

Project: METAL SNAKE



Project Charter

Project Sponsor: Brendan Gasparin

Project Manager: Brendan Gasparin

Date of Project Approval:

Commencement Date: 29/07/2024

Estimated Completion Date: 17/11/2024

Estimated Project Duration: 4 Months

Version: 1.0 (13/08/2024)

1. Executive Summary

1.1. Project Overview

Project: METAL SNAKE is the construction of an on-premises cybersecurity lab with a web server for hosting business infrastructure, plus a cloud server for hosting client websites and a cloud-based Systems Information and Event Management (SIEM) system for improved security posture, organizational training and knowledge, and employee training.

1.2. Project Purpose

The business is paying too much for an expensive cloud server instance. By constructing an on-premises network lab to host business infrastructure, monthly costs of cloud server hosting will be drastically reduced.

The cybersecurity lab will also provide opportunities for training and upskilling for employees of the business, and increase security posture of the organization.

1.3. Expected Benefits and Outcomes

The following benefits and outcomes are expected from Project: METAL SNAKE:

- Reduced cloud server costs.
- On-premises facilities for new technological development.
- Facilities for cybersecurity and SIEM training.
- Improved security posture for the organization.

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2. Project Objectives and Success Criteria

2.1. Objectives

The objectives of Project: METAL SNAKE are as follows:

- Build an on-premises cybersecurity lab for improved security posture and employee training.
- Transfer business website to on-premises hosting in the cybersecurity lab.
- Build a cloud server instance for hosting client websites at a cheaper price than the current cloud server instance.
- Build a cloud server instance to host a SIEM cybersecurity system.
- Rebuild automated email system in the cybersecurity network. This can be offered as a service to clients.
- Thoroughly document the project in multiple media formats to increase authority and reputation and educate others.

2.2. Metrics to Measure Success

The following metrics will be used to measure success:

- Penetration testing to ensure the cybersecurity lab is secure, with no vulnerabilities.
- Business website should load within 3 seconds for client web browsers in Australia.
- Cloud server hosting costs should be cut by at least 50%.
- Automated email system needs to enlist people to mailing lists, allow email campaigns, and allow logins from clients who wish to pay for that service.
- All important project management and software documentation should be hosted in a Github repository. A general overview of the project should be hosted on YouTube.

3. Scope Statement

3.1. Scope Inclusions

The following is included in the scope of Project: METAL SNAKE:

- Preliminary Schedule
- Business Case
- Stakeholder Register
- Project Charter
- Project Manager Assignment
- Scope Statement
- Risk Register
- Introductory video
- Planning phase documentation and video deliverables (?)
- On-premises cybersecurity lab
- On-premises web server
- Cloud-based SIEM cybersecurity monitoring system
- Mautic automated email installation and configuration
- Testing phase documentation and video deliverables
- Deployment phase documentation and video deliverables
- Maintenance and closure deliverables
- Post-mortem report

3.2. Scope Exclusions

The following are excluded from the scope of Project: METAL SNAKE:

- Non-business related software, servers, and services
- Any IT infrastructure or systems not directly related to improving production or reducing operating costs
- Recreation or personal use projects, such as gaming and media streaming services

While gaming and media servers are not in the scope of Project: METAL SNAKE, the project sponsor is free to adopt them as personal projects.

3.3. Key Deliverables

- Preliminary Schedule
- Business Case
- Stakeholder Register
- Project Charter
- Project Manager Assignment
- Scope Statement
- Risk Register
- Introductory video
- Planning phase documentation and video deliverables (?)
- On-premises cybersecurity lab
- On-premises web server
- Cloud-based SIEM cybersecurity monitoring system

- Mautic automated email installation and configuration
- Testing phase documentation and video deliverables
- Deployment phase documentation and video deliverables
- Maintenance and closure deliverables
- Post-mortem report

3.4. Key Outcomes

- Reduced operational costs by self-hosting business server and Mautic automated email software.
- Cybersecurity training opportunities via the on-premises cybersecurity lab and cloud-based SIEM system.
- Reduced operational costs by building a newer, less powerful cloud server for client web hosting.
- Extensive collection of documentation and videos to increase authority and reputation.

5. Stakeholder Analysis

[Briefly describe the different kinds of stakeholders that will be involved with the project.]

