



# Enterprise Manager Cloud Control 12c

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imagination at work



# Our Company

**GE is a diversified technology, media and financial services company focused on solving some of the world's toughest problems.**

**With products and services ranging from aircraft engines, power generation, water processing and security technology to medical imaging, business and consumer financing, media content and industrial products, we serve customers in more than 100 countries and employ more than 320,000 people worldwide.**

# GE Corporate Initiatives Group

- Provides database leadership services to all application development and support groups within Corporate GE and select business divisions.
- Partner with Application Teams in the design, development, and implementation and control of IT solutions.

# CIS Environment Complexity

## Support for:

- 3 Major Data Centers
- 2500 databases
- 200 Tb total storage
- 400 ERP Instances
- 1000 Non-ERP Instances
- 200 SQL Server Instances
- 300 Database Servers

## Types:

- **Databases**
  - Oracle RDBMS
  - SQL Server
  - MySQL
- **Operating Systems**
  - Linux
  - Solaris
  - Windows
- **ERP**
  - Oracle E-Business Suite
  - Peoplesoft

# Challenges

- Scalability
  - Many targets in different divisions/verticals with support for segregation of duties
  - Automation for target adds
- Operational Standardization
  - Noise reduction, reaction time & control improvements
  - Standardizing alert response.
  - Trend Analysis
- Security
  - Role Management
  - Target / Group assignment

# Scalability Solution

EM 12c provides multiple new features that will ease the burden of managing a large number of targets in a diverse support organization.

## Administration Groups

- Structured hierarchy to match business structure
- Building blocks for target administration

## Template Collections

- Bundled monitoring settings and compliance standards
- “Automatic” inheritance of monitoring attributes

## Incident Rules

- Route the right incidents to the right support group
- Escalation rules for mission critical targets

# Administration Groups

## EM 12c Administration Groups add structure and manageability where large numbers of targets exist

- Strategize optimal hierarchy to meet your business need
- 4 Tier strategy:
  - Level 1 – **Lifecycle Status**
  - Level 2 – DBA Support **Department**
  - Level 3 – **Line of Business** being supported
  - Level 4 – **Contact** LOB Subdivision
    - Systems
    - Targets

**Template Collections** containing monitoring templates and compliance standards applied at various levels

### Hierarchy Levels

+ Add - Remove

Property
Lifecycle Status
Department
Line of Business
Contact

### Lifecycle Status: Property Values for Membership Criteria

+ Add - Remove Merge Split

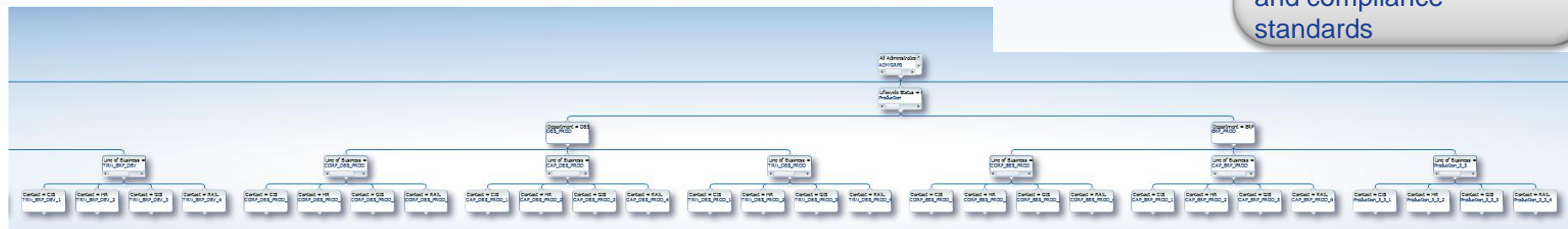
Criteria
Development
Mission Critical Or Production
Staging Or Test

