users
- Restrict access to vulnerable users

RESTRICT ACCESS TO SENIOR OFFICIALS

Next Steps

Contact us for free no-obligation evaluation and quote

866-276 8309 or info@databrackets.com

UPCOMING EVENTS

Register now >> <https://databrackets.com/events/>

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Questions

Please don't hesitate to ask

Thank You

for your attention!

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email info@databrackets.com.

Thank you for joining us today

30 April 2020