

CompTIA Security + 3.0 Architecture and Design

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Title: Secure Staging Deployment Concepts

Subtitle: CompTIA Security+ (SY0-501)

3.4 Secure Staging Deployment Concepts

- 3.4 Explain the importance of secure staging deployment concepts
 - Sandboxing
 - Developers can utilize the sandbox environment at their leisure (no prior authorization is required)
 - Each Dev team member has access to their own individualized sandbox
 - The sandbox is a virtualized environment that is isolated from the dev, testing, staging and production environment
 - Each sandbox can be and most likely will be rolled back via snapshots daily
 - Environment
 - Development
 - Dev environment differs from sandboxing in the fact that all members have access to the dev environment
 - Single server running both the web application and the database
 - Test (Quality Assurance)
 - Might be separate web server and database server
 - Closer to the production environment
 - Unit testing happens here and can possibly be moved back to the dev environment
 - Staging
 - This environment is a complete replica of the production environment
 - If there are 10 web app servers and 2 database servers in production then there will be the same here
 - QC can happen here where the code is executed then inspected for quality fulfillment.
 - Projects might be moved from staging back to testing
 - Product might be run in staging for a short period of time
 - Production
 - This is the final stage however bug check, performance and functionality monitoring will continue as with all software
 - Secure baseline
 - Integrity measurement
 - Quality Assurance - Part of quality management focused on providing confidence that quality request or standard are going to be fulfilled- positive declaration of quality fulfillment and how that process is performed - process oriented
 - Quality Control - Part of quality management that is focused on fulfillment of the quality request - inspection of the project or product and that it has met the quality request or standard - product oriented.
 - QA focuses on preventing defects - Verification
 - QC focuses on identifying defects - Validation