

# Oracle Summer Project

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8<sup>th</sup> July, 2008

# Overview

- Team at Oracle
- Introduction
- Understanding Summer Project

## **a) Large screen Display in System Management Product**

Problem Statement

Design Process followed

Solutions

Conclusion

## **b) Animation Semantics in System Management Product**

Problem Statement

Design Process followed

Solutions

Conclusion

- Project Learnings

# Team at Oracle

- Team :

Wai On Lee  
Sourabh Dubey  
Rejeeb Mohammed  
Kannan Natarajan



# Introduction

- Introduction – Worked at Oracle, Lexington Tower, Bangalore from 9<sup>th</sup> May – 27<sup>th</sup> June 2008



# Understanding Summer Project

- Overview of **Enterprise Manager** as a product
- Understanding the Projects
- Understanding the common use – cases
- Set Design Process
- Set Design Goals

# Project 1. Large Screen Display

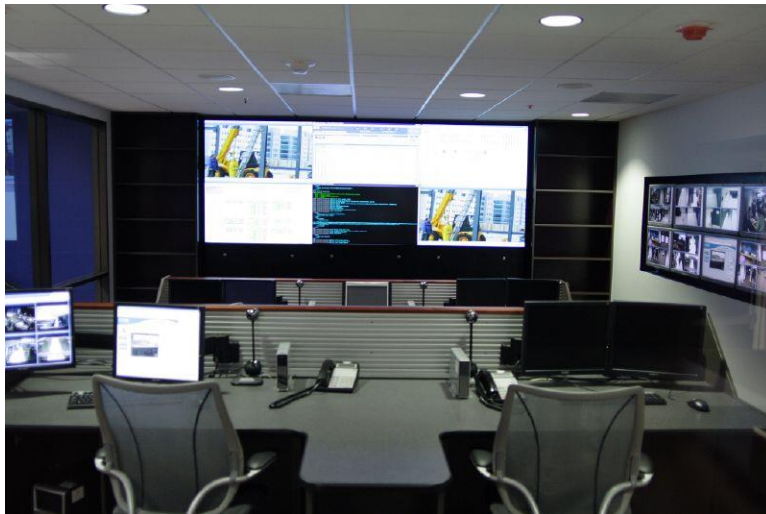
- Problem Statement :

System Management Products are often viewed on a projected displays in a control room. The UI needs of these displays is different from that of the display as seen on a monitor.

The aim of this project is to **propose a set of guidelines** for projection-based display systems and optimize the EM 11g UI based on these guidelines.



# Reference images of projected display



# Project 1. Large Screen Display - Need

Design Process Followed :

## **1. Understand the need of projected display –**

- It is a **Common Reference**. A single source of a truth.
- To help make decisions
- To help organize a system
- It provides a direction
- It provides a focus
- It helps in collaboration
- To avoid confusion



# Project 1. Large Screen Display- Issues

Design Process Followed :

1. Understand the need of projected display

## **2. Find issues in a projected display through User Tests**

- Identified User Profile
- Recruited users according to User Profiles
- Created a script for User Test
- Made a Task sheet
- Created a test environment

# Project 1. Large Screen Display- Issues

Design Process Followed :

1. Understand the need of projected display
2. Find issues in a projected display through User Tests

## **3. New findings through User test analysis**

**a) Functional Test**

**b) Subjective Test**

# Project 1. Large Screen Display- Issues

## **3. New findings through User test analysis**

### **a) Functional Test –**

Gave a fictional scenario and persona to the user and gave tasks to perform to find issues in the large screen display in system management product.

### **b) Subjective Test –**

Showed them images randomly and asked the users to match the images with keywords like elegance, futuristic, decent , fresh, contemporary etc..

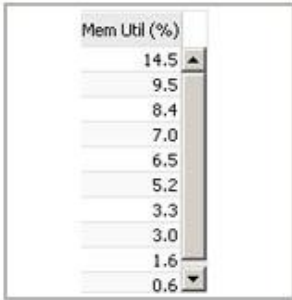
# Project 1. Large Screen Display- Guidelines

- We looked at issues of projected display with help of following points :
- Functional Issues
- Visual Issues

and prepared a set of guidelines based on the issues found.

## ● 1.Functional Issues for Projected Display

Projected Display is a non-interactive display, Elements who's functions for being interactive can not be used, following are the examples:



scroll bar

	Others	critical	
2	8	2	
0	0	2	
2	3	0	
0	0	0	
0	0	0	
0	5		

mouse over



drop down



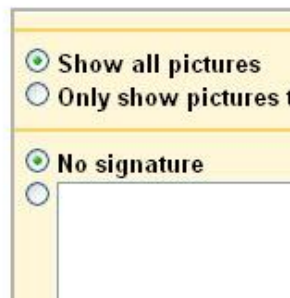
tabs



text selection



buttons



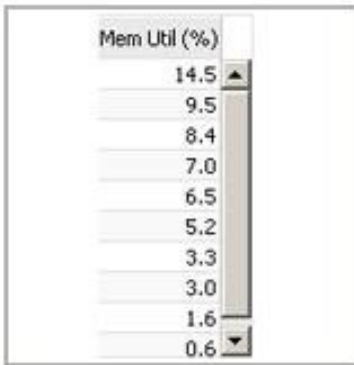
check box



input

# ● Proposed solutions for Functional Issues

## Scroll Bar



Scroll bar is used when information is more than the space reserved.

### **Problem Statement:**

How to display the information when scroll bar cannot be used?

### **Proposed Solutions:**

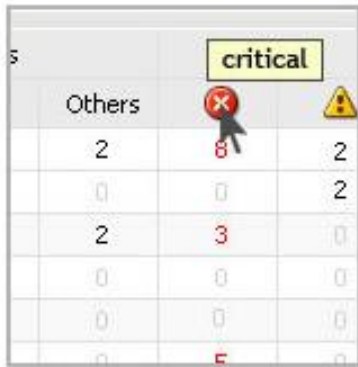
Auto-scroll ( Distributing the information in space )

Slide show within the reserved space ( Distributing the information in time )



# ● Proposed solutions for Functional Issues

## Mouse over



A screenshot of a table with a tooltip. The tooltip is a yellow box with the word 'critical' in black text. A mouse cursor is hovering over a red 'X' icon in the table. The table has columns labeled 'Others' and 'critical'. The data in the table is as follows:

	Others	critical
2	8	2
0	0	2
2	3	0
0	0	0
0	0	0
0	5	0

Mouse over displays name/label of icons which are not shown upfront.

### Problem Statement:

How to display the information when mouse over cannot be used?

### Proposed Solutions:

Add label to the icons

Provide legend

# ● Proposed solutions for Functional Issues

## Drop down



Drop down is used to give users options.

### **Problem Statement:**

How to display the information when the drop down cannot be used?

### **Proposed Solutions:**

Viewer is not given control to switch the information, hence this option is not applicable for projected display

# ● Proposed solutions for Functional Issues

## Tabs



Tab is used when information is divided into multiple sections.

### **Problem Statement:**

If there are multiple tabs and user is interested in specific tabs to be projected, how can we address this scenario?

### **Proposed Solutions:**

The user can specify the particular tabs to be projected and those can run in a slide show.

# ● Proposed solutions for Functional Issues

## Text selection



Text selection is used when the text is to be copied or deleted or it is used to guide eyes while reading

### Problem Statement:

How to help user to guide his eyes while reading

### Proposed Solutions:

Copying text is not applicable for projected display

Paragraph should be avoided in a projected display.

The maximum length of a textual line should be 65 characters

# ● Proposed solutions for Functional Issues

## Button



Button is used to either to give feedback( enter, ok) or to activate new function( login, search)

### Problem Statement:

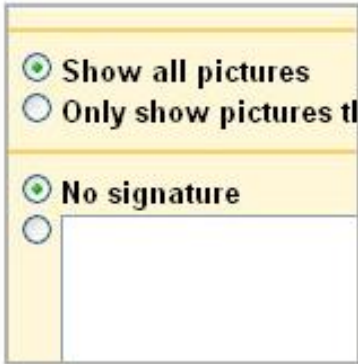
The user cannot use button when information is projected

### Proposed Solutions:

Giving feedback or activating new function can be done in desktop view and these tasks should be hidden when projected

# ● Proposed solutions for Functional Issues

## Check Box



The image shows a screenshot of a form with a yellow background. It contains two groups of radio buttons. The first group has two options: 'Show all pictures' (which is selected, indicated by a green dot) and 'Only show pictures tl' (which is not selected). The second group has two options: 'No signature' (which is selected, indicated by a green dot) and an empty radio button (which is not selected). Below the radio buttons is a large empty rectangular box.

Check Box is used when one single option have to be selected out of many options

### **Problem Statement:**

The user cannot use Check Box when information is projected

### **Proposed Solutions:**

Selecting an option can be done in desktop view and these tasks should be hidden when projected



