knowledge15®
April 19–24, 2015 • Mandalay Bay • Las Vegas, NV

Lab Guide

ServiceWatch 101

Mapping Services

The Modern Way!

Richard Wall & James Neal

Links to your 2 lab instances will be provided.

Default Login / Password:

admin / Knowledge15

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Lab Goal

The purpose of this lab is to understand the steps needed to discover a new Business Service using ServiceWatch and then analyze the results of both the service map and the underlying log that will be created.

The infrastructure and credentials have all been taken care of already so that the lab can focus on the actual discovery element.

Lab 1.1 Create Service Map

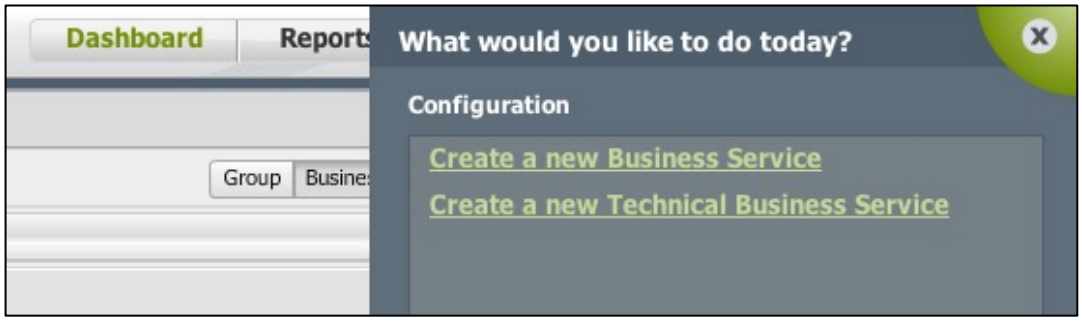
Log on to Your ServiceWatch Training Instance

1. Navigate to the unique instance URL provided to you.
2. Log on with provided credentials.

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Create a New Business Service

1. Navigate to the top right corner of the browser window and hover over the **gray arrow** icon within the green. Click **Create a new Business Service**.



2. Add a Business Service Name: **myBusinessService**
   NOTE: Leave **Related Groups** and **Business Service Priority** as they are.

3. Within the **Entry Points** section, add the URL now shown on the projector.

4. Go to the bottom right corner of the window and click **Save and view Map**.

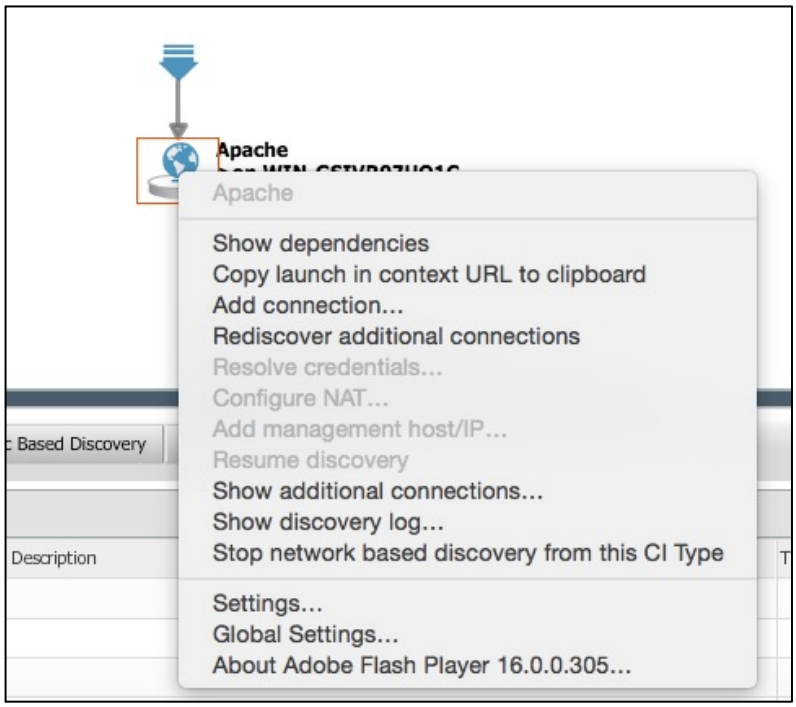
5. Wait for the discovery to complete, the spinning green progress bar will show **Done** when the discovery process has finished. You should now see a service map.

