

# Using Servlet Contexts to Deploy Servlets

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**SWE 432**

**Design and Implementation of  
Software for the Web**

## Servlet Contexts

- Every servlet is deployed as part of a servlet context
- Servlet context defines:
  - Location of servlet *.class* file
  - Servlets that it can interact with
- The servlet context is set up by the system administrator

## Servlet Contexts : Platforms

- Most commercial web applications use Unix or Linux
- Administrators have concerns with the Windows / IIS combination about :
  - Reliability
  - Robustness
  - Security
- Administering and maintaining servlet engines is more complicated on Unix platforms
- Serious web application developers must know at least a little about Unix / Linux

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## Servlet Context

- URI: Uniform Resource Identifier
  - A string that identifies an internet resource
  - Several schemes: (http, ftp, ...)
  - domain name ( apps-swe432.vse.gmu.edu )
  - path ( swe432/servlet/ )
  - parameters: ( ?name=dumb )
- A URL is a specific type of URI
  - http scheme
- URI path: The *path* inside the URI

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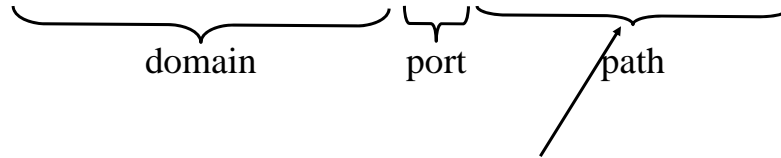
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## Servlet Context (2)

- Each servlet is mapped to a specific URI:

`http://apps-swe432.vse.gmu.edu:8080/swe432/servlet/offutt.Hello`



maps to servlet

- For servlet contexts, each context must be mapped to a path prefix on disk:

`/apps/tomcat/swe432/WEB-INF/classes/`

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## Installing Servlet Contexts

- The system administrator must tell:
  - Server about contexts : where classes directory is
  - Servlet engine : a name mapping for the servlet pages
  - Server : to start contexts upon initialization
- On the web apps cluster, we have one servlet context for the entire class
- This is inconvenient in some ways, but easier to set up and administrate

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## Deployment Summary

- This is more like system administration than software engineering
- Most software companies have staff who specialize in deployment
- The naming choices require knowledge of the user's expectations and *mental model* (usability)