# ● Proposed solutions for Functional Issues

## Input



input is used when user has to type data in the given space

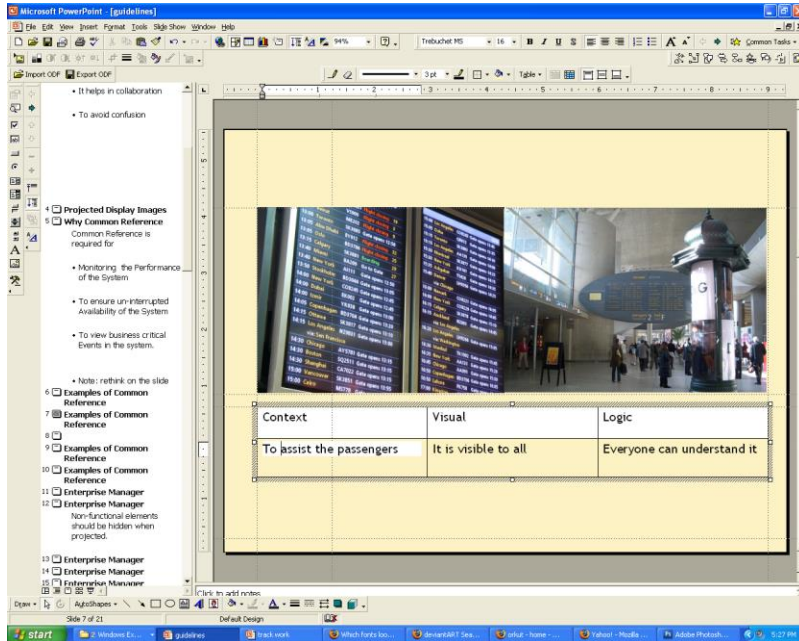
### **Problem Statement:**

The user cannot use Input function when information is projected

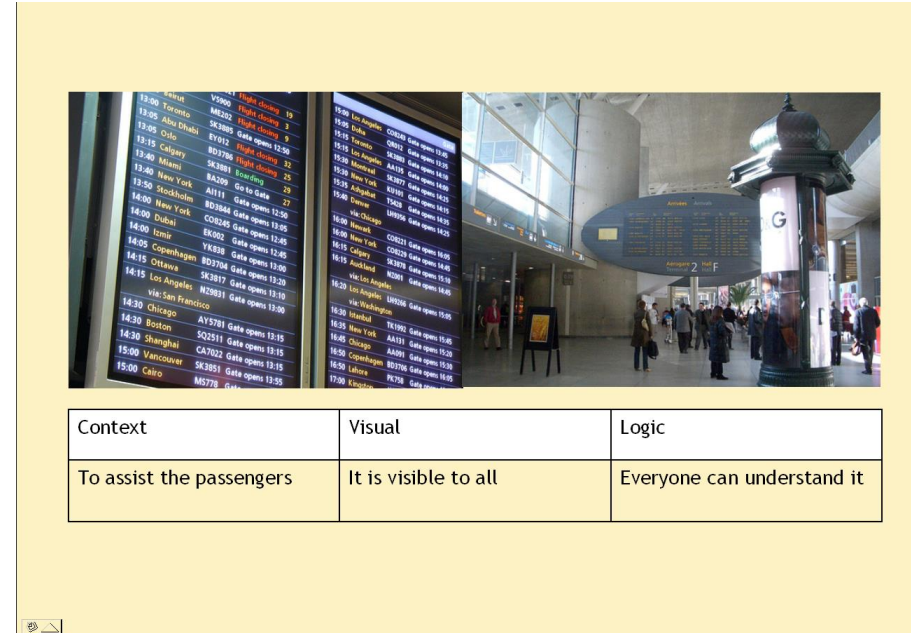
### **Proposed Solutions:**

Writing text is not applicable for projected display

# ● Tool for creating Projected Display



Normal screen



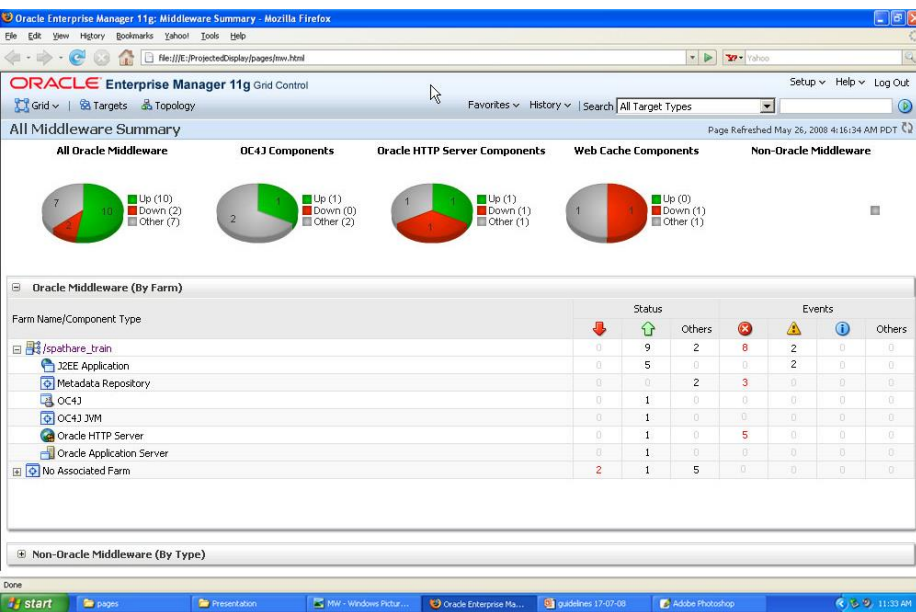
Slide show screen

Power point is a tool dedicated to create presentations for projected display and it can be used as a reference for the Projected Display in System Management Products.

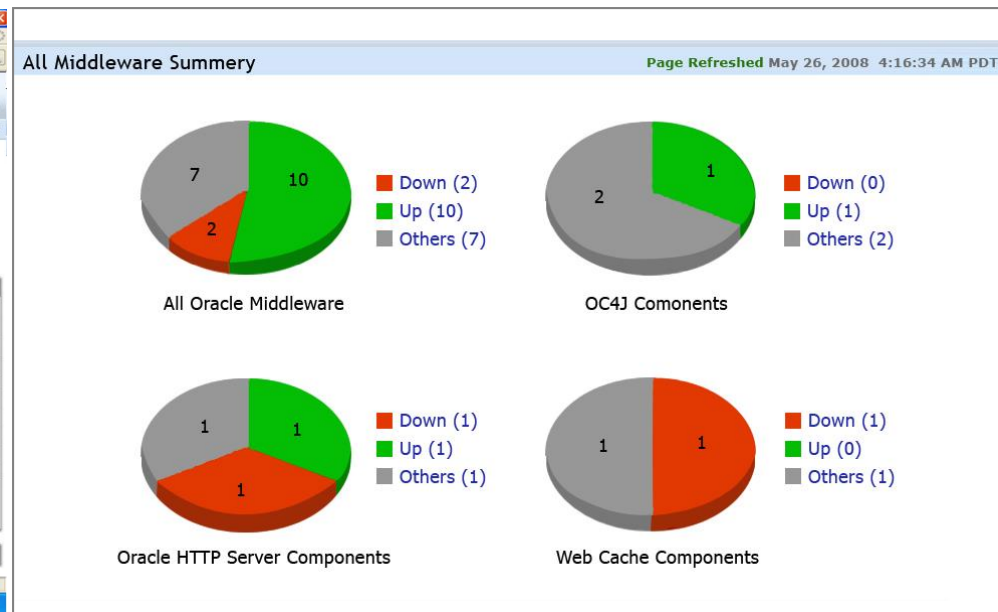
There are two aspects of Creating a Projected Display

- Creating the Display
- Viewing the Display

# ● Tool for creating Projected Display



Desktop View



Projected View

# • Desktop View

Oracle Enterprise Manager 11g: Middleware Summary - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

file:///E:/ProjectedDisplay/pages/mmw.html

ORACLE Enterprise Manager 11g Grid Control

Grid Targets Topology


Setup Help Log Out

Favorites History Search All Target Types

All Middleware Summary


Page Refreshed May 26, 2008 4:16:34 AM PDT

**All Oracle Middleware**




Up (10)  
Down (2)  
Other (7)

**OC4J Components**



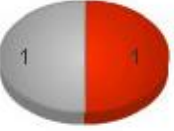
Up (1)  
Down (0)  
Other (2)

**Oracle HTTP Server Components**




Up (1)  
Down (1)  
Other (1)

**Web Cache Components**



Up (0)  
Down (1)  
Other (1)

**Non-Oracle Middleware**



**Oracle Middleware (By Farm)**

Farm Name/Component Type	Status			Events			
	Down	Up	Others	Errors	Warnings	Infos	Others
/spathare_train	0	9	2	8	2	0	0
J2EE Application	0	5	0	0	2	0	0
Metadata Repository	0	0	2	3	0	0	0
OC4J	0	1	0	0	0	0	0
OC4J JVM	0	1	0	0	0	0	0
Oracle HTTP Server	0	1	0	5	0	0	0
Oracle Application Server	0	1	0	0	0	0	0
No Associated Farm	2	1	5	0	0	0	0

**Non-Oracle Middleware (By Type)**

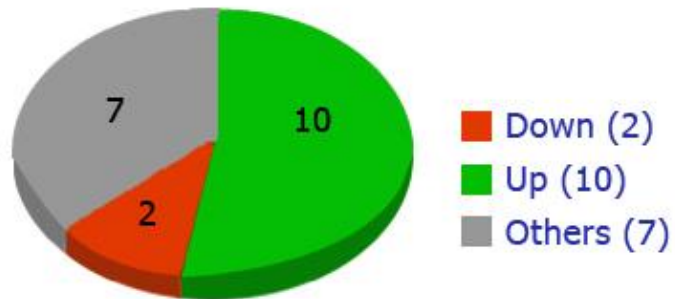
Done

start pages Presentation MW - Windows Pictur... Oracle Enterprise Ma... guidelines 17-07-08 Adobe Photoshop 11:33 AM

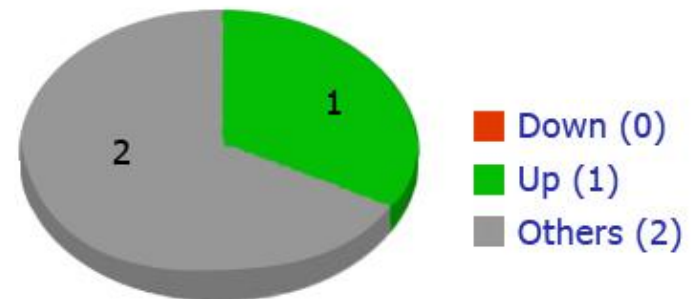
# ● Projected View

All Middleware Summery

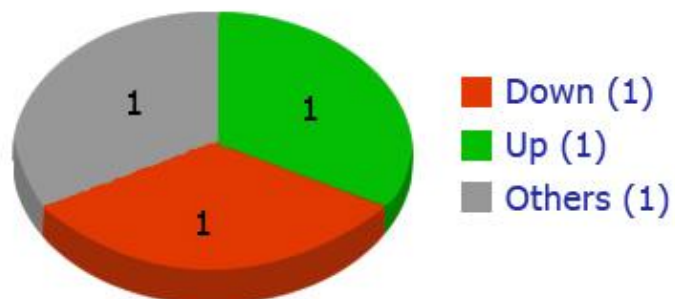
Page Refreshed May 26, 2008 4:16:34 AM PDT



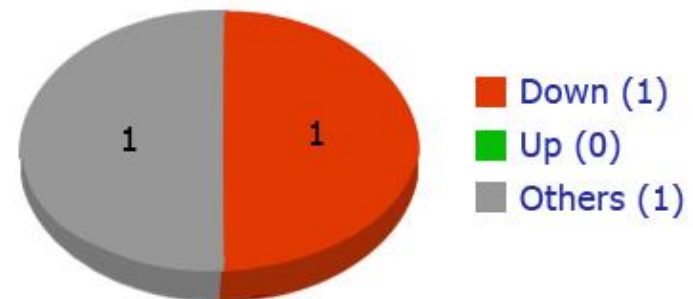
All Oracle Middleware



OC4J Comonents



Oracle HTTP Server Components



Web Cache Components



# • Desktop View

Oracle Enterprise Manager 11g: Middleware Summary - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

file:///E:/ProjectedDisplay/pages/mmw.html

ORACLE Enterprise Manager 11g Grid Control

Setup Help Log Out

Grid Favorites Targets Search All

Page Refreshed Sep 23, 2007 11:53:03 PM PDT

### Grid Home

#### Getting Started

Enterprise Manager 11g has powerful new features. Click on the links below to know more

**Enhanced User Experience** [More]

- Customizing the Home Page
- Personalizing the Start Page
- Using Favorites
- Menu Based Navigation
- Dynamic Context Menu

**Administering Enterprise Manager** [More]

- Adding Agents
- Adding Targets
- Adding Users
- Adding Roles
- Creating Groups

**Operating Enterprise Manager** [More]

- Patching Targets
- Target Blackouts
- Managing Events
- Change Management
- Creating Deployment Procedures

**Concepts: 11g Vs. 10g** [More]

11g concepts are available on Oracle Technology Network. Links below will navigate you to OTN.

