OFFICIAL MICROSOFT LEARNING PRODUCT

# 10965A

## IT Service Management with System Center Service Manager

Product Number: 10965A

Part Number (if applicable):

Released:

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## Justin Kimber – Content Developer

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# Module 1

## Service Management Overview

### Contents:

# Lesson 1
# Introduction to System Center 2012

## Contents:

## Question and Answers

**Question:** You need to provide a solution to monitor the performance and availability of critical business applications and services. What System Center 2012 component provides these features?

**Answer:** Operations Manager

# Lesson 2
# System Center 2012 SP1 Service Manager Overview and Key Features

## Contents:

## Question and Answers

**Question:** What is the definition of an incident in service management as defined by Information Technology Infrastructure Library?

> **Answer:** As defined by Information Technology Infrastructure Library, an incident is an unplanned disruption or degradation of service.

Lesson 3
# Information Technology Infrastructure Library and Microsoft Operations Framework

## Contents:

## Question and Answers

**Question:** What are the four phases of the IT service life cycle as defined by Microsoft Operations Framework?

**Answer:** The four phases of the IT service life cycle are:

- Plan
- Deliver
- Operate
- Manage

Lesson 4
# Adopting ITIL/ MOF Best Practices with Service Manager

## Contents:

## Question and Answers

**Question:** How is incident prioritization managed in Service Manager?

**Answer:** Service Manager enables you to configure specific values for the Impact and Urgency fields when it generates incidents, and then based on the values set, will return a configurable priority, which can be used to group and report on specific incidents in the environment. This can also be used when you configure views within Service Manager that allow specific operators such as Tier 1 or Tier 2 support operators to view and work on incidents that relate to them.

## Demonstration: The Service Manager Console

### Demonstration Steps

1. On LON-SM0, click **Start**, and then click **Service Manager Console**.
2. In the Service Manager console, click the **Work Items** pane.
3. Expand the **Work Items** node, and then expand **Activity Management**.
4. Note the various Activity Management views that are available.
5. Expand **Review Activities**, and then click **All Activities**.
6. In the details pane, click the **Approve Change Request** activity and then from the **Tasks** pane, click **Edit**.
7. In the **Approve Change Request** form that opens, view the **Title**, **Description**, **Stage**, and **Approval Condition** fields. Click **Cancel**, and then in the **Service Manager** window, click **Yes**.
8. Expand the **Work Items** node, and then expand **Change Management**.
9. Note the various Change Management views that are available.
10. Click **All Change Requests**, and then from the details pane, click **Standard Change Request**.
11. From the **Tasks** pane, click **Edit**.
12. In the Standard Change Request form that opens, click the **General** tab, and review the options that are available.
13. Click the **Planning** tab, and review the scheduled start and end dates.
14. Click the **Activities** tab, and note the Approve Change activity that was shown in Task 1.
15. Click the **Related Items** tab, and note the related items that can be added to the change request.
16. Click the **History** tab, and expand the history items to view their contents.
17. Click **Cancel**, and then in the **Service Manager** window, click **Yes** to close the Standard Change Request form.
18. Expand the **Work Items** node, and then expand **Incident Management**.
19. Note the various incident management views that are available.
20. Click **All Incidents**, and then in the details pane, click the **Intranet Site Unavailable** incident.
21. From the **Tasks** pane, click **Edit**.
22. Note the various tasks that can be applied to the incident, including Apply Template and Create Change Request.

23. Review the fields on the **General** tab of the incident, including **Affect user**, **Impact**, **Urgency**, and **Priority**.
24. Click the **Resolution** tab, and note the Time Worked and Resolution Details sections.
25. Click **Cancel** to close the incident form.
26. Expand the **Work Items** node, and then expand **Problem Management**.
27. Note the various problem management views that are available.
28. Click **Active Problems**, and then in the details pane, click the **Intranet Web Server Down** problem. Then from the **Tasks** pane, click **Edit**.
29. In the Intranet Web Server Down form that opens, review the fields on the **General** tab, including **Source**, **Category**, and **Affected Services**.
30. Click the **Related Items** tab, and view the incidents that are associated with the problem in the Work Items section.
31. View the related computers that are shown in the **Configuration Items** section.
32. Review the **tasks** that can be used with the problem, such as **Create Change Request**, Create **Release Record**, and **Change Status**.
33. Click **Cancel** to close the Intranet Web Server Down problem form.
34. Expand the **Work Items** node, and then expand **Release Management**.
35. Note the various release management views that are available.
36. Click **Release Records: All**, and then in the details pane, click the **Intranet Software Update** release record. Then from the **Tasks** pane, click **Edit**.
37. In the Intranet Software Update release record form that opens, review the details on the **General** tab, and then click the **Release Package** tab.
38. Note the Configuration Items To Modify and Affected Services sections, and then click the **Activities** tab.
39. Note the various activities that are associated with the release record.
40. Click the **Documentation** tab, and review the details.
41. Click the **Scheduling** tab, and review the release schedule dates that can be configured.
42. Click **Cancel**, and then in the **Service Manager** window, click **Yes** to close the Intranet Software Update release record form.
43. Expand the **Work Items** node, and then expand **Service Request Fulfillment**.
44. Note the various service request fulfillment views that are available.
45. Click **All Open Service Requests**, and in the details pane, double-click **Incident Management Service Request**.
46. In the Incident Management Service Request form that opens, review the details on the **General** tab, including the **Affected User**, **Title**, and **Description** fields.
47. Click the **Activities** tab, and view the list of activities associated with the service request.
48. Click the **Related Items** tab, and note the affected configuration items and work items related to the service request.