6. Did you expect this number of elements within the Service Map?

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Diagnose the Service Map

1. Right-click on the discovered **Apache Web Server** and then left-click on **Show discovery log…**



2. Which pattern was checked first, was it successful?

3. Make a note of the pattern that was a success.

4. Click on the **plus sign** next to the **Successful pattern** and you will see the elements of the **Identification** and **Connection** sections.

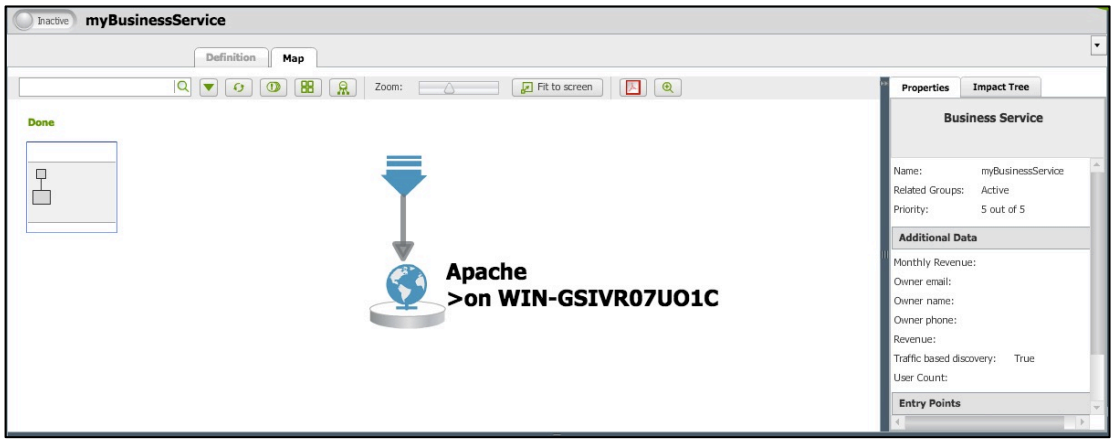
5. Make a note of how many different connectivity attempts were made.

6. Why do you think the connection to the next tier was not made?

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Lab Success Verification

1. Your business service should look like this:



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Lab Goal

The purpose of this lab is to understand the steps needed to import a pre-built Knowledge Base of patterns and then trigger a re-discovery of your Business Service.

Lab 1.2 Import Knowledge Base

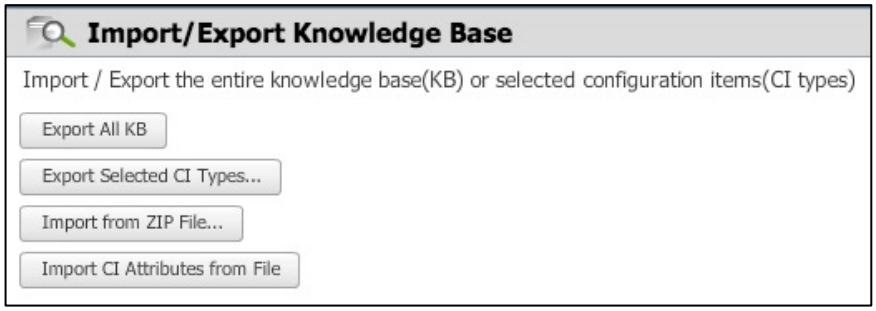
Import Knowledge Base of Patterns

1. Download the **Knowledge Base** zip file from the **Pattern Knowledge Base** article within the ServiceNow instance **Knowledge Base**.

2. Click on the **wrench** icon on the banner and select **Import / Export**.



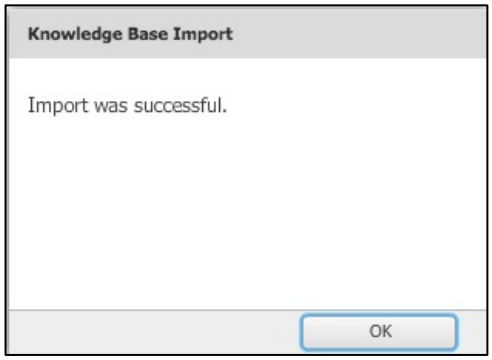
3. Click on **Import from ZIP file…**



4. Navigate to the ZIP file that you downloaded in Step 1 and select **Open**.

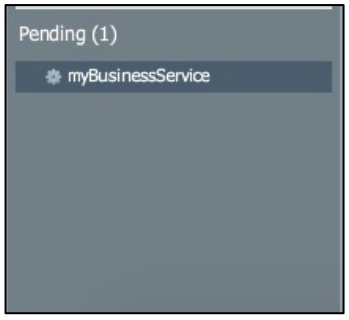
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5. You should receive the following confirmation message.



