GRACE

An Overview

GSA Readily Available Computing Environment

What is GRACE?

GRACE is a cloud broker

- We manage the contract with the Cloud Provider
- We facilitate the account creation/deletion process
- We restrict access to only security-approved services

Present

- We will share and maintain security-approved Reference Architectures, Components, and Subcomponents
- We will provide minimalistic and easily consumable service offerings

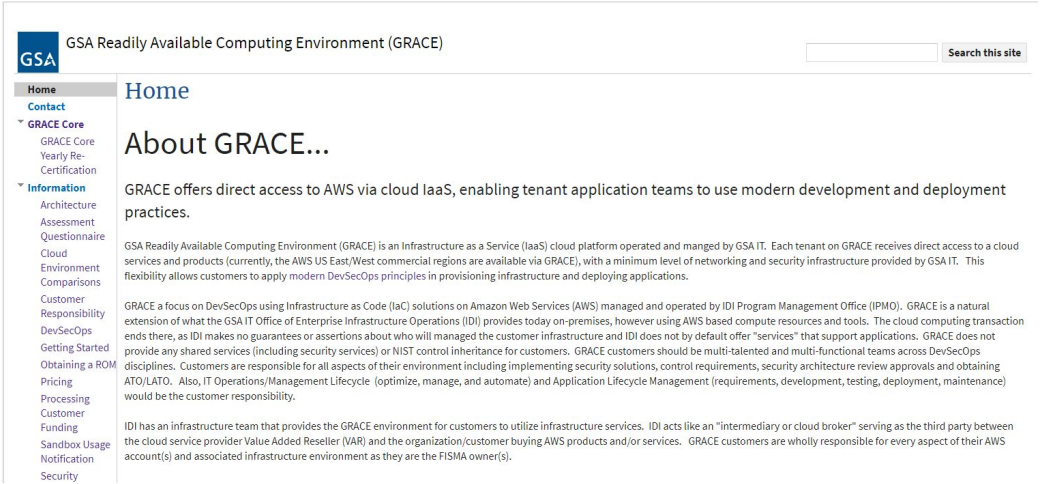
Future

Learn more

Our website is a great resource for up-to-date detailed information about GRACE.

Where we cover various pertinent topics such as customer responsibility, pricing, funding, etc.

[GRACE Website]



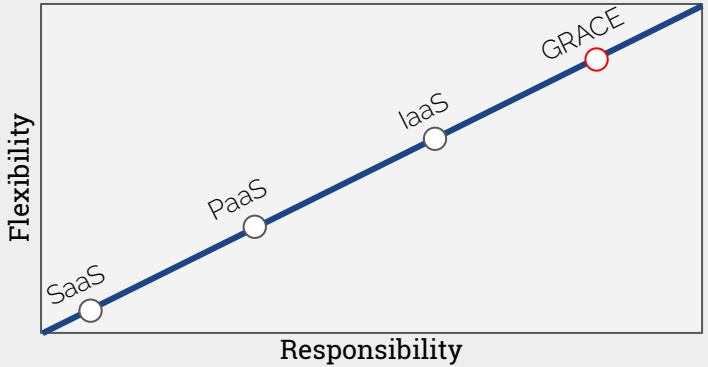
Target Consumers

Ideal GRACE customers are DevSecOps teams with the technical proficiency to implement the full systems development lifecycle from scratch inside their respective cloud environments.

Those skill sets include:

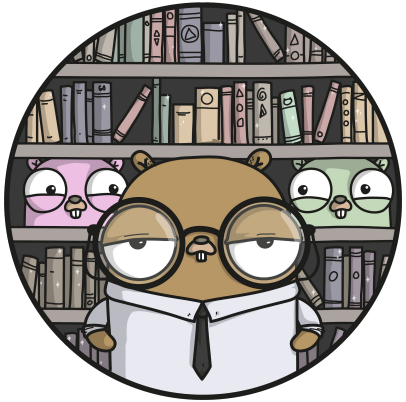
- Cloud Architecture
- Software Engineering
- Security Engineering
- Site Reliability Engineering

GRACE customers are encouraged to embrace Infrastructure as Code, Continuous Integration and Deployment, and a heavy focus on automation.



We provide the most flexibility in exchange for the highest level of customer responsibility. Enabling the creation of higher quality and more innovative solutions.

Responsibility



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Customers are responsible for development of necessary automation, deployment, and continued operational support for their applications and environments.