49. Click **Cancel**, and then in the **Service Manager** window, click **Yes** to close the Incident Management Service Request form.

# Module Review and Takeaways

## Review Question(s)

**Question:** How does Service Manager manage incident categorization?

**Answer:** In Service Manager, when incidents are created, you can specify the classification category of the incident. This can then be used to group or report on incidents based on category. There are a number of default classification categories built-into Service Manager, and custom categories can also be added for specific categories relevant to your environment.

## Real-world Issues and Scenarios

Before you start to plan your Service Manager deployment, you should have a basic understanding of the processes and procedures as defined in Microsoft Operations Framework and Information Technology Infrastructure Library. To learn more about Microsoft Operations Framework, you can go here: http://go.microsoft.com/fwlink/?LinkID=390245.

## Tools

The Service Manager Connector for Exchange can be used to manage incidents and change requests via email. You can download the System Center Service Manager Connector 3.0 for Exchange from the following website: http://go.microsoft.com/fwlink/?LinkID=390246.

# Lab Review Questions and Answers

## Lab: Exploring the Service Manager Console

## Question and Answers

## Lab Review

**Question:** What are the six work item types included in Service Manager?

**Answer:** The six work item types included in Service Manager are:

- Activities
- Change requests
- Incidents
- Problems
- Release records
- Service requests

# Module 2

## Installing System Center 2012 SP1 Service Manager

### Contents:

# Lesson 1
# System Center 2012 Service Manager Architecture and Core Components

## Contents:

## Question and Answers

**Question:** What are the three data warehouse jobs that take data from the Service Manager database and make it available in the data warehouse database for reporting purposes?

**Answer:** Extract, Transform, and Load.

# Lesson 2
# Hardware and Software Requirements

## Contents:

## Question and Answers

**Question:** The Service Manager console cannot be installed on a computer running the Windows 7 operating system.

( ) True

( ) False

**Answer:**

( ) True

(√) False

Lesson 3
# Security Requirements

## Contents:

## Question and Answers

**Question:** What are the security requirements of the account used to register the Service Manager data warehouse Management Group with the Service Manager Management Group?

> **Answer:** The account used to register the Management Groups must be a member of the Administrators user role in both Management Groups and must be a member of the local administrators group on the data warehouse management server.

# Lesson 4
# Installing System Center 2012 SP1 Service Manager

## Contents:

## Question and Answers

**Question:** What is the first component that is installed when you are deploying a new Service Manager Management Group?

**Answer:** The Service Manager management server

## Demonstration: Installing System Center 2012 SP1 Service Manager

### Demonstration Steps

1. On **LON-SM1**, navigate to **\\LON-DC1\Media\System Center 2012 SP1 Service Manager\amd64** and double-click **Setup.exe**.
2. On the Service Manager Setup Wizard page that opens, click **Service Manager management server**.
3. On the **Product registration** page, select **Install as an evaluation edition** and then select **I have read, understood, and agree with the terms of the license terms**. Then click **Next**.
4. On the **Installation location** page, click **Next**.
5. On the **System check results** page, click **Next**.
6. On the **Configure the Service Manager database** page, click **OK** in the **Configure database** window and then click **Next**.
7. On the **Configure the Service Manager management group** page, type **CONTOSO** in the **Management group name** box and then, next to **Management group administrators**, click **Browse**.
8. In the **Select User or Group dialog** box that opens, type **Domain Admins** in the **Enter the object names to select** box, and then click **OK**.
9. On the **Configure the Service Manager management group** page, click Next.
10. On the **Configure the account for Service Manager services** page, select **Doman account** and then type **SM_Services** in the **User name** box.
11. Type **Pa$$w0rd** in the **Password** box, and then under **Domain**, select **Contoso**.
12. Click **Test Credentials** and then click **Next**.
13. On the **Configure the Service Manager workflow account** page, select **Domain account** and then type **SM_Workflow** in the **User name** box.
14. Type **Pa$$w0rd** in the **Password** box and then, under **Domain**, select **Contoso**.
15. Click **Test Credentials** and then click **Next**.
16. On the **Help improve Microsoft System Center 2012 – Service Manager** page, select **No, I am not willing to participate** and then click **Next**.
17. On the **Use Microsoft Update to help keep your computer secure and up-to-date** page, select **I do not want to use Microsoft Update and clear Initiate machine wide Automatic Update**. Then click **Next**.
18. On the **Installation Summary** page, click **Cancel** and then click **Yes** to cancel the installation**.**

# Lesson 5
# Upgrading to System Center 2012 Service Manager

## Contents:

## Question and Answers

**Question:** What is the minimum supported version of Service Manager 2010 that can be upgraded to System Center 2012 Service Manager?

**Answer:** You must be running Service Manager 2010 Service Pack 1 with Cumulative Update 3.

# Module Review and Takeaways

## Review Question(s)

**Question:** What permissions must the account used for the Orchestrator connector have?

> **Answer:** The account used for Orchestrator must have Read, List, and Publish permissions to the root Runbook folder and all child objects in Orchestrator.

## Real-world Issues and Scenarios

When Service Manager is being installed, setup fails if the specified SQL Server instance name includes a $ character. In this scenario, you must select a SQL Server instance that does not include a $ character in its name.