- 10g Monitoring Templates Vs. 11g Monitoring Standards
- 10g Policies Vs. 11g Configuration Standards
- 10a Alerts Vs. 11a Events

#### Events

Event Type							Last 24 hours
Metric Alert	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19
Others	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>

[Details]

#### Services

40 % 40 % 20 %

All Services (5)

Down (2)  
Up (1)  
Others (2)

Name	Status	Down Since
Acme Identity Service		2 Days 4 hrs 8 min 13 sec
Oracle Financials		1 hrs 8 min 13 sec
CRM OnDemand		3 hrs 8 min 10 sec
Pet Store		6 min 01 sec
Credit Check		15 min 22 sec

[Details]

#### Deployments

View By Database Installations Show By Version and Platform

Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HPUX	12	12
Oracle Database 9i 9.0	AIX	6	6

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# ● Projected View

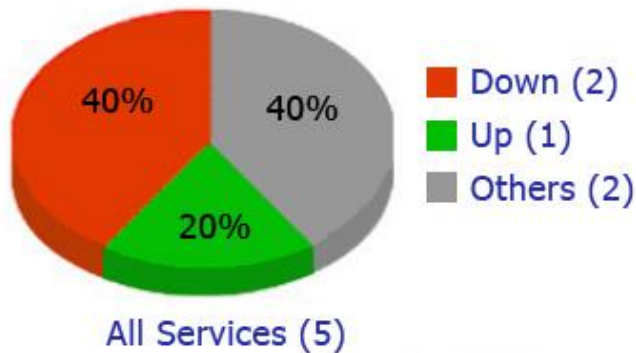
Grid Home






Page Refreshed June 09, 2008 00:33:45 AM PST

## Events

Event Type								Last 24 hours
Metric Alert	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0
Others	0	0	0	0	0	0	0	0
	18	0	1	0	19	0	19	0

## Services



Name	Status	Down Since
Acme Identity Service		2 Days 4 hrs 8 min 13 sec
Oracle Financials		1 hrs 8 min 13 sec
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Pet Store		6 min 01 sec
Credit Check		15 min 22 sec

# • Desktop View

Oracle Enterprise Manager 11g: Middleware Summary - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

file:///E:/ProjectedDisplay/pages/mmw.html

ORACLE Enterprise Manager 11g Grid Control

Grid ▾ Web Application ▾ All Targets

Petstore (Web Application) ⓘ

Setup ▾ Help ▾ Log Out

Favorites ▾ History ▾ Search All Target Types

Page Refreshed Jan 17, 2008 12:27:55 AM PST

### Availability

Up Since 16-Jan-08 22:42:44  
Up Time 1 hours 51 minutes 46 seconds  
Last Calculated 17-Jan-08 00:33:35  
Last 24 Hours 100%  
Availability (24 Hours)

16-Jan-08 00:34:30 17-Jan-08 00:34:30

### User Comments

No Comments Available

+ Add Comment

Edit

### Events

Event Type	✗	⚠	ℹ	🚩	🔍	👤	Last 24 hours
Metric Error	0	0	0	0	0	0	0
Job Status Change	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Metric Alert	2	0	n/a	0	2	0	2
Others	4	0	0	0	4	0	4
<b>Total</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>6</b>

Edit

### Service Performance and Usage

#### Performance

Perceived Total Time (ms) 328  
My Agg System Based Perf Metric 328

#### Usage

Interrupts (per second) 328  
Number of cpus 328

#### Chart : Last 24 Hours

1,200  
800  
400  
0

01:00 05:00 09:00 13:00 17:00 21:00  
16 January 2008

Perceived Total Time (ms)  
Interrupts (per second)

Edit

### Service Test Performance (Last 24 Hours)

Status	Test Type	✗	⚠
↑ LoginTest	HTTP Ping	12	6

Service Tests and Beacons | Edit

### System Status

Status	Name	Type	✗	⚠	↻
↑	database?	oracle_database			

start | pages | Presentation | MW - Windows Pictur... | Oracle Enterprise Ma... | guidelines 17-07-08 | Adobe Photoshop | 11:33 AM

# ● Projected View

Petstore

Page Refreshed Jan 17, 2008 12:27:55 AM PST

## Service Performance and Usage

### Performance

Perceived Total Time (ms)

328

My Agg System Perf Metric

328

### Usage

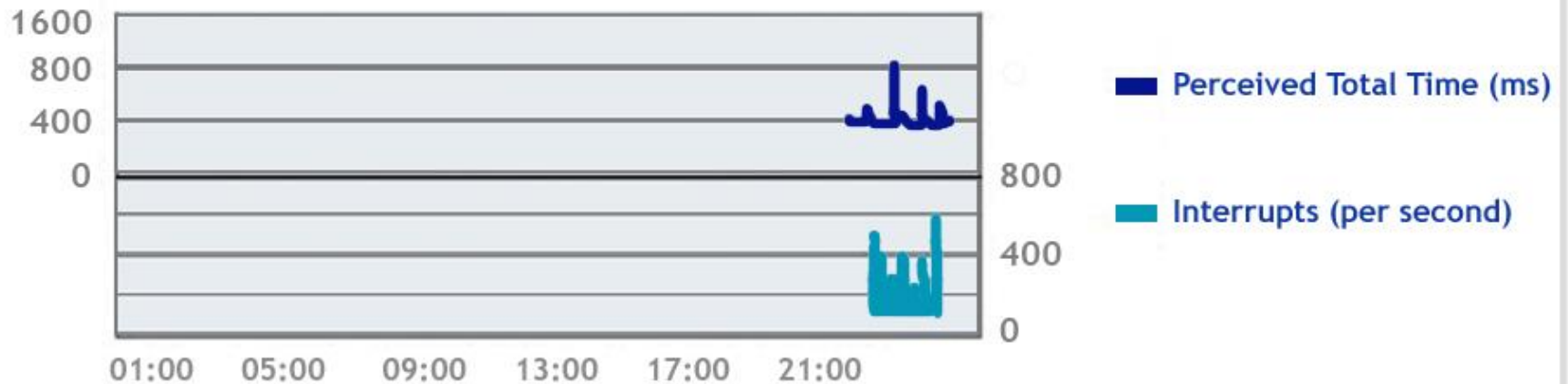
Interrupts (per second)

328

Number of cpus

328

### Chart : Last 24 hours



## ● 2. Visual Issues for Projected display

Projected Display is a low contrast display

Visual decisions which are valid for a desktop are not valid for a Projected Display

Luminosity difference to match the desktop display

Colors

Gradients

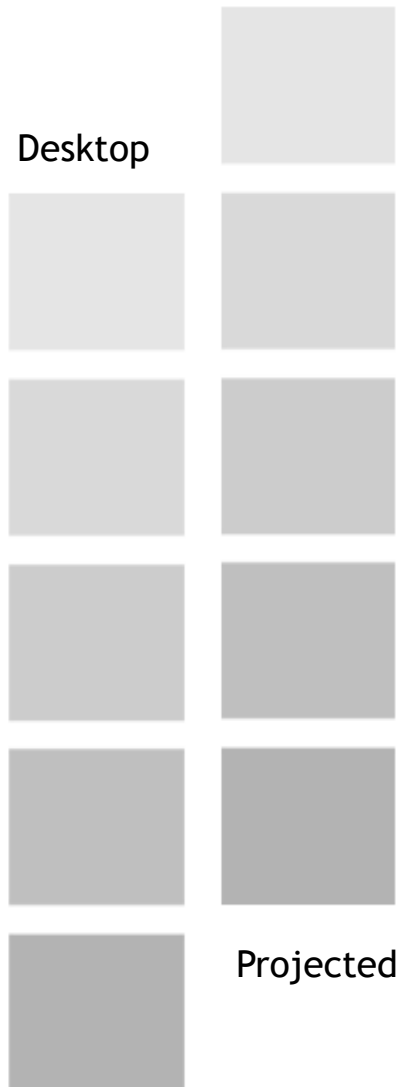
Font

Line

Layout

# ● Proposed solutions for Visual Issues : Luminosity

## Luminosity difference to match the desktop display



Luminosity for the desktop (Emitting ) is different from projected (Reflecting) display

### **Problem Statement:**

The screen designed for desktop will have more Luminosity when projected. Hence the black will not appear proper black.

### **Proposed Solutions:**

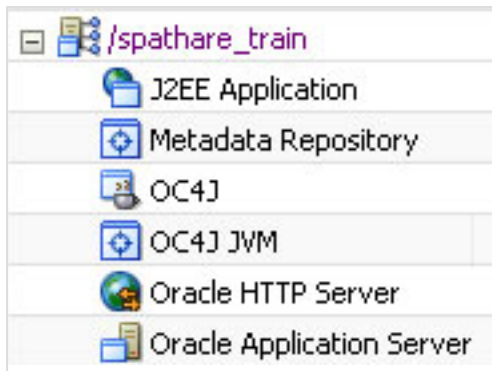
5-10 % decrease in Luminosity for projected display is recommended to match the Desktop view.

This value also depends on the ambient light and screen color.

- Proposed solutions for Visual Issues : Luminosity

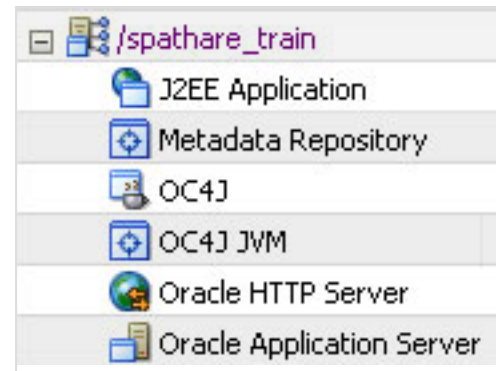
## Luminosity difference to match the desktop display (example)

Desktop



Luminosity - 100%

Projected



Luminosity - 95%



## ● Proposed solutions for Visual Issues : Colors

### Colors

With the study carried out we reached at the conclusion that for reading a display, luminosity difference between background color and font color should be of minimum 70 % for good readability

Projected display is reflective in nature and there is a reduced luminosity difference and this difference is further reduced due to ambient light.