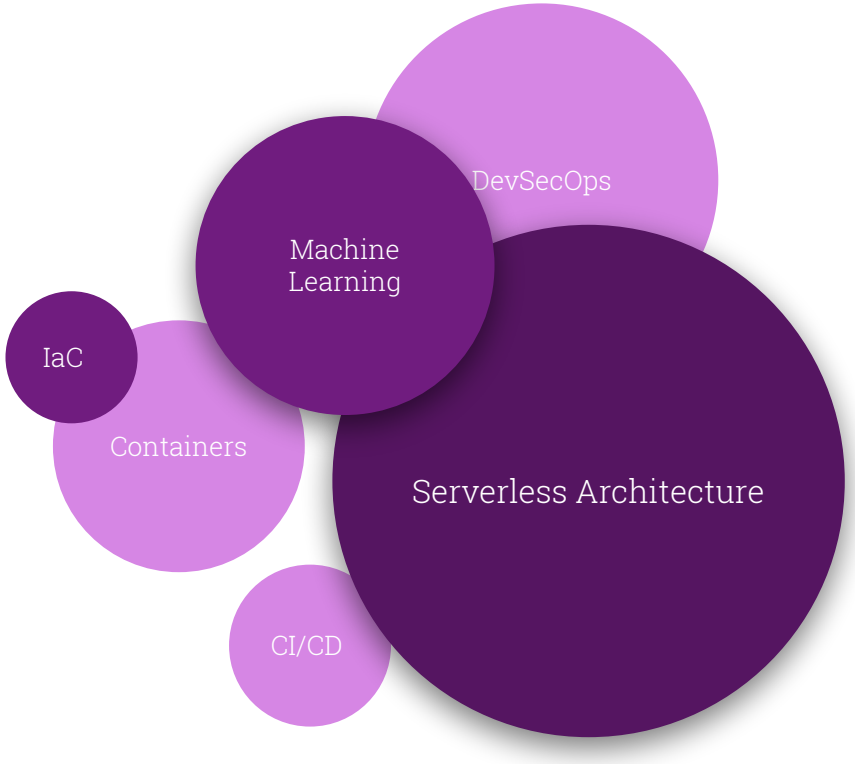
GRACE is not intended for application teams that do not have the staff to support their system from end-to-end. This includes provisioning, configuration, and obtaining LATO/ATO for their environments.

The GRACE team may contribute to design and architecture discussions to ensure customers are creating maintainable and optimal solutions. However, we do not currently support customer applications or automation.

Forging innovation

GRACE was designed to provide minimal restrictions to customer accounts and implementations.

This keeps overhead costs low, saving customers money and gives customers the creative control, flexibility, and ability to design innovative solutions that meet NIST standards.

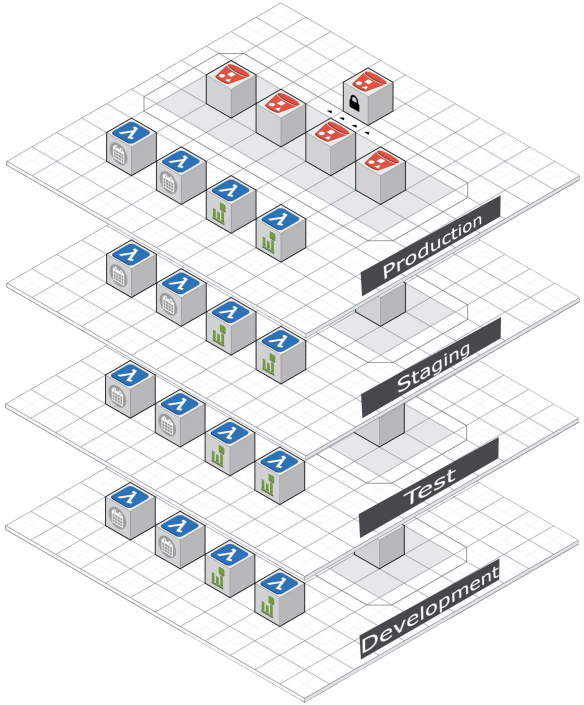


Operational Parameters

Each GRACE account represents a single business application or project tier.

Customers are not required to deploy multiple application tiers (Production, Development, etc.); however, this model is encouraged as it reduces risk to production, and optimizes delivery.

Infrastructure as Code, testing, and CI/CD are also highly encouraged to further reduce risk, increase consistency, and promote modern development methodologies like DevSecOps.