## Tools

When planning your System Center 2012 SP1 Service Manager deployment, you can use the Sizing Helper for System Center 2012 Service Manager to help determine the hardware requirements based on your environment. You can download the Sizing Helper for System Center 2012 Service Manager from the following website: http://go.microsoft.com/fwlink/p/?LinkID=232378

## Common Issues and Troubleshooting Tips

| Common Issue | Troubleshooting Tip |
|---|---|
| When installing or upgrading to System Center 2012 SP1 Service Manager, setup might fail if you have the Service Manager 2010 Authoring Tool installed. | You must remove the Authoring Tool before running setup. |

# Lab Review Questions and Answers

## Lab A: Installing System Center 2012 SP1 Service Manager

## Question and Answers

## Lab Review

**Question:** What are the names of the three Windows Services that are installed on a Service Manager management server?

> **Answer:** The three Windows Services that are installed on a Service Manager management server are System Center Management, System Center Data Access Service, and System Center Management Configuration.

**Question:** After installing either the Service Manager management server or data warehouse management server, what should you do to protect the data in the Service Manager databases?

> **Answer:** After installing either the Service Manager management server or data warehouse management server, you should use the Encryption Key Backup Or Restore Wizard to make a backup of the encryption key.

**Question:** After installing the Service Manager data warehouse management server, the Data Warehouse workspace does not appear in the Service Manager console. What could be the cause of this?

> **Answer:** After installing the Service Manager data warehouse management server, you must register the Service Manager Management Group with the data warehouse Management Group.

## Lab B: Upgrading to System Center 2012 Service Manager

## Question and Answers

**Question:** Before upgrading Service Manager 2010 to System Center 2012 Service Manager, what should you do?

> **Answer:** You should ensure that there is a backup of all Service Manager databases and encryption keys. Additionally, you should back up any unsealed Management Packs.

**Question:** What is the upgrade order when upgrading Service Manager 2010 to System Center 2012 Service Manager?

> **Answer:** You should first upgrade the data warehouse management server. Then the first management server should be upgraded. Then the Service Manager consoles and any additional Service Manager management servers should be upgraded.

**Question:** How do you upgrade the Service Manager 2010 Self-Service Portal?

> **Answer:** The Service Manager 2010 Self-Service Portal cannot be upgraded. The System Center 2012 Service Manager Self-Service Portal must be installed as new.

# Module 3

## Configuring Base Settings in Service Manager

### Contents:

# Lesson 1
## System Center 2012 Service Manager Base Configuration

### Contents:

## Question and Answers

**Question:** Before you can assign work items to users in Service Manager, what must you do?

> **Answer:** You must configure the Active Directory Connector and synchronize AD DS with Service Managers configuration management database (CMDB).

## Demonstration: Configuring Base Settings

### Demonstration Steps

1. On LON-SM1, click **Start**, and then click **Service Manager Console**.
2. In the Service Manager console, click the **Administration** pane, and then click **Settings**.
3. From the details pane, double-click **Data Retention Settings**.
4. In the **Data Retention Settings** dialog box that opens, click the **Work Items** tab, and then set the **Data Retention** as shown below.
    - Incident Retention Time: **7 days**
    - Change Request Retention Time: **7 days**
    - Release Record Retention Time: **7 days**
    - Service Request Retention Time: **7 days**
    - Problem Retention Time : **7 days**
5. In the **Data Retention Settings** dialog box, click **OK**.

# Lesson 2
# Configuring Notifications

## Contents:

## Question and Answers

**Question:** What function do notification templates perform in Service Manager?

**Answer:** Notification templates define the type and format of the email message that is sent in an email notification.

Lesson 3

# Integrating System Center 2012 Service Manager by Using Connectors

## Contents:

## Question and Answers

**Question:** What is the primary function of the Operations Manager Alert connector in Service Manager?

**Answer:** It synchronizes alerts in Operations Manager with incidents in Service Manager.

# Lesson 4
## Configuring the Exchange Connector

### Contents:

## Question and Answers

**Question:** You need to update the status of an incident by using email. What should you include in the subject of the email?

**Answer:** You should include the ID of the incident enclosed in square brackets.

# Lesson 5
# Configuring Business Services

## Contents:

## Question and Answers

**Question:** What connector in Service Manager is used with business services?

**Answer:** The Operations Manager CI connector.

# Module Review and Takeaways

## Review Question(s)

**Question:** What is the primary function of the Operations Manager CI connector in Service Manager?

**Answer:** To import configuration items in Operations Manager into Service Managers configuration management database (CMDB).

## Real-world Issues and Scenarios

It is important that you configure the Service Manager Connectors so that they synchronize data from external sources such as Operations Manager and Configuration Manager. By doing this, you can associate them with work items in Service Manager, including Incidents, Problems, and Change Requests.

# Lab Review Questions and Answers

## Lab: Configuring System Center 2012 SP1 Service Manager

## Question and Answers

## Lab Review

**Question:** You need to reduce the number of days that Service Manager keeps closed change requests. What should you do?

> **Answer:** You should edit the data retention settings in the Settings node of the Administration pane in the Service Manager console.

**Question:** When configuring the notification channel for notification in Service Manager, what address should be used for the return email address?

> **Answer:** The email address used for the return email address in the notification channel should be that of the Service Manager Workflow Run As account.

**Question:** You have imported a Management Pack from Operations Manager that contains a Distributed Application Diagram. What else should you do to enable the automatic creation of a business service?

> **Answer:** You should create or refresh the Operations Manager CI connector to include the Management Pack and any other relevant Management Packs, and then synchronize the connector.