While switching on to the projected mode the luminosity difference should be maintained to 70 %. This can be achieved by calculating the Hexa-decimal values corresponding to 70 %

- Proposed solutions for Visual Issues : Colors

## Data

Foreground	Background	Brightness Difference	Color Difference	L1 (Lab)	L2 (Lab)	L2-L1
#000000	#49D6F9	175.831	536	0	79	79
#000000	#FFB7FF	212.736	693	0	83	83
#000000	#FFE300	209.494	482	0	90	90
#000000	#B2FF00	202.907	433	0	92	92
#000000	#00E3FF	162.319	482	0	82	82
#000000	#D7D1FF	216.038	679	0	85	85
#000000	#FFFF7B	239.952	633	0	98	98
#000000	#FFCCFF	225.063	714	0	88	88
#####	#1856B9	176.252	470	100	38	62
#####	#000059	244.853	676	100	5	95
#####	#004EAA	189.834	517	100	34	66
#####	#5E4232	182.452	555	100	31	69
#####	#274F9D	179.067	490	100	34	66
#####	#746401	161.502	548	100	43	57
#####	#284F6E	184.127	536	100	32	68
#####	#7D1A4A	193.927	540	100	29	71
#####	#1B4F5F	189.724	564	100	31	69
#####	#A03500	176.049	552	100	39	61
#####	#552611	171.341	523	94	22	72
#####	#882C1F	167.974	503	94	33	61
#####	#306600	163.774	564	94	38	56
#####	#950009	192.423	556	94	31	63
#####	#525572	150.591	433	94	37	57

# ● Proposed solutions for Visual Issues : Gradient

## Gradient

Gradients for desktop is different from projected view

### Problem Statement:

User is not able to get the information effectively due to gradients usage in background

### Proposed Solutions:

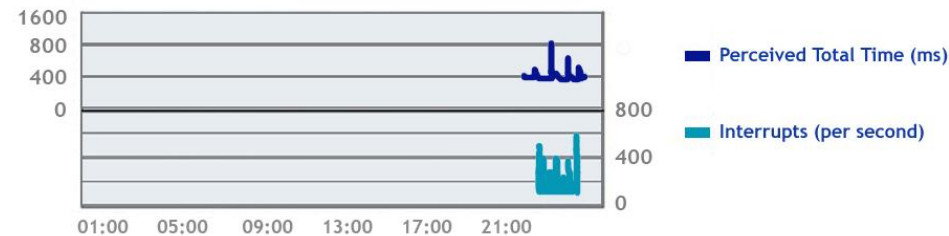
Gradients not to be used for projected display

Chart : Last 24 Hours



Desktop

Chart : Last 24 hours















Projected

- Proposed solutions for Visual Issues : Font

FONTS	White		Light Grey		Mid Grey	
	Desktop	Projected	Desktop	Projected	Desktop	Projected
Arial	10	12	10	12	10	13
Verdana	10	13	9	13	9	13
Trebuchet MS	11	14	10	14	10	13
Tahoma	10	13	10	14	12	15
Times New Roman	11	15	11	15	12	14
Georgia	9	11	9	12	10	13
Ms San Serif	10	15	11	15	11	13

# ● Proposed solutions for Visual Issues : Line

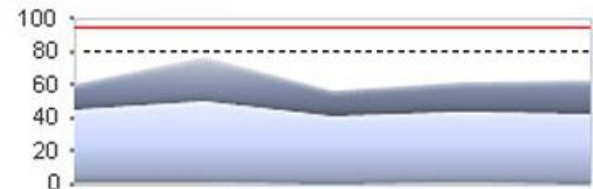
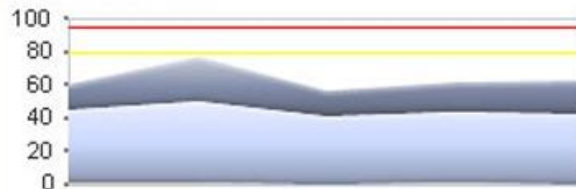
Color of the line	1pt line on Desktop	Minimum line thickness required on projected display
60% black		 1.10 pt
50% black		 1.15 pt
40% black		 1.25 pt
30% black		 1.5 pt
20% black		 1.5 pt
10% black		 2.0 pt

## Colors with high luminosity

Problem statement

When the line color is of high luminosity (eg. yellow) increasing the line thickness does not improve the visibility of the line.

Problem Solution



The line can be replaced with a black dotted line with minimum thickness of 1pt.

# ● Proposed solutions for Visual Issues : Layout

## Layout

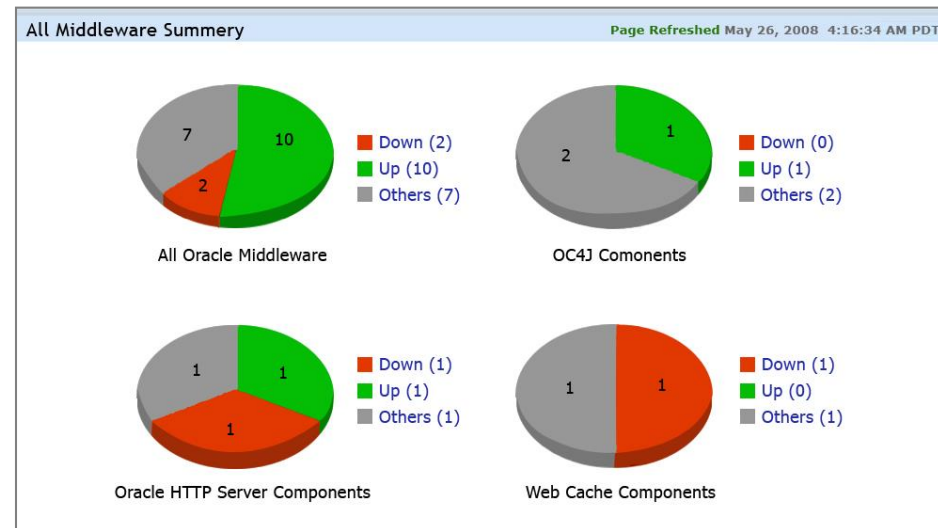
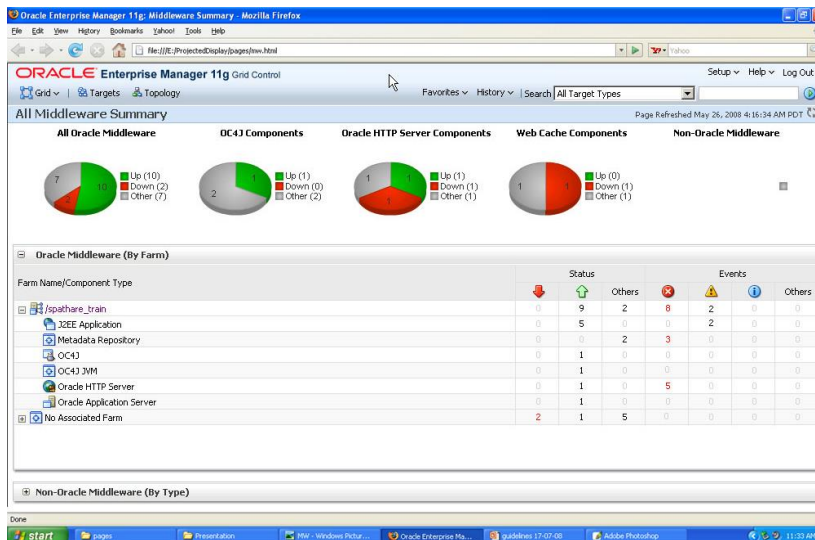
Layouts for desktop cannot be kept same for projected view

### Problem Statement:

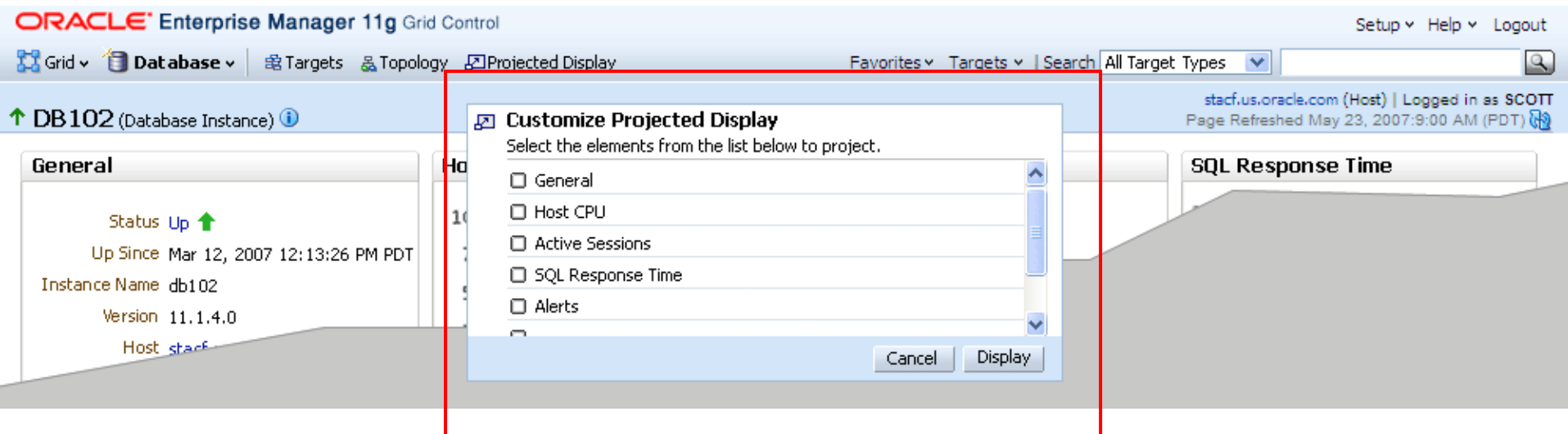
Information is not arranged effectively to utilize space provided when projected

### Proposed Solutions:

The elements should reposition themselves to use the 4x3 space in the best possible manner



- Invoking the Projected Mode through Button/Tab



# ● Invoking the Projected Mode through Area selection

ORACLE Enterprise Manager 11g Grid Control

Project

Setup Help Log Out

Grid

Favorites Targets

Search All

Grid Home

Page Refreshed Sep 23, 2007 11:53:03 PM PDT

## Getting Started

Enterprise Manager 11g has powerful new features. Click on the links below to know more

### Enhanced User Experience

- Customizing the Home Page
- Personalizing the Start Page
- Using Favorites
- Menu Based Navigation
- Dynamic Context Menu

### Administering Enterprise Manager

- Adding Agents
- Adding Targets
- Adding Users
- Adding Roles
- Creating Groups

### Operating Enterprise Manager

- Patching Targets
- Target Blackouts
- Managing Events
- Change Management
- Creating Deployment Procedures

### Concepts: 11g Vs. 10g

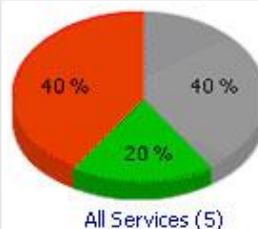
11g concepts are available on Oracle Technology Network. Links below will navigate you to OTN.