Use-cases

Initial use-cases for GRACE include:

- Sandboxed environments
- Cloud-only applications
- Serverless applications
- Testing security-approved AWS services and solutions

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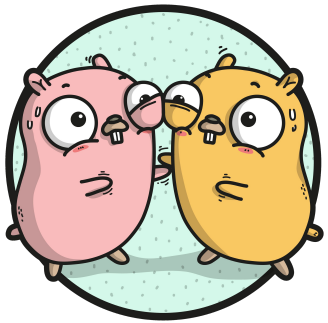
The Future

Sharing is Caring

The GRACE team will be creating shareable packages that customers can use to assist in building out the necessary infrastructure to gain an ATO. Currently, there are three types of packages:

- Reference Architecture
- Component
- Subcomponent



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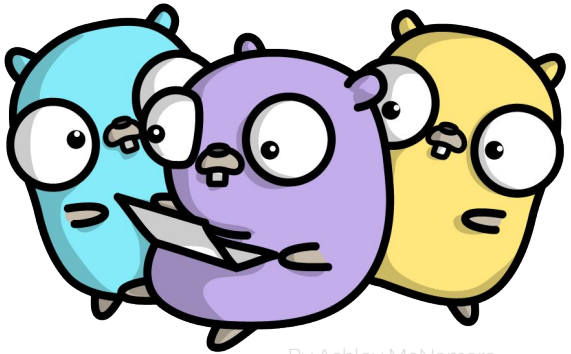

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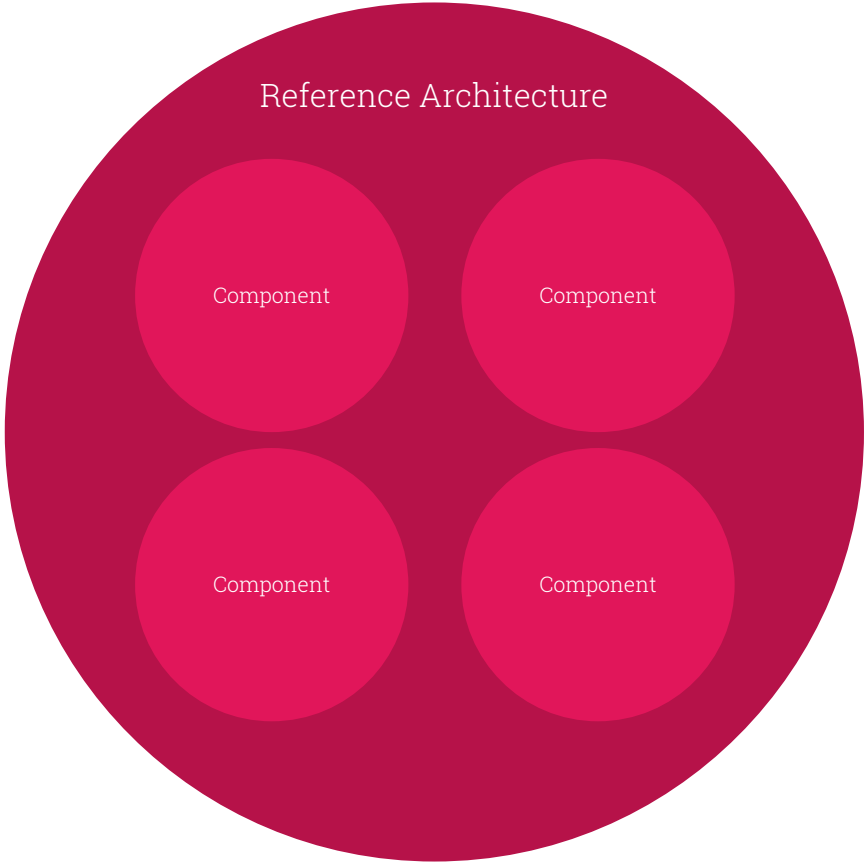
These packages are currently proposed to contain:

- High level description (tools/services used)
- Diagrams
- Control coverage and SSP control narrative
- Guides for deployment, operations, and maintenance
- Example process documentation
- Cost Considerations

Defining Terms

A **Reference Architecture** is a package of documents, guides, services, capabilities, and media outlining the best practices for the implementation, deployment and delivery of a particular System to meet a specific business requirement.

A **Component** is an integrated set of Subcomponents and capabilities providing unified functionality in a discrete functional area, within a System. (example: alerting and notification)

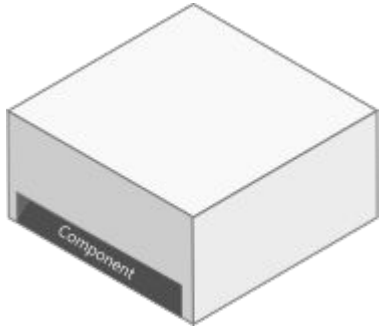


Our First Component

The GRACE team has selected its own internal logging and monitoring solution as the candidate for the initial component release. Which will be refactored to make it more extensible, configurable, and 12-factor compliant.

Our goal is to formalize an assessment process for components that will reduce the level-of-effort for customers seeking ATO.

Targeted for release by August 31, 2019



The initial component releases will primarily be internal GRACE components that are refactored to meet the requirements of the component package.

Questions?

For more information visit the GRACE Website, follow us on Chatter, or send us an email at grace-staff@gsa.gov