LifeCycle Status = Mission Critical Or Prod  
Production  
Template Collection

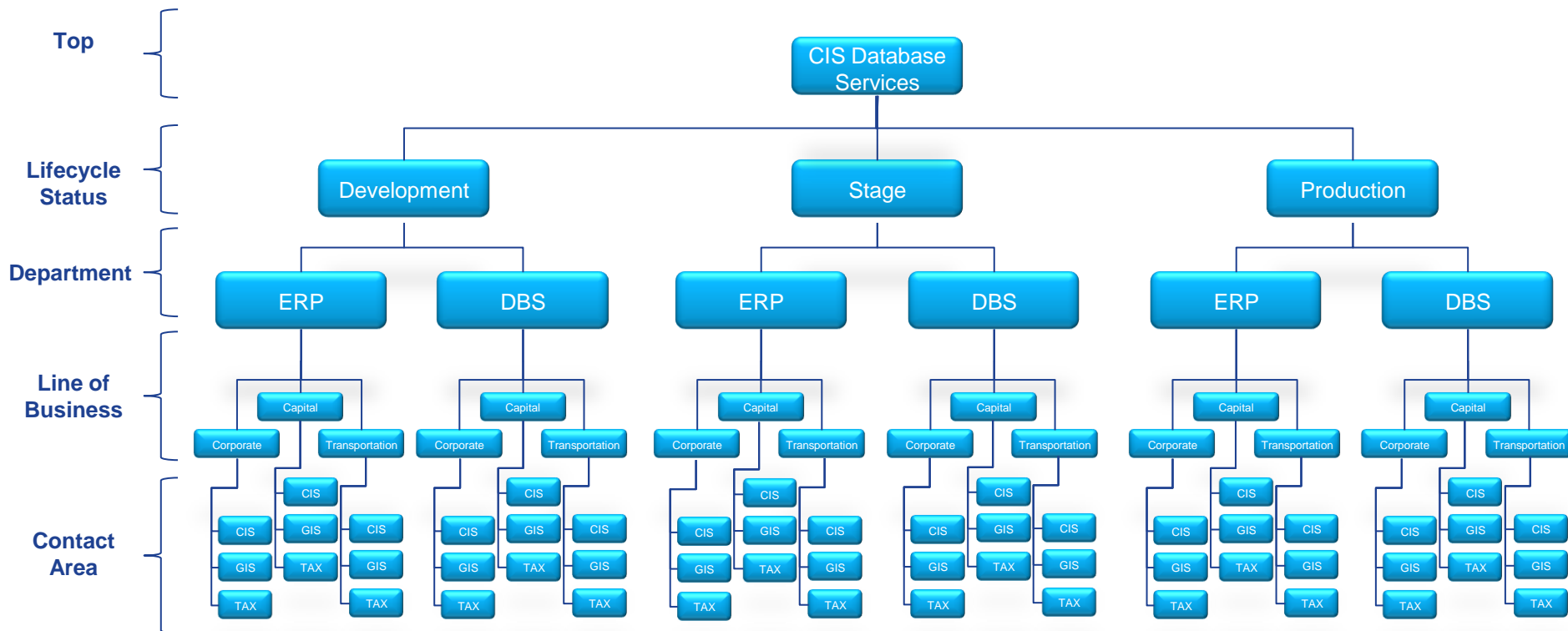
Name	GE Template 1
Created On	Sep 6, 2011
Created By	SYSMAN

All Administration Groups (ADMGRP0)  
Mission Critical Or Production (Production)