- 10g Monitoring Templates Vs. 11g Monitoring Standards
- 10g Policies Vs. 11g Configuration Standards
- 10g Alerts Vs. 11g Events
- 10g Notification Rules Vs. 11g Event Rules
- 10g Vs. 11g: User Privileges

## Events

Event Type									Last 24 hours
Metric Alert	0	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0	0
Others	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>

## Services



Down (2)  
Up (1)  
Others (2)

Name	Status	Down Since
Acme Identity Service	Down	2 Days 4 hrs 8 min 13 sec
Oracle Financials	Down	1 hrs 8 min 13 sec
CRM OnDemand	Warning	3 hrs 8 min 10 sec
Pet Store	Warning	6 min 01 sec
Credit Check	Up	15 min 22 sec

## Deployments

View By	Database Installations	Show By	Version and Platform
Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HPUX	12	12
Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5

Desktop View



# • Invoking the Projected Mode through Area selection

**ORACLE Enterprise Manager 11g Grid Control** Project Setup Help Log Out

Grid Home Page Refreshed Sep 23, 2007 11:53:03 PM PDT

### Getting Started

Enterprise Manager 11g has powerful new features. Click on the links below to know more

#### Enhanced User Experience

- Customizing the Home Page
- Personalizing the Start Page
- Using Favorites
- Menu Based Navigation
- Dynamic Context Menu

#### Administering Enterprise Manager

- Adding Agents
- Adding Targets
- Adding Users
- Adding Roles
- Creating Groups

#### Operating Enterprise Manager

- Patching Targets
- Target Blackouts
- Managing Events
- Change Management
- Creating Deployment Procedures

#### Concepts: 11g Vs. 10g

11g concepts are available on Oracle Technology Network. Links below will navigate you to OTN.

- 10g Monitoring Templates Vs. 11g Monitoring Standards
- 10g Policies Vs. 11g Configuration Standards
- 10g Alerts Vs. 11g Events
- 10g Notification Rules Vs. 11g Event Rules
- 10g Vs. 11g User Privileges

double click / enter to project > esc to cancel

### Events

Event Type							Last 24 hours
Metric Alert	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19
Others	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>

### Services

All Services (5)





Name	Status	Down Since
Acme Identity Service		2 Days 4 hrs 8 min 13 sec
Oracle Financials		1 hrs 8 min 13 sec
CRM OnDemand		3 hrs 8 min 10 sec
Pet Store		6 min 01 sec
Credit Check		15 min 22 sec

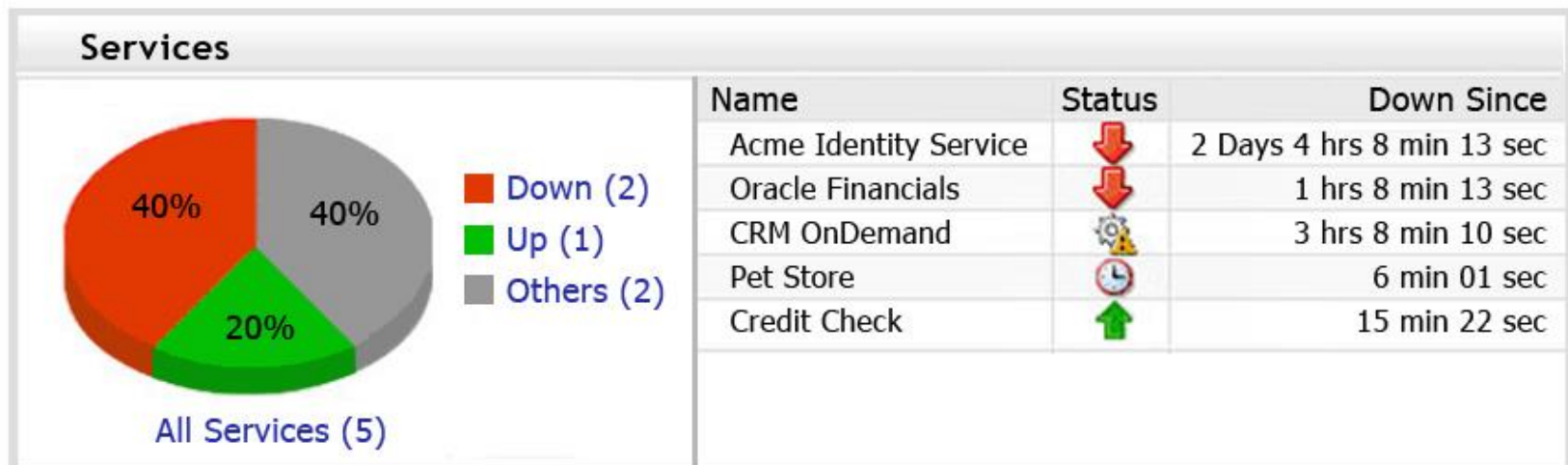
### Deployments

Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HPUX	12	12
Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5

Desktop View

- Invoking the Projected Mode through Area selection

Events								
Event Type								Last 24 hours
Metric Alert	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0
Others	0	0	0	0	0	0	0	0
	18	0	1	0	19	0	19	0



# ● Invoking the Projected Mode through Individual icon

## Grid Home

### Getting Started

Enterprise Manager 11g has powerful new features. Click on the links below to know more

#### Enhanced User Experience

- Customizing the Home Page
- Personalizing the Start Page
- Using Favorites
- Menu Based Navigation
- Dynamic Context Menu

#### Administering Enterprise Manager

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- Adding Targets
- Adding Users
- Adding Roles
- Creating Groups

#### Operating Enterprise Manager

- Patching Targets
- Target Blackouts
- Managing Events
- Change Management
- Creating Deployment Procedures

#### Concepts: 11g Vs. 10g

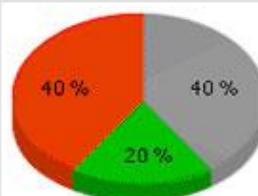
11g concepts are available on Oracle Technology Network. Links below will navigate you to OTN.

- 10g Monitoring Templates Vs. 11g Monitoring Standards
- 10g Policies Vs. 11g Configuration Standards
- 10g Alerts Vs. 11g Events
- 10g Notification Rules Vs. 11g Event Rules
- 10g Vs. 11g: User Privileges

### Events

Event Type	✖	⚠	ℹ	🚩	🔄	👤	Last 24 hours
Metric Alert	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19
Others	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>

### Services



- Down (2)
- Up (1)
- Others (2)

Name	Status	Down Since
Acme Identity Service	⬇	2 Days 4 hrs 8 min 13 sec
Oracle Financials	⬇	1 hrs 8 min 13 sec
CRM OnDemand	⚙	3 hrs 8 min 10 sec
Pet Store	🕒	6 min 01 sec
Credit Check	⬆	15 min 22 sec

### Deployments

View By	Database Installations	Show By	Version and Platform
Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HPUX	12	12
Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5



# ● Invoking the Projected Mode through Individual icon

**ORACLE Enterprise Manager 11g Grid Control** Setup ▾ Help ▾ Log Out

Grid ▾ Favorites ▾ Targets ▾ Search All ▾

Grid Home Page Refreshed Sep 23, 2007 11:53:03 PM PDT

### Getting Started

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- 10g Vs. 11g User Privileges

double click / enter to project > esc to cancel

### Events

Event Type							Last 24 hours
Metric Alert	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19
Others	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>

[Details](#)

### Services

40 % 40 % 20 %

All Services (5)

- Down (2)
- Up (1)
- Others (2)

Name	Status	View	Watch List	Down Since
Acme Identity Service			<input checked="" type="checkbox"/>	2 Days 4 hrs 8 min 13 sec
Oracle Financials			<input type="checkbox"/>	1 hrs 8 min 13 sec
CRM OnDemand			<input type="checkbox"/>	3 hrs 8 min 10 sec
Pet Store			<input type="checkbox"/>	6 min 01 sec
Credit Check			<input type="checkbox"/>	15 min 22 sec

[Details](#)

### Deployments

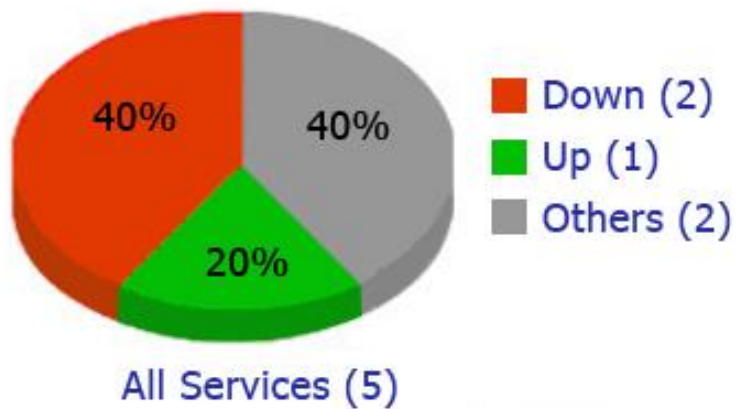
View By Database Installations ▾ Show By Version and Platform ▾

Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
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Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5

[Details](#)

- Invoking the Projected Mode through Individual icon

## Services



Name	Status	Down Since
Acme Identity Service	↓	2 Days 4 hrs 8 min 13 sec
Oracle Financials	↓	1 hrs 8 min 13 sec
CRM OnDemand	⚙️⚠️	3 hrs 8 min 10 sec
Pet Store	🕒	6 min 01 sec
Credit Check	↑	15 min 22 sec

# ● Invoking the Projected Mode through Check box

**ORACLE Enterprise Manager 11g Grid Control** Setup ▾ Help ▾ Log Out

Grid ▾ Favorites ▾ Targets ▾ Search All ▾

Page Refreshed Sep 23, 2007 11:53:03 PM PDT

### Grid Home

#### Getting Started

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- 10g Alerts Vs. 11g Events
- 10g Notification Rules Vs. 11g Event Rules
- 10g Vs. 11g: User Privileges

#### Events

Event Type							Last 24 hours
Metric Alert	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19
Others	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>

[Details]

#### Services

■ Down (2)  
■ Up (1)  
■ Others (2)

All Services (5)

Name	Status	Down Since
Acme Identity Service		2 Days 4 hrs 8 min 13 sec
Oracle Financials		1 hrs 8 min 13 sec
CRM OnDemand		3 hrs 8 min 10 sec
Pet Store		6 min 01 sec
Credit Check		15 min 22 sec