# Module 4

## Configuring Incident and Problem Management

### Contents:

# Lesson 1
## The Definition of an Incident and a Problem

### Contents:

## Question and Answers

**Question:** Name three objectives in incident management.

**Answer:** The main objectives of incident management include:

- Restore the IT service as quickly as possible.
- Minimize the adverse impact that incidents have on business operations.
- Maintain the highest levels of service availability and quality.
- Ensure that incidents are processed in a consistent manner.
- Direct support resources where they are most needed.

# Lesson 2
# Managing Incidents

## Contents:

## Question and Answers

**Question:** What does the Escalate or Transfer task do when managing incidents?

**Answer:** The Escalate or Transfer task can be used to change the support group that the selected incidents are part of. This is useful when you need to transfer an incident to a different incident resolver that is a member of a different support group, such as tier 3. When you use the task, you can optionally set the incident to Escalated, which is useful when used in conjunction with queues because incidents can be filtered based on their escalation status and support group. You must include a comment when you use this task, which is added as a log entry to the Incidents Action log.

## Demonstration: Creating Incidents

### Demonstration Steps

1. On LON-SM1, click **Start**, and then click **Service Manager Console**.
2. Click the **Work Items** pane, and expand **Incident Management**. Then click **All Incidents**.
3. From the **Tasks** pane, click **Create Incident**.
4. In the **Incident** form that opens, configure the following fields as shown below.
   - Affected User: **Administrator**
   - Title: **Internet Explorer fails to open**
   - Description: **When opening Internet Explorer, an error stating "iexplorer.exe is corrupt" appears.**
   - Classification Category: **E-Mail Problems**
   - Source: **Console**
   - Impact: **Medium**
   - Urgency: **High**
   - Support Group: **Tier 1**
   - Assigned To: **sm_IncidentResolver**
5. Under Affected Items, click Add.
6. In the **Select objects** window that opens, under **Available objects**, select LON-SM1, and click **Add**. Then click **OK**.
7. Click **OK** on the **Incident** form.
8. Confirm that the **Internet Explorer fails to open** incident is displayed in the details pane of the All Incidents view.

# Lesson 3
# Managing Problems

## Contents:

## Question and Answers

**Question:** What are the three statuses that a problem record can be in?

**Answer:** Active, Closed, or Resolved.

Lesson 4
# Using Queues and Views with Incidents and Problems

## Contents:

## Question and Answers

**Question:** What is the primary function of queues in Service Manager?

> **Answer:** Queues are used to group collections of work items, such as incidents or problem records.

# Module Review and Takeaways

## Review Question(s)

**Question:** What is the Affected Items element of an incident used for?

> **Answer:** The Affected Items section provides the ability to add the configuration items that are affected by the incident—for example, the computer that the incident has directly affected. This is useful because the incident is then associated with the computer's configuration item and can be opened directly from the Related Items tab.

## Real-world Issues and Scenarios

When working with incidents and problem records in Service Manager, you should, where possible, use incident templates to automatically populate common fields. You should also consider keeping the known errors and knowledge articles updated regularly because this information can be used to help troubleshoot reoccurring problems and resolve the problem in a timely manner.

# Lab Review Questions and Answers

## Lab: Configuring Incident and Problem Management

## Question and Answers

### Lab Review

**Question:** What is the primary function of incident templates in Service Manager?

**Answer:** Incident templates enable you to automatically populate fields in an incident with common values. This helps when creating incidents and can be used to ensure that mandatory fields are completed.

# Module 5

## Configuring Activity, Change, and Release Management

### Contents:

# Lesson 1
# Managing Activities in Microsoft System Center 2012 Service Manager

## Contents:

## Question and Answers

**Question:** What is the function of runbook automation activities in Service Manager?

> **Answer:** Runbook automation activities in Service Manager are used to initiate Orchestrator runbooks to automate a process.

# Lesson 2
# Configuring Change Management

## Contents:

## Question and Answers

**Question:** You need to restart a change request from a specific activity. How can you do this?

**Answer:** The Return To Activity task can be used to restart the change request from a specific activity.

## Demonstration: Creating change requests

### Demonstration Steps

1. In the Service Manager console, click the **Work Items** pane and then expand **Change Management**.
2. Click the **All Change Requests** view, and then, from the **Tasks** pane, click **Create Change Request**.
3. In the **Select Template** window that opens, click **Minor Change Request**, and then click **OK**.
4. In the **Minor Change Request** form that opens, configure the **General** tab as follows.
    - Title: **Install new software application**
    - Description: **Change Request to control the test and deployment of the new Accounting Application**
    - Area: **Software\Application**
    - Assigned to: **SM_ChangeManager**
    - Priority: **High**
    - Impact: **Standard**
    - Risk: **Low**
5. Click the **Planning** tab, and then, next to the **Scheduled start date** box, click the calendar icon and select today's date.
6. Next to the **Scheduled end date** box, click the calendar icon and select tomorrow's date.
7. Click the **Activities** tab, and then double-click the first activity named **Approve Change Request**.
8. In the **Approve Change Request** window that opens, click **Add**; and then in the **Reviewer** window that opens, click the ellipsis; and then in the **Select User** window that opens, click **Administrator** where the **User Name** column displays **Administrator**; and then click **OK**.
9. In the **Reviewer** window, click **OK**.
10. Click **Add** again, and then in the **Reviewer** window that opens, click the ellipsis; then in the **Select User** window that opens, click **SM_ChangeManager** where the **User Name** column displays **SM_ChangeManager**: and then click **OK**.
11. In the **Reviewer** window, click **OK**.
12. In the **Approve Change Request** window, click **OK**.
13. In the **Install new accounting application** window, click **OK** to create the change request.