5.1. Key Stakeholders

Stakeholder	Organisation	Role in Organisation	Interest in Project
Brendan Gasparin	Brendan Gasparin	Sole Proprietor	Owner of business
	???	???	Premises owner
	N/A	N/A	Premises owner
	Brendan Gasparin	Intern	Intern
Clients	N/A	N/A	Reliable services
Users	N/A	N/A	Reliable services

5.2. Stakeholder Needs and Expectations

Stakeholder	Need	Expectations
Brendan Gasparin	Control over the premises Internet connection	Reduced business costs
	Maintaining Internet access Static IP hire cost	???
	Maintaining Internet access Static IP hire cost	
	Experience, training	Fun
Clients	Internet services	Reliable services
Users	Internet services	Reliable services

5.3. Stakeholder Communication Plan

Stakeholder	Preferred Contact Method	Contact Details	Frequency of Contact
Brendan Gasparin	Text Message		N/A
	Face-to-Face	N/A	Daily
	Face-to-Face	N/A	Daily
	Discord		Weekly
Clients	N/A	N/A	N/A
Users	N/A	N/A	N/A

6. Project Manager Assignment

6.1. Project Manager Details

Name: Brendan Gasparin

Position/Role: Sole Proprietor

Phone: 0467 473 994

Email: brendan.gasparin@gmail.com

Linktree: <https://linktr.ee/brendangasparin>

6.2. Project Manager Authority

The project manager is authorized to do the following:

- Manage and maintain the residential Internet connection on the premises.
- Deal directly with the Internet service provider (Telstra) in case of outages and other unforeseen problems.
- Draw on the project's reserve budget, if necessary for the completion of the project.
- Maintain access to necessary physical assets of the premises owners, such as the Telstra ISP router.
- Make all decisions regarding project welfare, completion of the project, and, if necessary, cancellation of the project.

6.3. Project Manager Responsibilities

The project manager has the following responsibilities:

- Planning, execution, monitoring, and closing of the project.
- Construction and completion of deliverables, such as hardware, software, and documentation.

7. High-Level Timeline and Milestones

6.1. High-Level Project Schedule

Phase/Subphase	Start Date	End Date	Deliverables
1. Initiation	29/07/2024	11/08/2024	Preliminary Schedule Business Case Stakeholder Register Project Charter Project Manager Assignment Scope Statement Initial Risk Register High-Level Project Plan Introductory Video
2. Planning and Design	12/08/2024	25/08/2024	Project Plan Requirements Document Device Inventory Planning and Design Video
3. Execution: Subphase 1: Server Box	26/08/2024	01/09/2024	Raspberry Pi Server Installation Documentation Raspberry Pi Server Video
3. Execution: Subphase 2: Cloud Server	02/09/2024	08/09/2024	Cloud Server Installation Documentation Google Cloud Server Video
3. Execution: Subphase 3: Firewall	09/09/2024	15/09/2024	Hardware Firewall Installation Documentation Raspberry Pi Firewall Video
3. Execution: Subphase 4: Router	16/09/2024	22/09/2024	Raspberry Pi Router Installation Documentation Raspberry Pi Router Video
3. Execution: Subphase 5: Wireless Access Point	23/09/2024	29/09/2024	Raspberry Pi WAP Installation Documentation Raspberry Pi WAP
3. Execution: Subphase 6: LAN Installation	30/09/2024	06/10/2024	Physical Cybersecurity Lab Installation Documentation Raspberry Pi LAN Installation Video
3. Execution: Subphase 7: SIEM	07/09/2024	13/10/2024	SIEM Cloud System Installation Documentation SIEM Cloud System Video
3. Execution: Subphase 8: Mautic Email Automation	14/10/2024	20/10/2024	Mautic Email Automation Software Installation Documentation Mautic Email Automation Video
4. Testing	21/10/2024	27/10/2024	Testing deliverables?
5. Deployment	28/10/2024	03/11/2024	Deployment deliverables?
6. Maintenance and Closure	03/11/2024	17/11/2024	Post-Mortem Report Other deliverables?

6.2. Key Milestones and Deadlines

Milestone	Deadline
On-premises web server	01/09/2024
Cloud web server	08/09/2024
LAN Installation	06/10/2024
Cloud-based SIEM system	13/10/2024
Mautic Email Automation	20/10/2024
Deployment	03/11/2024
Documentation and closure	17/11/2024

8. Budget and Resources

[Preliminary budget estimates. Required resources.]