[Details]

#### Deployments

View By Database Installations ▾ Show By Version and Platform ▾

Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HP-UX	12	12
Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5

[Details]



# ● Invoking the Projected Mode through Check box

ORACLE Enterprise Manager 11g Grid Control

Setup ▾ Help ▾ Log Out

Grid ▾ Favorites ▾ Targets ▾ Search All

Page Refreshed Sep 23, 2007 11:53:03 PM PDT

### Grid Home

#### Getting Started

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- 10g Alerts Vs. 11g Events
- 10g Notification Rules Vs. 11g Event Rules
- 10g Vs. 11g: User Privileges

#### Events

Event Type	0	0	0	0	0	0	0	0	0
Metric Alert	0	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0	0
Others	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>18</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>

#### Services

View Watch List

Projection Mode

Name	Status	2 Days 4 hrs 0 min 13 sec
Acme Identity Service	Down	1 hrs 8 min 13 sec
Oracle Financials	Down	3 hrs 8 min 10 sec
CRM OnDemand	Warning	6 min 01 sec
Pet Store	Up	15 min 22 sec
Credit Check	Up	

#### Deployments





View By Database Installations Show By Version and Platform

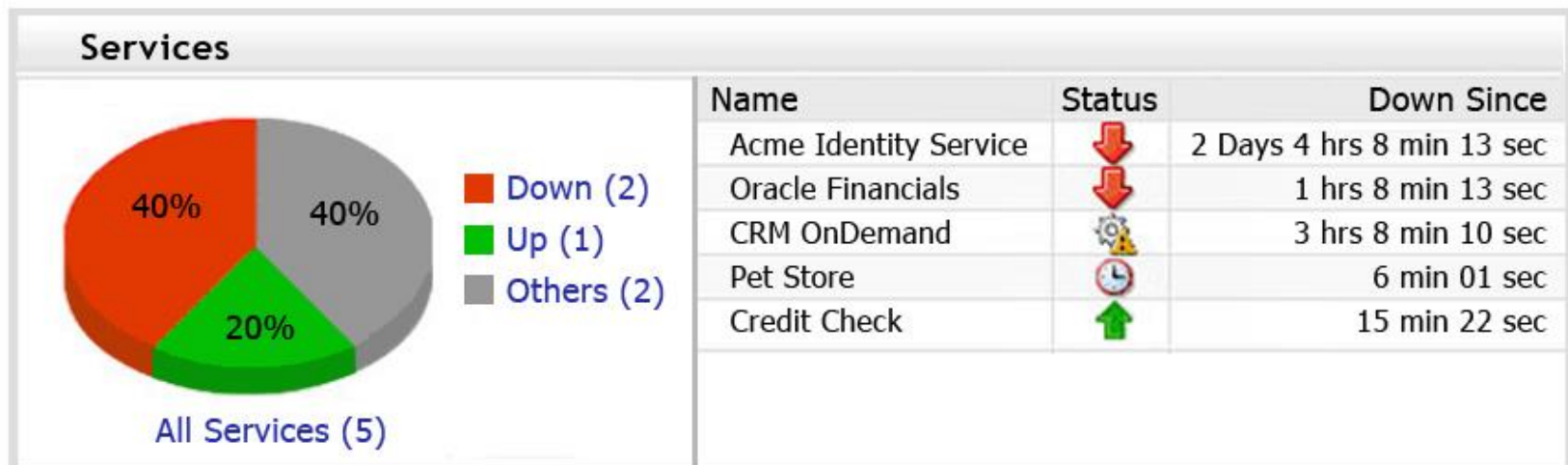
Version	Platform	Targets	Installations
Oracle Database 11g 11.1	Linux	65	65
Oracle Database 10g 10.2	Linux	23	23
Oracle Database 10g 10.1	HP-UX	12	12
Oracle Database 9i 9.0	AIX	6	6
Oracle Database 8i 8.1	Microsoft Windows	5	5

The Projection Icons for individual Regions will appear when the Projection Mode is clicked.

Desktop View






- Invoking the Projected Mode through Check box

Events								
Event Type								Last 24 hours
Metric Alert	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0
Others	0	0	0	0	0	0	0	0
	18	0	1	0	19	0	19	0





- Invoking the Projected Mode through Check box

Events								
Event Type								Last 24 hours
Metric Alert	0	0	0	0	0	0	0	0
Metric Error	0	0	0	0	0	0	0	0
Standard Score Event	0	0	0	0	0	0	0	0
Job State Change	18	0	1	0	19	0	19	0
Others	0	0	0	0	0	0	0	0
	18	0	1	0	19	0	19	0



## ● Framework Suggestions

Objects (Regions, Charts, Sub headers) on the screen should be taggable to **"Projectable"**

Projectable elements CSS will modify based on the Color, Luminosity differences found in the study.

Projected display will be a full screen display. Even the browser will not be visible.

The elements will reposition themselves to use the 4x3 space in the best possible manner.

# Project 1. Large Screen Display- Conclusion

- Created a presentation listing issues and mentioning guidelines
- Presented the final set of guidelines to the head of Design team.
- Included few changes in the set of guidelines.

# Project 2. Animation Semantics

- Problem Statement :

A typical System Management product is **not very interesting** to work with. It is possible to make the user-experience richer and more intuitive by the use of **meaningful animation**.

This project explores the various meanings of animation and attempts to evolve an interaction which enhances the user-experience **in context** of the “Use Case”.

# What does Animate mean in context of the SMP user

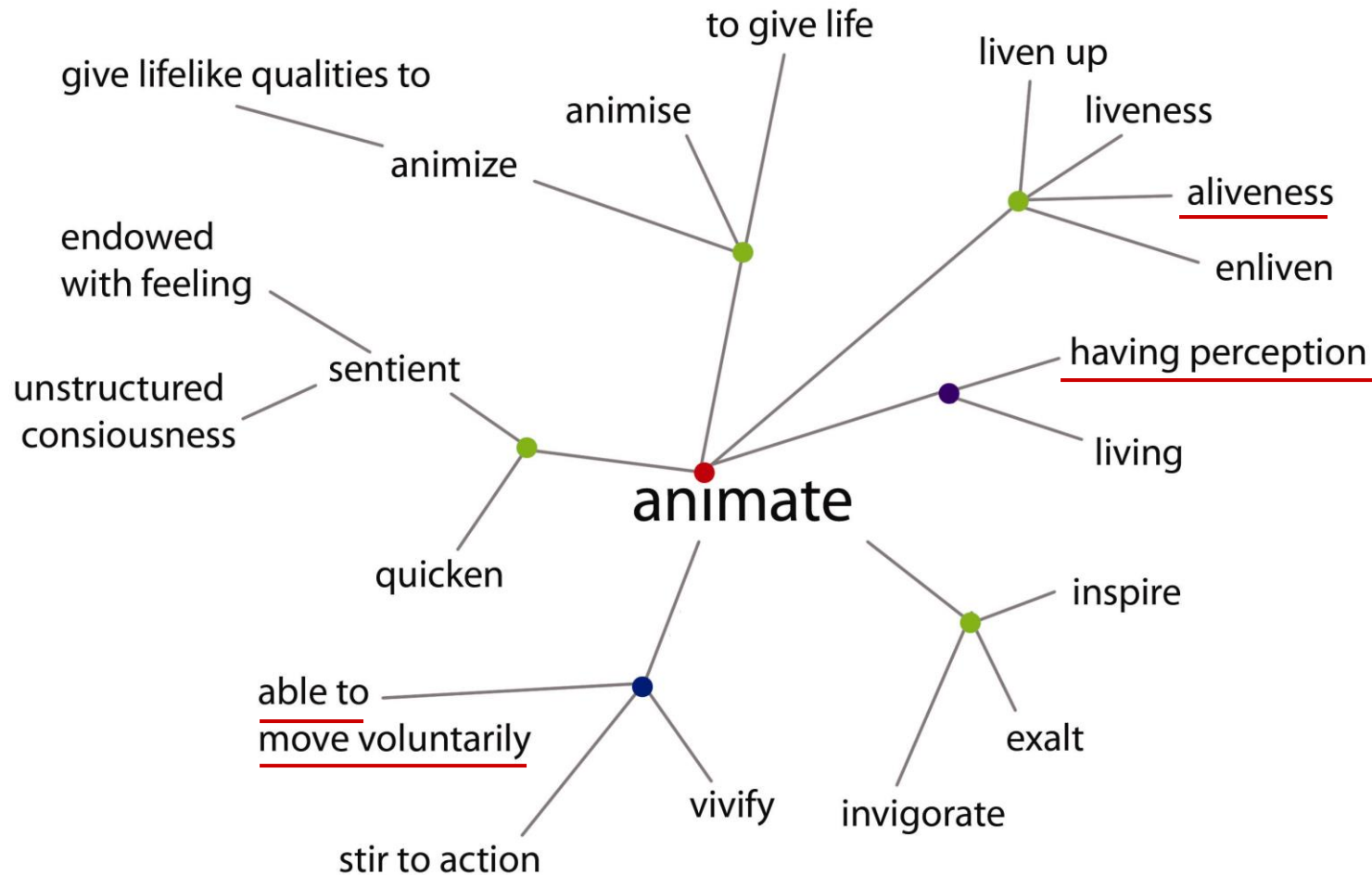
“Animate” for an System Management Product User means that the UI should

- Add
  - recall value
  - judgement
  - ownership

- Enhance
  - experience
  - learnability
  - structure

- Make
  - actions faster
  - tasks simpler

# Exploring Animation - Brainstorming



# What represents “Animate”

**Having Perception** - Understands, Communicates in commonly understood language.

**Ability to move voluntarily**- Makes Logical Decision, Responds to a situation based on Experience.

**Aliveness** - Proactive Communication.

# Concept 1 (Scenario)

Adam is a system administrator and he wants to perform a simple task of viewing logs for his host "stapkcfc.us.oracle.com".

He finds it really time consuming to use the User Interface to navigate to the task at hand . Often he wishes that this option was available up-front in one of the menus, rather than in the Administration > Log under the Host.



# Concept 1 (Need)

**Animate:** Having perception

Understands, Communicates in commonly understood language.