# Lesson 3
# Configuring Release Management

## Contents:

## Question and Answers

**Question:** You have created a release record, but all of the activities within it are in an On Hold status. What should you do to start the release record?

**Answer:** When the release record is ready to be started, the Run task should be used to start it.

# Module Review and Takeaways

## Review Question(s)

**Question:** Your release manager has asked that she be notified via email whenever a release record is completed. How can you configure this in Service Manager?

> **Answer:** You should create a workflow rule in Service Manager and configure it to send a notification when the status of a release record is set to completed.

## Real-world Issues and Scenarios

In scenarios in which the default change request form needs to be customized to meet an organization's corporate standards, you can edit the ServiceManager.ChangeManagement.Library.mp Management Pack by using the authoring tool to rearrange fields that are used in the form and, if required, include a company logo. For more information about customizing the default change request form, go to the following website: http://go.microsoft.com/fwlink/?LinkID=390293

# Lab Review Questions and Answers

## Lab: Configuring Change and Release Management

## Question and Answers

## Lab Review

**Question:** You have created a change request by using the Emergency Change Request template. You do not need to wait for approval for the change, but the change request will not proceed past the review activity. What can you do?

> **Answer:** You can either manually add a reviewer to the review activity and then approve the change, or you can right-click the review activity and click Skip Activity.

**Question:** An activity in a change request has been marked as failed. You need to determine the cause of the failure and who marked the activity as failed. What should you do?

> **Answer:** You should open the failed activity and then view the History tab. This will include the mandatory comment that must be added when failing an Activity. It will also show the date and time that the activity failed and who marked the activity as failed.

**Question:** You have created a change request with dependent activities that will be used by release management to control when the changes should be deployed. What should be performed in the release record when a change is ready to be deployed?

> **Answer:** In the release record, a manual activity is linked to the dependent activity in the change request. When the activity has been completed, the manual activity is then marked as completed.

# Module 6

## Configuring and Managing Service Requests

### Contents:

# Lesson 1
## The Service Catalog, Request Offerings, and Service Offerings

### Contents:

## Question and Answers

**Question:** You need to group a number of request offerings in the Self-Service Portal. What can you do to facilitate this?

> **Answer:** You should create a service offering and then add the request offering to the service offering.

Lesson 2
# Managing Service Requests and Catalog Groups

## Contents:

## Question and Answers

**Question:** What is the default state that a service request is in when it is first created?

**Answer:** In-Progress.

# Lesson 3
# The Self-Service Portal

## Contents:

## Question and Answers

**Question:** What are the four default pages in the Self-Service Portal?

**Answer:**

- Home Page
- Help Articles
- My Requests
- My Activities

## Demonstration: Raising Incidents using the Self-Service Portal

### Demonstration Steps

1. On LON-SM1, click **Start**, and then click **Internet Explorer**.
2. In Internet Explorer, browse to **http://LON-AP1:8083/SMPortal**.
3. In the **Self-Service Portal**, in the lower-right side of the page, click **Create a Request**.
4. On the **Generic Incident Request (EN)** page, click **Go** to request.
5. On the **Provide information** page, in the **Please enter the title for this issue** box, type **Demo**.
6. In the **Please describe the symptoms of the issue in detail** box, type **Error message states "Database not found" is displayed.**
7. On the **Provide information** page, click **Next**.
8. On the **Review and Submit** page, click **Submit**.
9. On the **Confirmation** page, make a note of the **ID**, and then click **Back to Home**.
10. Open the Service Manager console, and then click the **Work Items** pane.
11. Expand **Incident Management**, and then click **All Open Incidents**.
12. From the **details** pane, note that the **Demo Incident** is visible.

# Lesson 4
## Datacenter Resource Provisioning with the Cloud Services Process Pack

### Contents:

## Question and Answers

**Question:** What tasks does the service provider user role perform in the Cloud Services Process Pack?

**Answer:** The service provider performs the following tasks:

- Installs and configures the Cloud Services Process Pack
- Configures the service offerings
- Installs and configures runbooks

# Module Review and Takeaways

## Review Question(s)

**Question:** You have multiple end users that need to submit requests by using the Self-Service Portal. How can you ensure that each user logs on with their relevant account?

> **Answer:** You must configure User Authentication for the Microsoft SharePoint site that hosts the Self-Service Portal and then instruct users to sign out when they have finished using the Self-Service Portal. See the "Configuring User Authentication and Permissions for the SharePoint Site" topic in the Student Handbook for more information.

## Real-world Issues and Scenarios

**Troubleshooting the Self-Service Portal**

Because the Service Manager Self-Service Portal uses Microsoft Silverlight, you should understand where the Silverlight logs are stored in case you need to troubleshoot errors that might occur. The Silverlight logs are stored in the logged-on user's %appdata%\LocalLow\Microsoft\Silverlight\is folder. There is an automatically generated sub-folder within this folder. When you search this folder for *.log, the search will find the log file named **SMPortalTrace.log**.

# Lab Review Questions and Answers

## Lab: Configuring Service Requests

## Question and Answers

## Lab Review

**Question:** You have created a request offering in the Service Manager console but it does not display in the Self-Service Portal. What could the problem be?

> **Answer:** The request offerings status must be set to Published before it will be displayed in the Self-Service Portal. Additionally, if the request offering is not associated with a published service offering, you must use the List view in the Self-Service Portal to display it.

**Question:** You need to ensure that when an end user logs in to the Self-Service Portal, the user can only see the service offerings and request offerings that are relevant to his role. What should you do?