8.1. Preliminary Budget Estimate

Budget Allocation for Project: METAL SNAKE (13 Weeks)					
Category	Item Description	Start Date	Est. Cost	Frequency	Total Cost
Initial Setup Costs					
Hardware	Computers, network equipment	29/07/2024	\$1,485.99	One-Time	\$1,485.99
Software	Free open source software	29/07/2024	\$0.00	One-Time	\$0.00
Operational Costs					
Internet	Static IP Address	29/07/2024	\$10.00	Monthly	\$40.00
Hosting	Web server cloud hosting fees		\$15.00	Monthly	\$45.00
	SIEM cloud hosting fees		\$15.00	Monthly	\$15.00
Personnel Costs					
Project Manager	Salary	29/07/2024	\$0.00	Fortnightly	\$0.00
Intern	Salary	29/07/2024	\$0.00	Fortnightly	\$0.00
Training Costs					
Self-Education	Self-Education	29/07/2024	\$0.00	One-Time	\$0.00
Training Costs	Intern Training	29/07/2024	\$0.00	One-Time	\$0.00
Miscellaneous Costs					
Office Supplies	General Office Supplies		\$20.00	Monthly	\$80.00
Contingency Fund					
Contingency	Reserve for unexpected expenses		\$500.00	One-Time	\$500.00
Grand Total					\$2,165.99

8.2. Required Resources

Resources	Procurement
Raspberry Pi 5 B 8GB x 4	Purchase
Raspberry Pi 5 Power Supply x 4	Purchase
Raspberry Pi 5 Official Case x 2	Purchase
Argon NEO 5 Raspberry Pi Case x 2	Purchase
Raspberry Pi Active Cooler x 4	Purchase
Raspberry Pi Keyboard	Purchase
Raspberry Pi Mouse	Purchase
512GB SanDisk MiniSD Card x 4	Purchase
Micro HDMI Cable x 2	Purchase
Wireless Network Adapter x 2	Purchase
USB to Ethernet Adapter x 2	Purchase
External Storage 5TB	Purchase
LAN cables x 5	Purchase
ISP Router	Premises Owners
Intern	Family

9. Risks, Assumptions, and Constraints

[Potential risks, assumptions, constraints, and their possible impact on the project should be identified.]

9.1. Project Risks

[Risks associated with the project: obtain from Risk Register.]

Risk	Likelihood	Impact
Data loss	Possible	Major
Data protection issues resulting in legal penalties and reputational damage	Possible	Major
Budget overrun	Possible	Major
Supply chain disruptions	Possible	Moderate
System failures in hardware and software	Possible	Moderate
Cost fluctuations (e.g. cloud hosting)	Likely	Moderate
Human error during installation or configuration	Likely	Major
Failure to comply with regulations	Possible	Critical
Market competition	Very Likely	Moderate
Technology obsolescence	Unlikely	Major
Exchange rate fluctuations impacting costs	Likely	Moderate
Resource availability of essential equipment	Unlikely	Moderate
Insufficient testing	Possible	Moderate
Cost estimation errors resulting in financial discrepancies	Possible	Moderate
Process inefficiencies in project management may result in wasted resources or time	Likely	Major
Stakeholder conflicts	Possible	Critical
Misalignment with organizational goals	Possible	Major
Unexpected tax liabilities from changes in tax laws to misinterpretation of tax liabilities	Likely	Major
Infringement of intellectual property on patents or trademarks could lead to legal disputes and financial liabilities	Possible	Major
Global economic conditions affecting financial viability or supply chains	Possible	Major
Negative reputation of partners	Possible	Moderate
Social media backlash	Possible	Major
Unfulfilled promises, failure to deliver on project promises or milestones	Possible	Moderate
Loss of physical premises	Likely	Moderate
PM Dies	Unlikely	Critical
Project requires extra hardware/software	Possible	Moderate
Innapropriate hardware precurement	Possible	Moderate
Difficulty in filming in laboratory	Likely	Minor
Difficulty completing documentation deliverables on schedule	Likely	Moderate

9.2. Project Assumptions

1. The planned architecture and software can fulfill the deliverables of the project.
2. The organization will be able to continue to rent premises to house server hardware.

9.3. Project Constraints

Project constraints include the following:

- Adherence to the budget
- Maintenance of Internet connections for all residents on the premises
- Documentation must redact all personal information (except the business owner's)

10. Project Organization

The key project team members and their roles and responsibilities.

Name	Role	Email	Phone Number	Responsibilities
Brendan Gasparin	Project Sponsor and Manager			Project: METAL SNAKE
	Intern			Training, fun

11. Approval and Sign-Off

[Formal approval from project sponsor and key stakeholders Sign-off section with names, titles, and signatures.]

The following is an agreement between the project manager and stakeholders, accepting and acknowledging the undertaking and completion of Project: METAL SNAKE by the project manager.

The stakeholders agree to let the project manager construct a home cybersecurity lab using their Internet connection, and the project manager agrees to maintain availability of the Internet to all stakeholders.

Project Sponsor:

Brendan Gasparin

X _____
(Signature)

(Date)

Premises Owner:

[Redacted Name]

X _____
(Signature)

(Date)

Premises Owner:

[Redacted Name]

X _____
(Signature)

(Date)