Result: Automated deployment of monitoring and compliance standards



# Administration Groups at GE



1. Top Level: Our Service Name

2. Lifecycle Status: Dev, Stage, Production

3. Department: Subdivisions of our Service

4. Line of Business: Customer's Business

5. Contact Area: Subdivision of Business

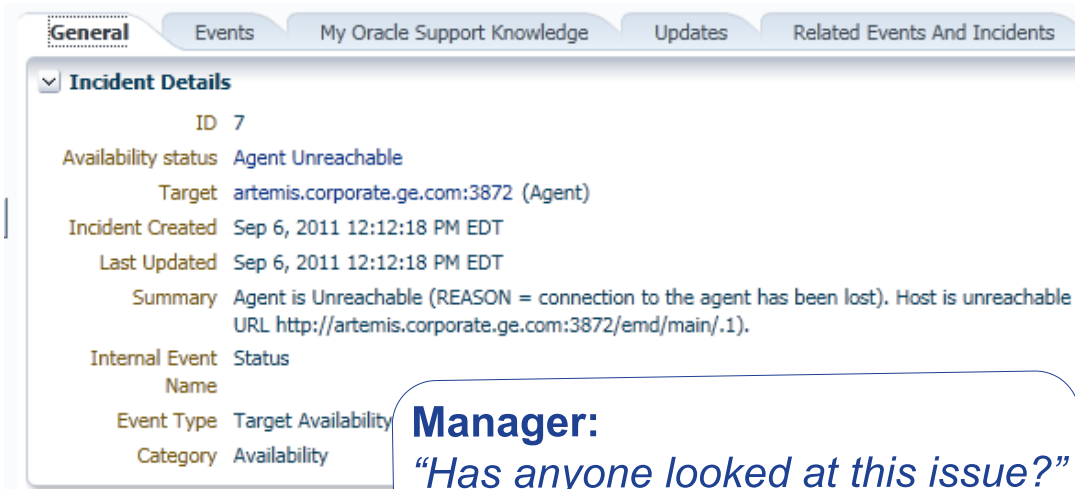


# Operational Standardization

EM 12c allows us to replace a highly maintained custom incident management solution with an out-of-the box alternative

## Incident Management

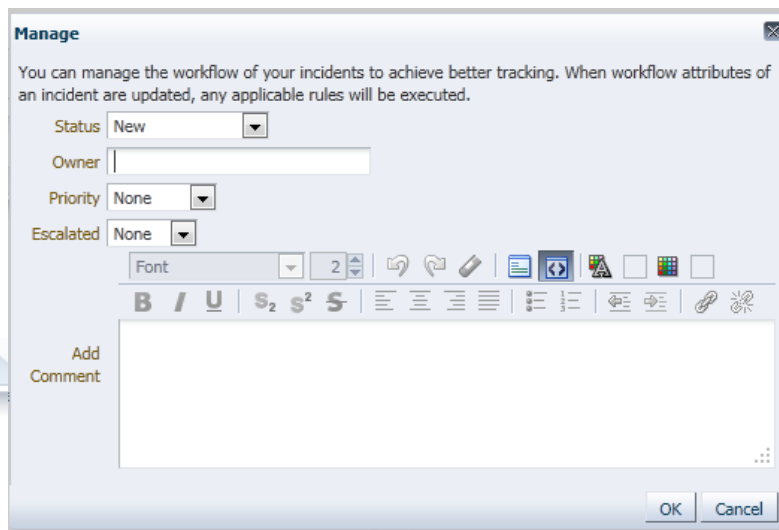
- Insure accountability for alert remediation
- Build on lessons learned
- Meet and enhance service levels



The screenshot shows the 'Incident Details' page in Oracle Enterprise Manager. The 'General' tab is selected, showing incident information for ID 7. The availability status is 'Agent Unreachable'. The target is 'artemis.corporate.ge.com:3872 (Agent)'. The incident was created and last updated on Sep 6, 2011 at 12:12:18 PM EDT. The summary states: 'Agent is Unreachable (REASON = connection to the agent has been lost). Host is unreachable (REASON = connection to the host has been lost). URL http://artemis.corporate.ge.com:3872/emd/main/.1)'. The internal event name is 'Status' and the event type is 'Target Availability'. The category is 'Availability'.