> **Answer:** You should create a catalog group that contains the request offering and service offerings that should be made available to the end user. You should then create a user role and associate the end user and the catalog group to the user role.

# Module 7

## Configuring Service Level Management

### Contents:

# Lesson 1
# Configuring Service Level Management

## Contents:

## Question and Answers

**Question:** What does the metric provide in an SLO?

> **Answer:** A metric is used to define the measurement of time between a start date and an end date.

## Demonstration: Configuring an SLO

### Demonstration Steps

1. On **LON-SM1**, open the Service Manager console.
2. Click the **Library** pane, and then click **Queues**.
3. In the **Tasks** pane, click **Create Queue**.
4. In the Create a Queue Wizard that opens, on the **Before You Begin** page, click **Next**.
5. On the **General** page, enter **Demo Incidents** in the **Queue name** box.
6. Under **Work item type**, click the ellipsis and then, in the **Select a Class** window that opens, click **Incident**; then click **OK**.
7. On the **General** page, click **Next**.
8. On the **Criteria** page, click **Next**.
9. On the **Summary** page, click **Create**.
10. On the **Completion** page, click **Close**.
11. Click the **Administration** pane, and then expand **Service Level Management**.
12. Click **Calendar**, and then in the **Tasks** pane, click **Create Calendar**.
13. In the **Create/Edit Calendar** window that opens, in the **Title** box, enter **Demo Work Hours**.
14. Under **Working days and hours**, select the check boxes for **Monday** through **Friday**.
15. In the **Start time** box, enter **09:00** for boxes **Monday** through **Friday**.
16. In the **End time** box, enter **17:00** for boxes **Monday** through **Friday**.
17. Next to **Holiday**, click **Add**.
18. In the **Add Holiday** window that opens, in the **Name** box, enter **Christmas Day**.
19. Click the calendar icon, select December 25$^{th}$, and then, in the **Add Holiday** window, click **OK**.
20. In the **Create/Edit Calendar** window, click **OK**.
21. Click the **Administration** pane, and then expand **Service Level Management**.
22. Click **Metric** and then, in the **Tasks** pane, click **Create Metric**.
23. In the **Create/Edit Metric** window that opens, in the **Title** box, enter **Demo Resolution Time**.
24. Next to **Class**, click **Browse**, and in the **Select a Class** window that opens, click **Incident** and then click **OK**.
25. Click the drop-down list next to **Start date**, and then click **Created date**.
26. Click the drop-down list next to **End date**, and then click **Resolved date**.
27. In the **Create/Edit Metric** window, click **OK**.

28. Click the **Administration** pane, and then expand **Service Level Management**.
29. Click **Service Level Objectives** and then, in the **Tasks** pane, click **Create Service Level Objective**.
30. In the Create Service Level Objective Wizard that opens, on the **Before You Begin** page, click **Next**.
31. On the **General** page, in the **Title** box, enter **Demo Resolution Time**.
32. Next to **Class**, click **Browse**, then in the **Select a Class** window that opens, click **Incident**, and then click **OK**.
33. On the **General** page, click **Next**.
34. On the **Queues** page, select **Demo Incidents**, and then click **Next**.
35. On the **Service Level Criteria** page, under **Calendar**, select **Demo Work Hours**.
36. Under **Metric**, select **Demo Resolution Time**.
37. Set the **Target** value to **4 minutes**.
38. Set the **Warning threshold** value to **2 minutes**, and then click **Next**.
39. On the **Summary** page, click **Create**.
40. On the **Completion** page, click **Close**.

# Lesson 2
## Viewing Service Level Agreement (SLA) Information in Service Manager

### Contents:

## Question and Answers

**Question:** What are the four views in Service Manager that can be used to view service level agreement (SLA) information?

**Answer:** Incidents With Service Level Breached

Incidents With Service Level Warning

Service Requests With Service Level Breach

Service Requests With Service Level Warning

# Module Review and Takeaways

## Review Question(s)

**Question:** What is configured when you create an SLO?

**Answer:** The relationship between the service level and a queue, the relationship between a Calendar item and a metric, and the Target and Warning thresholds

## Real-world Issues and Scenarios

Although you can edit the queues, Calendar items, and metrics associated with an SLO, it is recommended that you do so outside of working hours, because this editing can have a negative effect on the performance of the Service Manager database.

## Common Issues and Troubleshooting Tips

| Common Issue | Troubleshooting Tip |
| --- | --- |
| If an incident that is associated with an SLO is reactivated, it can cause the SLO to breach. | This is by design and is due to the fact that the original date and time that the incident was created is preserved when incidents are reactivated. |

# Lab Review Questions and Answers

## Lab: Configuring Service Level Management

## Question and Answers

## Lab Review

**Question:** List the three features that must be configured in Service Manager before an SLO can be created, and provide a brief description of each.

**Answer:** Queue: Defines the work items that will be included in the SLO

Calendar item: Defines the work hours and days that the SLO will be based on

Metric: Defines the measurement for the start and end dates

**Question:** You need to configure Service Level Management to reflect an incident SLA that measures the resolution time of incidents that have been escalated. How do you ensure that only escalated incidents are included in the SLO?

**Answer:** You should configure the criteria in the queue to only include incidents that have an Escalated value of True.

# Module 8

## Customizing the Self-Service Portal

### Contents:

# Lesson 1
# Components of the Self-Service Portal

## Contents:

## Question and Answers

**Question:** What are the two components that make up the Self-Service Portal?

**Answer:** Web Content Server and SharePoint Web Parts

# Lesson 2
# Customizing the Self-Service Portal

## Contents:

## Question and Answers

**Question:** What is the minimum permission you need in SharePoint in order to update the theme on the Self-Service Portal site?

