



SECURITY SUMMARY

March 2019

THE GENROCKET ECOSYSTEM

GenRocket is a synthetic test data generation system. Synthetic data is 100% secure.

Virtual Private Cloud



1. GenRocket Virtual Private Cloud



2. GenRocket Scenario



3. Your Corporate Firewall (HTTPS)



4. Local Machine + GenRocket Runtime



5. Test Data

VIRTUAL PRIVATE CLOUD OR DEDICATED PRIVATE CLOUD

- Virtual Private Cloud is SaaS multi-tenant hosting
- Dedicated Private Cloud is SaaS single-tenant hosting





1. GenRocket Virtual Private Cloud

GENROCKET WEB

GENROCKET WEB

- The GenRocket application is hosted on AWS
- Independent security penetration tested
- Chrome, Firefox, Safari browsers using SSL
- No customer data is stored in the GenRocket system

LOGIN ACCESS

- Users are registered by storing:
 - first name, last name, email, password
- Passwords are SHA-256 one way encrypted
- Valid user name & password must be provided
- SSO is available as an extra layer of security

SECURITY ROLES

- 4 different system roles with different security access levels
- Organization level (admin), Project level, Domain level and Scenario level



1. GenRocket Virtual Private Cloud

ORGANIZATIONS AND PROJECTS

ORGANIZATIONS – ONE PER COMPANY (E.G. ABC CORP)

PROJECTS – ONE PER DATABASE OR APPLICATION (E.G. CMS, CRM, ERP)

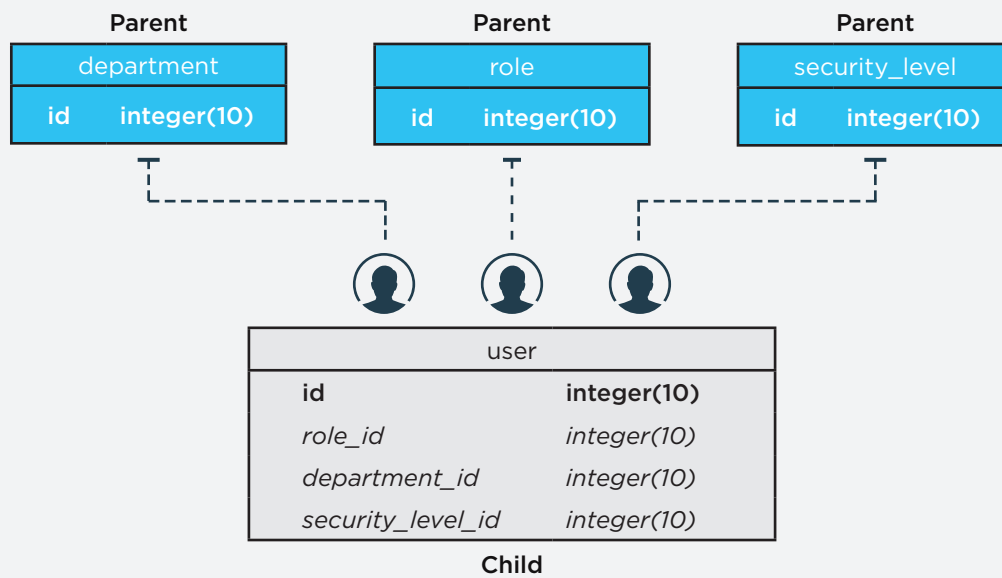
- Contains actual or modified Table names
- Contains actual or modified Column names and their type and size
- Projects do not contain any customer data

DATA MODELS

ACTUAL CORPORATE DATA MODEL RELATIONSHIPS ARE NOT EXPOSED

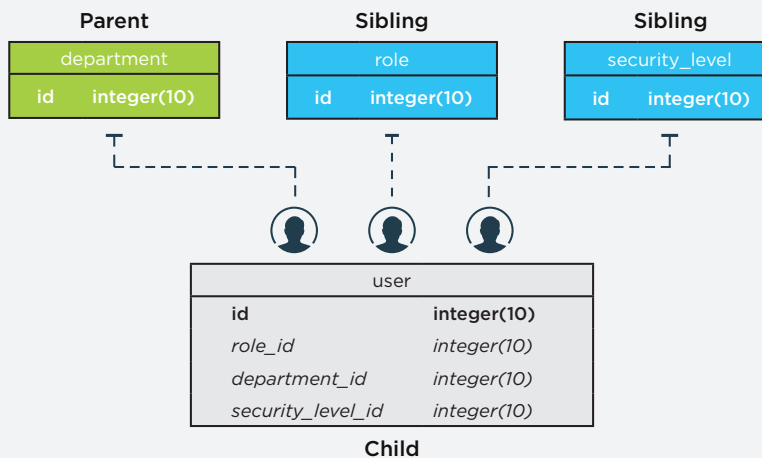
- Actual corporate database and application data model relationships are not stored in the same way in GenRocket.
- While corporate application data models can have one child with many parents GenRocket can only have one parent, one child and *many siblings*.
- Allowing a table to have multiple parents in a data generation model ends up generating huge amount of unnecessary data. GenRocket was awarded a U.S. patent for inventing the parent-child-*sibling* data generation model.

DEFINING A DATA MODEL IN AN APPLICATION



DEFINING THE SAME DATA MODEL IN GENROCKET

An entity may have only 1 parent but can have many siblings





2. GenRocket Scenario

SCENARIOS

- Scenarios are tiny 20K to 100K instruction sets that generate data when they are run.
- All Scenarios are encrypted
- Scenarios contain no data
- Only authenticated and licensed users can run the Scenarios
- **License checks:**
 - Virtual Private Cloud (VPC) Hosting - check happens on the VPC
 - Dedicated Private Cloud (DPC) Hosting - check happens on the DPC



3. Your Corporate Firewall (HTTPS)



4. Local Machine + GenRocket Runtime



5. Test Data

THE RUNTIME + DATA GENERATION

- The GenRocket Runtime is a secure Java program that runs the GenRocket Scenarios.
- All GenRocket Runtime JAR's* are validated with a checksum.
- Data generation only happens within the security of the corporate firewall

**Java Archive (JAR) is a package file format typically used to aggregate many Java class files. A Java class file is a file (with the .class filename extension) containing Java bytecode that can be executed on the Java Virtual Machine (JVM).*

