

# BC-isit442 Class Overview And Structure

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This Document is Available on-line at:

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# Contents

<b>I</b>	<b>ByStar Reference Model Review</b>	<b>1</b>
1	Philosophy And Values – Tangible Authonomy and Tangible Privacy	1
2	ByStar Platform (BxP)	1
3	Concept Of Autonomous and Controlled By* Information and Service Objects (BxIso)	1
4	Services Realization Of BxIsos	1
5	Email Service Realization Of BxIsos	2
<b>II</b>	<b>Daemontools Live Walkthrough</b>	<b>2</b>
6	Daemontools Blee Panel	2
7	File Variables As The Most Simple Control Method	2
<b>III</b>	<b>dnscache and tinydns Overview</b>	<b>2</b>
8	Dnscache Overview	2
9	Tinydns Overview	3
<b>IV</b>	<b>Class Activities</b>	<b>3</b>
10	Emacs As A System Administration Tool	3
11	Bash Scripting – The IIM Framework Oriented Approach	3
11.1	Framework Oriented IIM Bash Scripting . . . . .	3
11.2	Adding An iimPanel to Our iimBash Examples . . . . .	3
<b>V</b>	<b>Assignments</b>	<b>4</b>
12	Assignments	4

## List of Figures

## Part I

# ByStar Reference Model Review

## 1 Philosophy And Values – Tangible Authonomy and Tangible Privacy

### Philosophy And Values – Tangible Authonomy and Tangible Privacy

- Reading Assignment Feedback (<http://www.by-star.net>)
- Review the concept of “Conviviality”
- Review the concept of Resonsibility Of Professions – Though To Swallow?

## 2 ByStar Platform (BxP)

- The VM that we have been using is the ByStar Platform (BxP)
- It (the unified software) Can Be Configued To Become:
  - BUE: A Light User Environment (NATed) – For TouchPads, Phones
  - A Heavy Intranet Cluster User Environment (NATed) – For Desktops, LapTops
  - A Complete Internet Service Environment – For Servers, VMs, Private and Public Clouds

## 3 Concept Of Autonomous and Controlled By\* Information and Service Objects (BxIso)

- Each Of Us Will Be Registered As An Autonomous BxIso
- BxIso is manifested as a “Unix Account”
- BxPs are Containers Of bxSOs
- Each Autonomous BxIso can create additional controlled BxIsos
- BxIso’s can exist in parallel in multiple BxPs and be synchronized. At anytime the BxIso that is Internet Visible is call the “Principal BxIso”
- Different services within BxIsos can be mapped to domains at will

## 4 Services Realization Of BxIsos

- A service realization of a BxIso is manifested as a directory within the Unix Account
- Examples:  $\tilde{\text{BxIso}}/\text{iso}/\text{sr}/\text{apache2}/\text{web}$   $\tilde{\text{BxIso}}/\text{iso}/\text{sr}/\text{apache2}/\text{gitweb}$   $\tilde{\text{BxIso}}/\text{iso}/\text{sr}/\text{qmail}/$

## 5 Email Service Realization Of BxIsos

### Email Service Realization Of BxIsos

Within `BxIso/iso/sr/qmail/` are:

- Controls of local-parts
- Maildirs for final deliveries
- Mapping Of local-parts to maildirs
- Mail retrieval control information

## Part II

# Daemontools Live Walkthrough

## 6 Daemontools Blee Panel

### Daemontools Blee Panel

- Software-Service Continuum - Daemontools
- Review The Model
- Review
- Let's Walk Through <https://cr.yp.to/daemontools.html>

## 7 File Variables As The Most Simple Control Method

### File Variables As The Most Simple Control Method

- `cd /etc/service/dnscache`
- Start From Run and Walkthrough
- Visit `env`

## Part III

# dnscache and tinydns Overview

## 8 Dnscache Overview

### Dnscache Overview

- Control Through daemontools
- /etc/resolv.conf
- Local Resolutions Bypass

## 9 Tinydns Overview

### Tinydns Overview

- Control Through daemontools
- Dynamic Addition Of DNS records through scripting

## Part IV

# Class Activities

## 10 Emacs As A System Administration Tool

## 11 Bash Scripting – The IIM Framework Oriented Approach

### 11.1 Framework Oriented IIM Bash Scripting

- `cp /opt/public/osmt/bin/startIimGeneric.sh /isit442/lastName-iim.sh`
- Add VisExample
- Add Describe
- Add Functionality
- Add EH\_problem
- Invoke Through Emacs Client

### 11.2 Adding An iimPanel to Our iimBash Examples

- `cd /isit442`
- `cp /opt/public/osmt/bin/startIimBash.org Panel.org`
- F11-F11
- Let's Customize

## Part V

# Assignments

## 12 Assignments

- Read through “man dnscache” and “man tinydns”
- Page through more “Life With Qmail”. Focus on the qmail specific parts – message queueing and delivery.
- Experiment more with iimBash and iimPanels

## References