* Continuous Monitoring
  + solves quality of service
    - website latency
    - database performance
    - financial transactions accurate and secure
    - data privacy
    - vulnerabilities
  + continuous monitoring steps
    - research
      * application / technology stack
      * existing security
      * data management
      * business limitations
      * regulatory limitations
    - selection
    - implementation
      * configuration
      * testing
    - consumption
      * report management
* Continuous Monitoring and DevOps
  + DevOps: collaboration between a project's developments, QA, and IT teams that’s deigned to facilitate faster time-to-deployment and software update cycles, and to allow great levels of process automation
  + improve quality and reduce amount of errors

**Understanding Continuous Monitoring Categories**

* Risk Assessment
  + Understand what's actually going on (make sure your application is actually running and performing correctly)
* Application Performance Management
  + active monitoring: reproduce and precisely measure the real user experience of your application
    - **scripts**: launch user sessions to measure app performance
    - **schedules**: run scripts at the most effective/safe times
    - **metrics**: measure and report app performance
  + passive monitory
    - **assessments**: forensic analysis of past events
    - **data transfer**: network port mirroring to copy packets
    - **correlations**: connecting event metrics between resources
* Infrastructure Monitoring
  + resource awareness
    - track and understand servers / VM's, network infrastructure, storage devices, etc.
  + vulnerability assessment

**Defining an Appropriate Monitoring Process**

* Scope of Monitoring Project
  + only need to monitor what you control
* calculating costs
  + labor
    - development
    - administration
  + servers
  + storage
* Scripted Scanning
  + scripts
    - ensure scans will actually run
  + precision
    - scan just what needs to be scanned, and only when available
  + responsive
    - runs scan in response to real-world triggers
* Reporting Tools
  + Bundled
    - tools packaged with software solutions
  + media
    - email, text messaging, in-browser graphics…
  + home grown
    - redirect data streams to local clients

**Continuous Monitoring Tools**

* common APM features
  + full platform data aggregation
  + transaction tracing
  + application behavior tracking
  + multi-level reporting
* other APM features
  + SaaS
  + virtualization, language compatibility
  + multi-platform integration
  + cost and business collaboration platform integration