

# Turbine2 UsersGuide

## Turbine 2.x User's Guide

- Overview
  - [Contributing to the manual](#)
  - [Creating new pages](#)
- Turbine Services
  - Overview
    - [What Is A Service?](#)
  - How To Write A Service
  - Fulcrum Services
    - What Fulcrum Is
    - Fulcrum's Future
    - Why Use A Fulcrum Service
  - Individual Services
    - Core Services (Not generally used directly)
    - \*Assembler Broker Service
    - \*Factory
    - \*Velocity
    - \*JSP
    - \*Intake
    - \*MimeType
    - \*Pool
    - \*Naming
    - \*Pull
    - \*RunData
    - "End User" Services (Used directly)
    - \*Security
    - \*XSLT
    - \*Cache
    - \*Logging
    - \*Localization
    - \*Upload
    - \*XML-RPC
- Screens
  - Screen Basics
    - Screens Are Not Templates, but Templates Use Screens
    - Fill The Context, And Nothing Else
  - Securing A Screen
    - Authorize, Fill The Context, And Nothing Else...
  - Organize Your Screens To Make Them Simpler
  - Consistently Work To Thin Your Screens
  - Raw Screen (ie. PDF, and File Downloads)
- Actions
  - Distinguish Actions From Screens
  - Redirecting Browser
  - Securing An Action
  - [Action Events](#)
  - Organize Your Actions
  - Consistently Work To Thin Your Actions
  - [Preventing Double Submit of Forms](#)
- Persistence Layer
  - Torque (Written with aim to contribute it to Torque)
    - About Peers
    - Building Criteria
    - Retrieve Objects
    - Update Objects
    - Delete Objects
    - Foreign Keys
    - Stored Procedures
    - Transactions
    - Database Vendor Specific Issues
    - \*PostgreSQL
    - \*Oracle
    - \*MS SQL Server
  - OJB
- Intake
  - Overview
  - What Intake Cannot Do
  - Intake.xml
  - Implementing Retrievable
  - Filling Forms (Screen-side)
  - Receiving Forms (Action-side)
  - Create An Intake Facade For Complex Forms
  - Troubleshooting
  - Future Intake Enhancements

- Presentation Layer
  - Velocity
    - Read the Velocity User's Manual
    - Screen Templates
    - Layout Templates
    - [VelocityOnlyLayout](#)
    - VelocityECSLayout
    - Navigation Templates
    - Organizing Your Templates
    - Velocity Tips
    - Common Velocity Configuration Properties
  - Java Server Pages
  - [Turbine Skins - UIManager](#)
- Uploading Files
  - Use The Latest Turbine, Or Apply The Patches
  - Turbine Upload Service
  - Troubleshooting
- Turbine Security
  - Groups, Roles, Permissions and Users
  - Extending [TurbineUser](#)
  - Using Other Security Implementations:
    - Henning's Fulcrum Security Proposal
    - Windows NT Authentication
    - JAAS
  - [Not Using Turbine Security](#)
  - Completely Replacing [TurbineSecurity](#)
- Pull
  - Why Pull?
  - About Pull Tools
  - Distinguishing The Scopes
  - Logging-In And Maintaining Session Tools
- Strategies For Multiple Views/Sites
  - Organizing Your Layout Tree
  - Organizing Your Screen Tree
  - XML-RPC Interfaces
- Logging
  - Common Log4J Startup Errors
  - Creating Your Own Log Categories
- Using JBoss With Turbine
- Testing your Turbine application
  - With Cactus
  - With JUnit
  - With [HttpUnit](#)
  - With [WebTest](#)
- [Turbine in a Production Environment](#)