Security Architecture Narrative

Gray frame

August 2019

Contents

| 1 | Security Architecture Narrative | 3 | | | | | |
|---|---------------------------------|---|--|--|--|--|--|
| 2 | Grayframe Product Architecture | | | | | | |
| 3 | Grayframe Infrastructure | 3 | | | | | |
| | 3.1 Product Infrastructure | 3 | | | | | |
| | 3.2 IT Infrastructure | 3 | | | | | |
| 4 | Grayframe Workstations | 3 | | | | | |
| | 4.1 Remote Access | 4 | | | | | |
| 5 | Access Review | 4 | | | | | |
| 6 | Penetration Testing | 4 | | | | | |
| 7 | Grayframe Physical Security | 4 | | | | | |
| 8 | Risk Assessment | 4 | | | | | |
| | 8.1 Adversarial Threats | 5 | | | | | |
| | 8.2 Non-Adversarial Threats | 5 | | | | | |
| 9 | References | 5 | | | | | |
| | 9.1 Narratives | 5 | | | | | |
| | 9.2 Policies | 5 | | | | | |
| | 9.3 Procedures | 5 | | | | | |

Table 1: Control satisfaction

| Standard | Controls Satisfied |
|----------|----------------------------|
| TSC | CC6.6, CC6.7, CC7.1, CC7.2 |

Table 2: Document history

| Date | Comment | |
|------------|------------------|--|
| Jun 1 2018 | Initial document | |

1 Security Architecture Narrative

Here we narrate why our org satisfies the control keys listed in the YML block

2 Grayframe Product Architecture

Describe product architecture here, emphasizing security implications

3 Grayframe Infrastructure

3.1 Product Infrastructure

Describe product infrastructure, emphasizing security measures

3.1.1 Authorized Personnel

- AWS root account access is granted only to the CTO and CEO
- AWS IAM access is granted to to a limited group of Operators
- Grayframe SSH access is granted to a limited group of Operators
- Grayframe DB access is granted to a limited group of Data Operators

3.2 IT Infrastructure

Grayframe uses the following cloud services for its internal infrastructure:

• List cloud services

Access to these cloud services is limited according to the role of the Grayframe employee and is reviewed quarterly as well as via regular onboarding/offboarding tasks for new and departing employees.

4 Grayframe Workstations

Grayframe workstations are hardened against logical and physical attack by the following measures:

- operating system must be within one generation of current
- full-disk encryption
- onboard antivirus/antimalware software
- OS and AV automatically updated

Workstation compliance with these measures is evaluated on a quarterly basis.

4.1 Remote Access

Many Grayframe employees work remotely on a regular basis and connect to production and internal IT systems via the same methods as those employees connecting from the Grayframe physical office, i.e., direct encrypted access to cloud services. It is the employee's responsibility to ensure that only authorized personnel use Grayframe resources and access Grayframe systems.

5 Access Review

Access to Grayframe infrastructure, both internal and product, is reviewed quarterly and inactive users are removed. Any anomalies are reported to the security team for further investigation. When employees start or depart, an onboarding/offboarding procedure is followed to provision or deprovision appropriate account access.

6 Penetration Testing

Grayframe commissions an external penetration test on an annual basis. All findings are immediately reviewed and addressed to the satisfaction of the CTO/CEO.

7 Grayframe Physical Security

Grayframe has one physical location, in San Francisco, CA. Key issuance is tracked by the Office Physical Security Policy Ledger. Office keys are additionally held by the lessor, property management, and custodial staff. These keys are not tracked by the Office Physical Security Policy Ledger. Grayframe managers regularly review physical access privileges.

Grayframe infrastructure is located within AWS. Grayframe does not have physical access to AWS infrastructure.

8 Risk Assessment

Grayframe updates its Cyber Risk Assessment on an annual basis in order to keep pace with the evolving threat landscape. The following is an inventory of adversarial and non-adversarial threats assessed to be of importance to Grayframe.

8.1 Adversarial Threats

The following represents the inventory of adversarial threats:

| Threat | Source | Vector | Target | Likelihood | Severity |
|--------|--------|--------|--------|------------|----------|
| | | | | | |

8.2 Non-Adversarial Threats

The following represents the inventory of non-adversarial threats:

| Threat | Vector | Target | Likelihood | Severity |
|--------|--------|--------|------------|----------|
| | | | | |

9 References

9.1 Narratives

Products and Services Narrative System Architecture Narrative

9.2 Policies

Encryption Policy Log Management Policy Office Security Policy Remote Access Policy Security Incident Response Policy Workstation Policy

9.3 Procedures

Apply OS Patches Review & Clear Low-Priority Alerts Review Access Review Devices & Workstations