### Manager:

*“Has anyone looked at this issue?”*  
*“What have they done so far?”*  
*“How did they fix it?”*



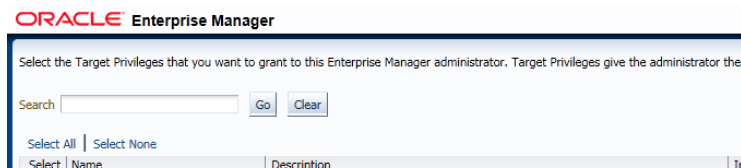
The screenshot shows the 'Manage' dialog box in Oracle Enterprise Manager. It allows users to manage the workflow of incidents. The status is set to 'New', priority is 'None', and it is not escalated. There is a text area for 'Add Comment' and 'OK'/'Cancel' buttons.

### DBA:

*“What is the problem?”*  
*“Has this happened before?”*  
*“Are there any notes on fixing this?”*

# Security

Enhanced security features in EM 12c allows different types of OEM use.

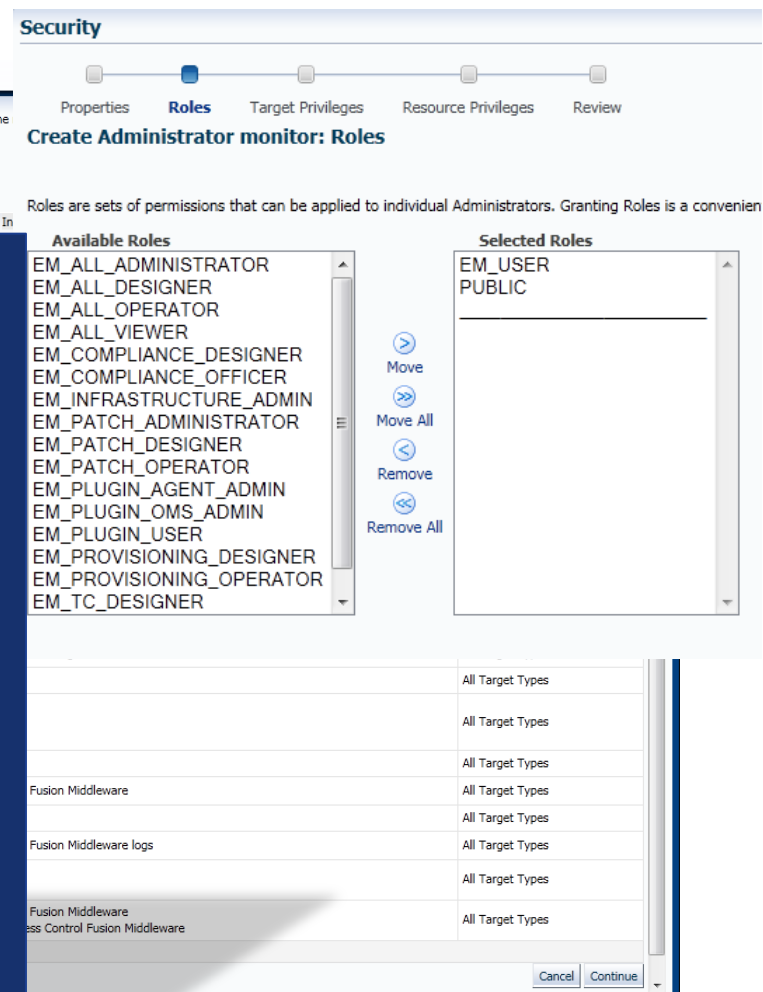


## Role Management

- Out-of-the-box roles for different types of OEM users.

## Target/Group Assignment

- Security compliance rules automatically applied to targets as they join an administration group
- Ease of use in updating security compliance rules
- Ensures consistency and completeness of security compliance checks across the enterprise



# Projected Benefits

EM 12c will streamline our internal processes resulting in savings

## **Improve customer service levels**

- Enterprise Manager facilitates our implementation of standard incident management processes

## **Save 20% administrator time through automation of target management**

- Eliminate manual tasks required to deploy monitoring, compliance settings, manage target privileges
- Enables us to focus on strategic, planning tasks

## **Cost savings will improve bottom line**

- Built-in Enterprise Manager features replace cost of developing/maintaining custom solution
- Replace custom dashboarding solutions, saving additional administration and licensing fees



# Questions?



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