**Answer:** You must have Design permissions on the Self-Service Portal site.

## Demonstration: Customizing the Self-Service Portal

### Demonstration Steps

1. On **LON-AP1**, open **Internet Explorer**, and browse to the **http://LON-AP1:8083/SMPortal Self-Service Portal.**
2. Click **Site Actions**, and then click **Site Settings**.
3. Under **Look and Feel**, click **Title, description and icon**.
4. In the **Title and Description** section, in the **Title** box, remove **SMPortal**, type **Demo Self-Service Portal**, and then click **OK**.
5. From the navigation links on the left side of the webpage, click **Home**.
6. Notice that the Self-Service Portals title has now changed to **Demo Self-Service Portal**.

# Module Review and Takeaways

## Review Question(s)

**Question:** What are the three elements that are configured when you add a navigation link to the Self-Service Portal?

**Answer:** URL, Description, and Heading

## Real-world Issues and Scenarios

**Improving Performance in the Self-Service Portal**

A common issue that many organizations find is that the Self-Service Portal can take some time to start.

**Background**

The Self-Service Portal uses an application pool in IIS in which a feature named Just-In-Time (JIT) compiling is used. JIT compiles the application the first time it runs. This improves performance of the application as it is compiled. Compiling of the Self-Service Portal application can take between 5 and 20 seconds to complete.

**Cause**

Another feature in IIS is the Idle Time-Out feature, which is used to recycle an application pool after a given number of minutes of inactivity (by default, five minutes). This releases resources used by the application pool because they are no longer required by the inactive Self-Service Portal. After the application pool has been recycled, it must be compiled again by JIT before it can be used by the Self-Service Portal, resulting in a slower load time.

**Resolution**

To resolve this issue, you can modify the Idle Time-Out setting in IIS and set its value to zero, resulting in the application pool never being recycled. To do this, follow these steps:

1. Log in to the server where the **Self-Service Portal** is installed.
2. Open **Internet Information Services (IIS) Manager).**
3. Open **Application Pools**.
4. Right-click the **Service Manager Portal application pool**, and then click **Advanced Settings**.
5. Change the **Idle Time-out (Minutes)** setting from **5** to **0**.
6. Change the **Regular Time Interval (Minutes)** setting to **0**.
7. Click **OK**.
8. Recycle the **Service Manager Portal application pool**.
9. When you open the Self-Service Portal, the application will be compiled for the first time, but from then on, it will not be compiled unless the server is restarted or the IIS services are restarted.

# Lab Review Questions and Answers

## Lab: Customizing the Self-Service Portal

## Question and Answers

### Lab Review

**Question:** You have installed an additional language pack on the SharePoint Server that hosts the Self-Service Portal. When users log on to the Self-Service Portal, they are not able to select the additional language. What could be the problem?

> **Answer:** After installing the language pack, you must run the SharePoint Products Configuration Wizard and then select the language as an alternate language from the Language Settings section in SharePoint.

**Question:** You need to change the color scheme for a number of Web Parts in the Self-Service Portal but you do not want to change the color scheme for the whole site. What should you do?

> **Answer:** From the Self-Service Portal, select the Web Part that you want to change, and then from the Site Actions menu, click Edit Page. Then from the page that opens, click Edit Web Part.

# Module 9

## Using Reports and Analyzing Data in Service Manager

### Contents:

Lesson 1

# Running Reports in System Center 2012 Service Manager

## Contents:

## Question and Answers

**Question:** You need to provide a report that shows the activities performed against a specific configuration item. What report should you run, and what parameter should you configure in the report?

> **Answer:** You should run the List Of Activities report and configure the Select Affected Configuration item parameter.

## Demonstration: Running Reports in Service Manager

### Demonstration Steps

1. On **LON-SM1**, open the **Service Manager console**.
2. Click the **Reporting** pane, and then click **Incident Management**.
3. From the details pane, click **Incident Details**, and then from the **Tasks** pane, click **Run Report**.
4. In the **Incident Details** window that opens, click **Add**.
5. In the **Select dimension objects** window that opens, click the magnifying glass.
6. In the **Available objects** pane, click one incident, such as the **Failed to Connect to Computer** incident, and then click **OK**.
7. In the **Incident Details** window, click **Run Report**.
8. In the details pane, review the information in the **Incident Information** section.
9. In the **Affected Configuration Items** section, review the information.
10. Close the **Incident Details** report window.

# Lesson 2
# Configuring and Running Data Warehouse Jobs

## Contents:

## Question and Answers

**Question:** What is the function of the MPSyncJob in the Service Manager data warehouse?

**Answer:** The MPSyncJobs purpose is to synchronize the Management Packs from the Service Manager environment with the data warehouse.

# Lesson 3
# Troubleshooting Failed Data Warehouse Jobs

## Contents:

## Question and Answers

**Question:** What does the Get-SCDWJobModule Windows PowerShell cmdlet do?

> **Answer:** It provides a list of data sources that are registered to the Service Manager data warehouse.

# Lesson 4
# Data Warehouse Cubes

## Contents:

## Question and Answers

**Question:** What are the six components of an OLAP cube in Service Manager?

**Answer:**

- Dimensions
- Measures
- Drill down
- Drill though
- Key performance indicators (KPIs):
- Partitions

# Module Review and Takeaways

## Review Question(s)

**Question:** What does the Load job do in the Service Manager data warehouse?

> **Answer:** The Load job queries delta data held in the DWRepository database and then inserts the data into the DWDatamart database. The DWDatamart database is where all reports retrieve their data from.

