**Module 3 Architecture & Design**

**3.4 Staging**

**Secure Staging & Deployment**

* Secure baseline

1. Process whereby you use security standard for any system/app/service that considered secure to create your own security benchmark (See 3.1)
2. Separately securing baseline “gold” image to ensure its integrity

* Environments
* Integrity measurement

1. Monitoring systems (networks, OS, services etc.) against baseline for any deviations
2. Eg. Tripwire, Hash checking

**Environments**

* Separating environments for increased security
* Development – app development
* Test – replicating production as much as possible
* Staging – code preparation/consolidation
* Production – where you do business. Very restricted access
* Sandboxing – completely isolated test environment

**Sandboxing**

* Safe execution environment for untrusted programs
* Allows programs & processes to be run in isolated environment to limit access to files & host system
* Eg. Web pages