## **User Needs in Context of SMP**

- Perform the tasks fast

Easy Navigation

Easy to learn

Reduce time lost performing repetitive tasks

# Concept 1 (The Solution)

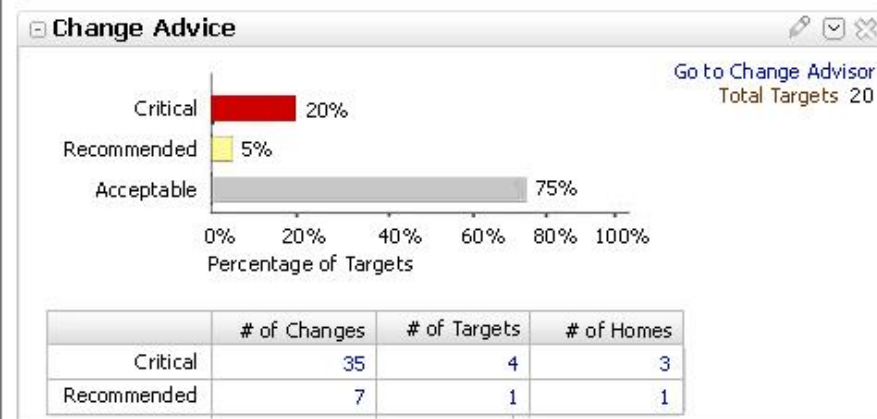
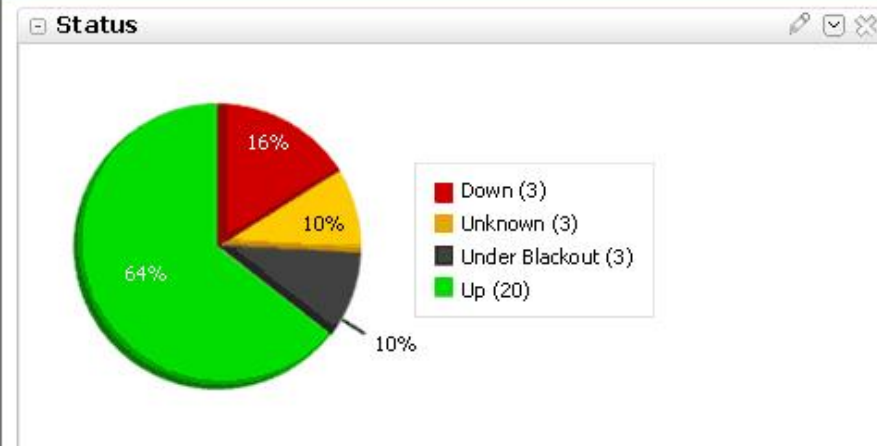
The user should be empowered to access the SMP features upfront. User knows exactly what they are looking for unlike a casual browser.

A rigid GUI forces the user to spend time understanding the information architecture. The structure comes in the way of a users task.

It would be really useful if somehow the user can access any feature in EM without having to understand the GUI Logic and structure.

This can be achieved by using a language which both the user and the interface are comfortable with. **A Command Line Interface along with the GUI appears to be an ideal solution.** This will make the user feel in control as well.

**EM as a virtual space without forced boundaries.**



### Getting Started

#### Returning Enterprise Manager User

- Now has a menu based navigation
- Smart Tables
- Contextual Menus
- Compliance Standards Management

[Read More...](#)

#### New Enterprise Manager User

### Events

Event Type									Last 24 Hours
Metric Alert	1	0	n/a	0	1	0	1	1	0
Metric Error	1	0	n/a	0	1	0	1	1	1
Standard Violation	1	0	0	0	1	0	1	0	0
Job Status	1	0	0	0	1	0	1	0	1
Others	1	0	0	0	1	0	1	0	0
	5	0	0	0	5	0	5	2	2

### Deployment Summary

Show Database Installations

Software Targets Without Inventory 4 of 13 Collection Problems 4

Database Installations	Targets	Installations	Interim Patch Applied
Oracle Database 10g 10.1.0.4.0	1	3	Yes
Oracle Database 10g 10.1.0.4.2	1	1	No
Oracle Database 10g 10.1.0.5.0	1	2	Yes
Oracle Database 10g 10.1.0.1.0	5	5	No
Oracle Database 10g 10.1.0.2.0	1	1	Yes

### Target Scorecard: Configuration Standards

Compliance Score	Targets
Critical	4
Warning	0
Acceptable	0

Total Events

#### Standards Summary

The table displays a summary of standards for compliance score events shown above

Name	Type	Targets	Applicable To	Events	Author
Test 5: 1g Inclu...	Configuration	2 0 0	DtHost	28	ORACLE
Test 1: 11g Dev...	Configuration	2 0 0	DtHost	4	ORACLE

### Resource Center

## Command Line Navigation

I want to



Action + Filter + Objects [eg. View All Targets]

## Actions

Add, Edit, Remove, Stop,  
Restart, View, Create, Configure  
[\[More...\]](#)

## Filters

All, \*, %  
[\[More...\]](#)

## Objects

<Target Type>, <Target Name>, Blackout, Compliance  
Standard, Monitoring Standard, Jobs, Events  
[\[More...\]](#)

## Concept 2 (Scenario)

Adam is a System Administrator in System Appliances Limited and he is in-charge of the business-critical “Time and Attendance Module” of his department. His job is to make sure that this service is always up and running.

In order to make sure that this service is always up, he needs to keep navigating between pages based on his monitoring needs.

Sometimes he wishes that the software was intelligent enough to navigate him to the screens which are most important to him.

## Concept 2 (Need)

**Ability to move voluntarily:** Makes Logical Decision, Responds to a situation based on Experience.

### **User Needs in Context of SMP**

- Perform the tasks fast

Easy Navigation

Easy to learn

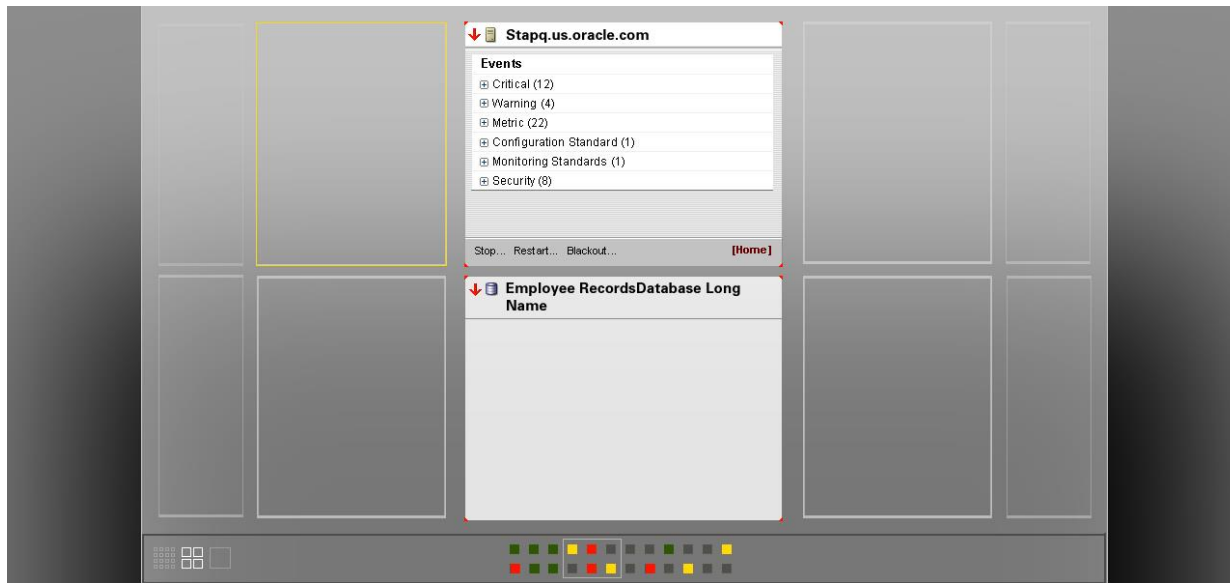
Reduce time lost performing repetitive tasks

# Concept 2 (The Solution)

As a Physical Space.

The targets can be treated as physical entities in space and the frame of focus will shift to the targets based on the business logic built in. If there is a target which is business critical and is down, then the frame of focus should shift on to this target automatically.

This is a monitor and diagnose model. The user will be navigated to the targets which require there immediate attention.



## Concept 3 (Scenario)

Adam is a System Administrator in System Appliances Limited and he takes care of multiple IT needs of the organization. Apart from his usual activities he is required to make sure that the Business Critical Servers are up and running.

His usual activities through the day are

- 1: Check mails to see if there are any service requests.
- 2: Communicate with the employees in the organization over the chat to respond to there needs.
- 3: Schedule Meetings using calendar.

He logs on to Enterprise Manager once in a while to make sure that the targets he is responsible for are performing well and are available.

He sometimes wishes that the targets were proactive like the staff in his organization and could communicate with him on the messenger.

This will eliminate the efforts of periodic monitoring.

## Concept 3 (Solution)

### **Targets act like real people.**

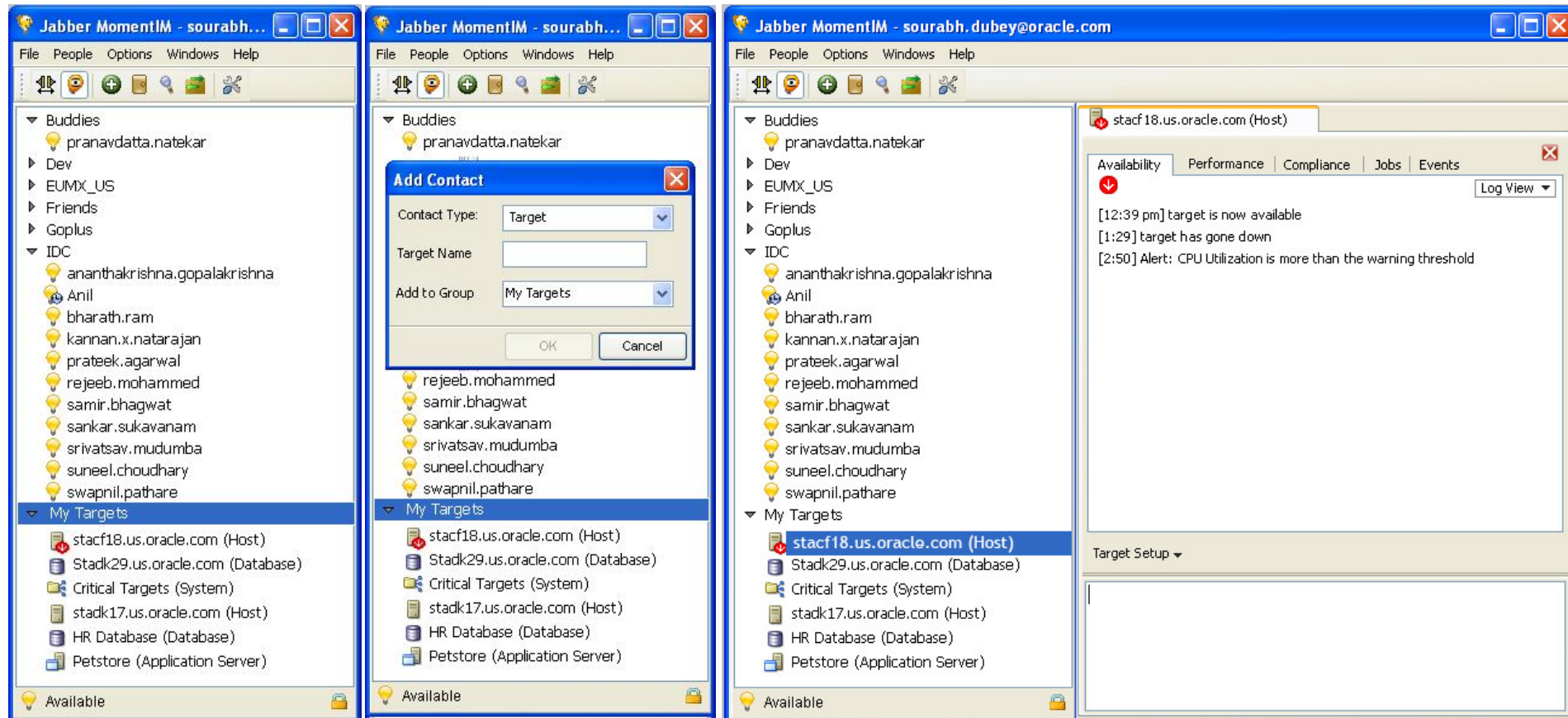
They will proactively ping the administrator in case of an emergency or a critical situation. This will save a lot of time for the administrator.