## Real-world Issues and Scenarios

With the Service Manager integration with SharePoint, it is possible to create custom views in the Service Manager console that display a dashboard and reports from PerformancePoint Services in SharePoint or Excel. To find more information about including dashboards and reports from PerformancePoint Services in the Service Manager console, go to the following website:
http://go.microsoft.com/fwlink/?LinkID=390335

# Lab Review Questions and Answers

## Lab: Configuring Reports and Analyzing Service Manager Data

## Question and Answers

### Lab Review

**Question:** You run a number of reports on a regular basis. Instead of navigating to the relevant report folder each time you want to add links to the reports in the Favorites folder, what should you do?

> **Answer:** Open each report, and then use the Save As Favorite task to save a link to the report in the Favorites folder.

**Question:** You need to troubleshoot a failed data warehouse job. What are the three tools you can use to assist you?

> **Answer:** The Data Warehouse Jobs node in the Service Manager console, the Operations Manager event log on the data warehouse management server, and the Service Manager Windows PowerShell cmdlets.

# Module 10

## Configuring Compliance with the Process Pack for IT GRC

### Contents:

# Lesson 1
## Microsoft System Center Process Pack for IT GRC Overview

### Contents:

## Question and Answers

**Question:** What is a control objective?

> **Answer:** A control objective can be thought of as the desired state or results that should be achieved in order to manage risks that have been identified in the risk management process.

# Lesson 2
# Installing the Process Pack for IT GRC

## Contents:

## Question and Answers

**Question:** What is the purpose of the Process Pack for IT GRC client?

**Answer:** It provides a method of importing information such as GRC programs, control objectives, and control activities in the Process Pack for IT GRC into Excel so that it can be modified and then published back into the Process Pack for IT GRC.

## Demonstration: Installing the Process Pack for IT GRC

### Demonstration Steps

On **LON-SM1**, close the Service Manager console if it is open.

1. Navigate to **\\LON-DC1\Media\Process Pack for IT GRC**, and then double-click **Setup.exe**.
2. On the **Process Pack for IT GRC Setup Wizard** startup screen that opens, click **Install Process Pack for IT GRC.**
3. On the **Product registration** page, select **I have read, understood, and agree with the terms of the license agreement,** and then click **Next**.
4. On the **Configure Account for Data warehouse deployment** page, in the **Data Warehouse management server** box, enter **LON-DW1**.
5. In the **User name** box, enter **Administrator**;, in the **Password** box, enter **Pa$$w0rd**; and then, under **Domain**, select **Contoso**.
6. Click **Test Credentials** and then, after the **The credentials were accepted** message appears, click **Next**.
7. On the **Installation summary** page, click **Cancel** to cancel the installation and then click **Yes**.

# Lesson 3
## Creating a Control Management Program

### Contents:

## Question and Answers

**Question:** What must you do to a control management program before it can be used?

**Answer:** You must publish it.

Lesson 4
# Managing a Control Management Program

## Contents:

## Question and Answers

**Question:** How are results from a manual control activity evaluated?

> **Answer:** You must manually add the results for the manual control activity into the control management program.

# Module Review and Takeaways

## Review Question(s)

**Question:** What are the three categories of IT GRC control management program exceptions that can be applied to a control management program?

**Answer:**

- Control activity scope exceptions
- IT GRC program scope exceptions
- GRC policy exceptions

## Real-world Issues and Scenarios

In order for data to be made available in reports, it must first be processed in the data warehouse. When you run a report and there is no data displayed, the most likely cause is that the data has not been completely processed yet. You can use the following steps to ensure that the data warehouse jobs have completed successfully and have processed the data for reports:

1. Click the **Data Warehouse** pane.
2. Expand **Data Warehouse**, and click **Data Warehouse Jobs**.
3. In the **center** pane, click **each job**, and then, in the **Tasks** pane, click **Suspend**. Repeat this step for all jobs.
4. In the **center** pane, click **MPSyncJob**, and then in the **Tasks** pane, click **Resume**.
5. In the **Tasks** pane, click **Refresh** intermittently until the job has completed.
6. Repeat steps 4 and 5 on the following jobs:
   - **Extract_ContosoSM**
   - **Extract_DW_CONTOSO**
   - **Transform.Common**
7. In the **center** pane, click **Load.Common**, and then in the **Tasks** pane, click **Resume**.
8. In the **center** pane, click **Load.OMDWDataMart**, and then in the **Tasks** pane, click **Resume**.
9. In the **center** pane, click **Load.CMDWDataMart**, and then in the **Tasks** pane, click **Resume**.
10. In the **Tasks** pane, click **Refresh** intermittently until all jobs have completed.

# Lab Review Questions and Answers

## Lab: Installing and Configuring the Process Pack for IT GRC

## Question and Answers

### Lab Review

**Question:** You have installed the Process Pack for IT GRC client, but when you open Excel, the Service Manager tab is not visible. What should you do?

> **Answer:** You should ensure that the Process Pack for IT GRC – Client Com add-in has been enabled in Excel by viewing COM add-ins in the Add-Ins section in Excel Options.

**Question:** You have created a manual control activity and associated it with a control objective within your control management program. What do you need to do to ensure that the compliance results are reflected correctly in the control management program?

> **Answer:** You must use the Add Result task to update the compliance result of the manual control activity.