Typically an administrator is busy performing multiple tasks and it is logical to approach the administrator using a software which he commonly uses.

The administrator should be able to communicate to the target in easy to understand CLI (as proposed in concept 1)



# Concept 3 (Conceptual Interaction)



## Concept 4 (Scenario)

Adam is a System Administrator in System Appliances Limited and he takes care of multiple IT needs of the organization. Apart from his usual activities he is required to make sure that the Business Critical Servers are up and running.

His usual activities through the day are

1: Check mails to see if there are any service requests.

He logs on to Enterprise Manager once in a while to make sure that the targets he is responsible for are performing well and are available.

He sometimes wishes that the information about the SRs and the targets was available without logging on to the Enterprise Manager.

This will save precious time for him.

**Inbox for sourabh.dubey@oracle.com - Thunderbird**

File Edit View Go Message Tools Help

Get Mail Write Address Book Reply Reply All Forward Tag Delete Junk Print Back Forward Subject

All Folders

- sourabh.dube...@oracle.com
  - Inbox
  - Drafts (2)
  - Templates
  - Sent
  - Trash
  - Deleted Items
  - Sent Items
- Beehive
  - Inbox (49)
    - 10.2.0.5
    - 10204GCExitReview
    - 10GR2-Beta
    - 11.2GC
    - Accessibility
    - ADFR3
    - Admin
    - ASControl
    - AshishGor
    - BLAF+
    - CheckList
    - Dashboard
    - DB
    - DevTeam
    - EM11g
    - EMStyleGuide
    - EMUIFWK
    - Events
    - FUA
    - Fusion
    - Icons
    - IDC-UI Projects
    - interview
    - Jim
    - John
    - Kannan

Sender	Subject	Date
Ankit Garg	IDC RM Meeting	6/23/2008 10:15 PM
WAI.ON.LEE@...	Jim's on vacation this week <eom>	6/23/2008 10:25 PM
Jonathan Riel	Flex Prototypes; Beyond Mock-Ups	6/24/2008 12:13 AM
WAI.ON.LEE@...	Re: We will use your meeting place ID	6/24/2008 8:52 AM
lavnish lalch...	Re: EM logging : trace level	6/24/2008 11:49 AM
Harish Vinay	A selected row in a table does not seem to send a serve...	6/24/2008 11:49 AM
stadmin_in	[Fwd: This week's Discover@Work session on Thursday]	6/24/2008 1:40 PM
Ankit Garg	10.2.0.5GC update --- (Schedule, CC, Projects, ERs)	6/24/2008 2:06 PM
918041085808	Voice Mail	6/24/2008 4:02 PM
Tyler Horton	Re: A selected row in a table does not seem to send a se...	6/24/2008 6:45 PM
Lokeswara V...	Re: Issue regarding Usage of EMOBJECT class	6/24/2008 7:13 PM
WAI.ON.LEE@...	No staff meeting this week	6/24/2008 10:07 PM
Richard Miller	Did anyone attend Larry's preso / Q&A at ST Partnership?	6/24/2008 11:49 PM
WAI.ON.LEE@...	FW: Next Generation EM Kickoff	6/25/2008 2:55 AM
WAI.ON.LEE@...	Re: [Fwd: Interns Project Presentation]	6/25/2008 3:12 AM
WAI.ON.LEE@...	updates	6/25/2008 4:28 AM
Matthew Gru...	Re: Issue regarding Usage of EMOBJECT class	6/25/2008 4:49 AM

**Subject: FW: Alerts/failures**

**From:** [WAI.ON.LEE@ORACLE.COM](mailto:WAI.ON.LEE@ORACLE.COM)

**Date:** 5:22 AM

**To:** [rejeeb.mohammed@oracle.com](mailto:rejeeb.mohammed@oracle.com)

**Cc:** [sourabh.dubey@oracle.com](mailto:sourabh.dubey@oracle.com), [james.emmond@oracle.com](mailto:james.emmond@oracle.com)

Here's the information you need - see my notes on your Visio file.  
Could you incorporate?  
Thanks,  
Wai On

-----Original Message-----  
**From:** [HELEN.WU@ORACLE.COM](mailto:HELEN.WU@ORACLE.COM)  
**Sent:** Wednesday, June 25, 2008 4:49 PM  
**To:** [WAI.ON.LEE@ORACLE.COM](mailto:WAI.ON.LEE@ORACLE.COM)  
**Cc:** [ANDREW.YAO@ORACLE.COM](mailto:ANDREW.YAO@ORACLE.COM); [TOM.HSU@ORACLE.COM](mailto:TOM.HSU@ORACLE.COM); [GODVIN.VAZ@ORACLE.COM](mailto:GODVIN.VAZ@ORACLE.COM); [RAJAGOPAL.MARRIPALLI@ORACLE.COM](mailto:RAJAGOPAL.MARRIPALLI@ORACLE.COM); [rejeeb.mohammed@oracle.com](mailto:rejeeb.mohammed@oracle.com); [SOURABH.DUBEY@ORACLE.COM](mailto:SOURABH.DUBEY@ORACLE.COM); [GOVINDA.SAMBAMURTHY@ORACLE.COM](mailto:GOVINDA.SAMBAMURTHY@ORACLE.COM)  
**Subject:** Re: Alerts/failures

Unread: 49 Total: 172

### Enterprise Communicator

#### Etrade Services

- Etrade
- Mail Host
- Service DB
- Payroll
- Sales

#### Payroll (Application Server)

##### 6 Service Requests

- Application is Not Responding**  
Kannan.Natarajan [SR Age: 15 min]  
I have been trying to perform queries on the Payroll Application server but it seems that it is down. Please make this target available again.

#### Alerts Log

- + 3 CPU Utilization Exceeds Critical
- + 5 CPU Utilization Exceeds Warning

## Concept 5 (Scenario)

Adam is a System Administrator in System Appliances Limited and he is in-charge of the IT infrastructure of his organization. His job includes keeping an eye on all the 9 hosts, on which multiple targets are deployed.

He regularly visits the Hosts dashboard page to see the status of all the hosts in a single glance. It takes some time for him to understand the overall health of the system.

Sometimes he wishes that he was able to monitor the system in a single glance and did not have to spend too much time analyzing the charts and the textual information. He wishes if monitoring the infrastructure was more intuitive.

## Concept 5 (Need)

**Liveness:** Appear alive and can displays different signs of life such as movement, energy.

### **User Needs in Context of SMP**

- Understand the information easily

Save time on analyzing the data.

Easy to learn

Reduce time spent on monitoring by making it more effective

## Concept 5 (The Solution)

## As a Natural System.

Enterprise IT Infrastructure is like any other ecosystem which exists around us. There are certain characteristics of a healthy system which are apparent by just looking at it and without analyzing.

We are using a metaphor of a Fish Aquarium to represent the IT infrastructure. The fishes in the aquarium represents different targets.

There are three basic things which are monitored in any system

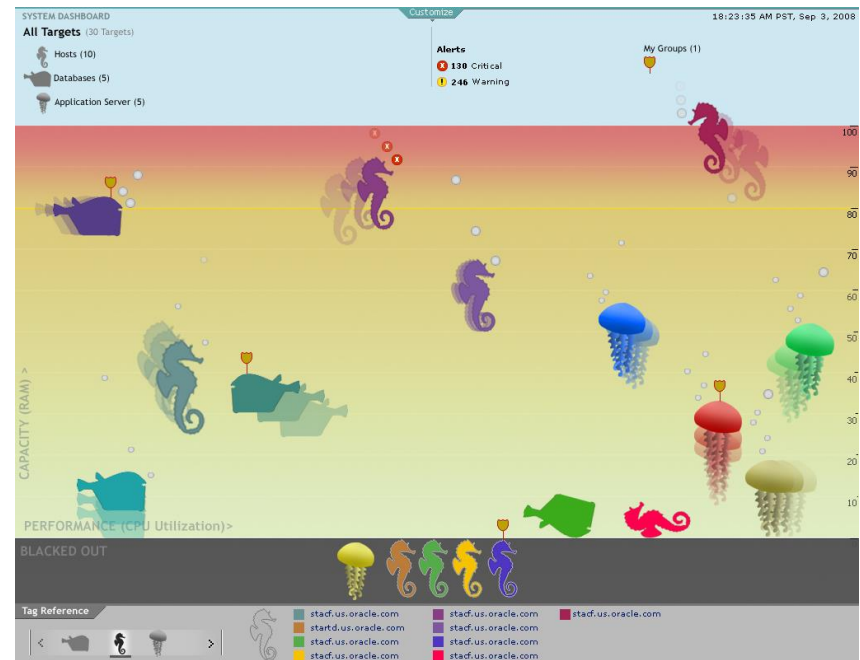
## Capacity

## Performance

## Availability

This unique interface captures these three parameters.

User can put different metrics for capacity, performance and availability based on the relevance to the target. For example a host performance will be measured by Capacity (RAM) and Performance (CPU Utilization) and Status for Availability



# Project 2. Animation Semantics - Conclusion

- Created a presentation providing concepts and ideas
- Presented the concepts and ideas to the head of Design team.

# Overall Feedback

- The Large Screen Display guidelines will be implemented in the next release of EM product.
- The Animation Semantics will be used for the futuristic approach for the EM product.



● Thank You!