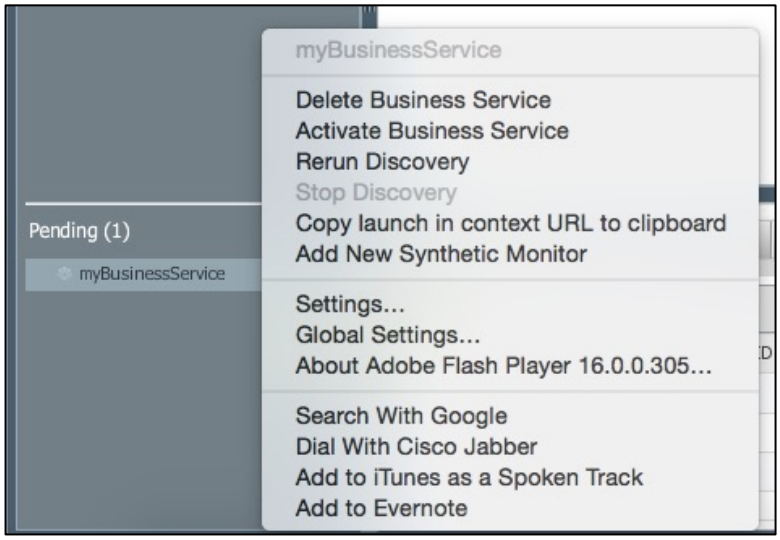
6. Click on **Dashboard** in the banner.

7. Under the **Pending** section on the left-hand side, click on your Business Service and your discovered Service Map will be displayed.

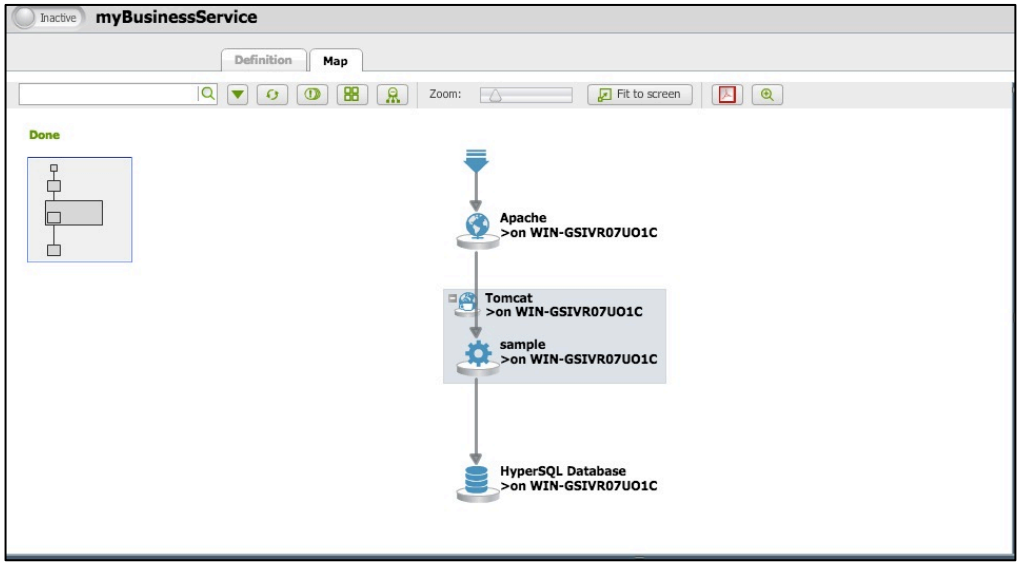


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8. Right-click on your Business Service and select **Rerun Discovery**.



9. Once discovery has completed, your Business Map should now look like this:



10. Show the discovery log for the Apache Web Server, as you did in Lab 1.1.

11. Expand the Apache Pattern. What is different from the first time discovery was run?

12. Within the **Connection** section and next to the **successful element**, click on the **plus sign**.

13. What is the final step within that Connectivity Pattern?

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14. Close the discovery log window.

15. Show the discovery log for the Tomcat Server.

16. Were there multiple patterns checked before it found a successful match?

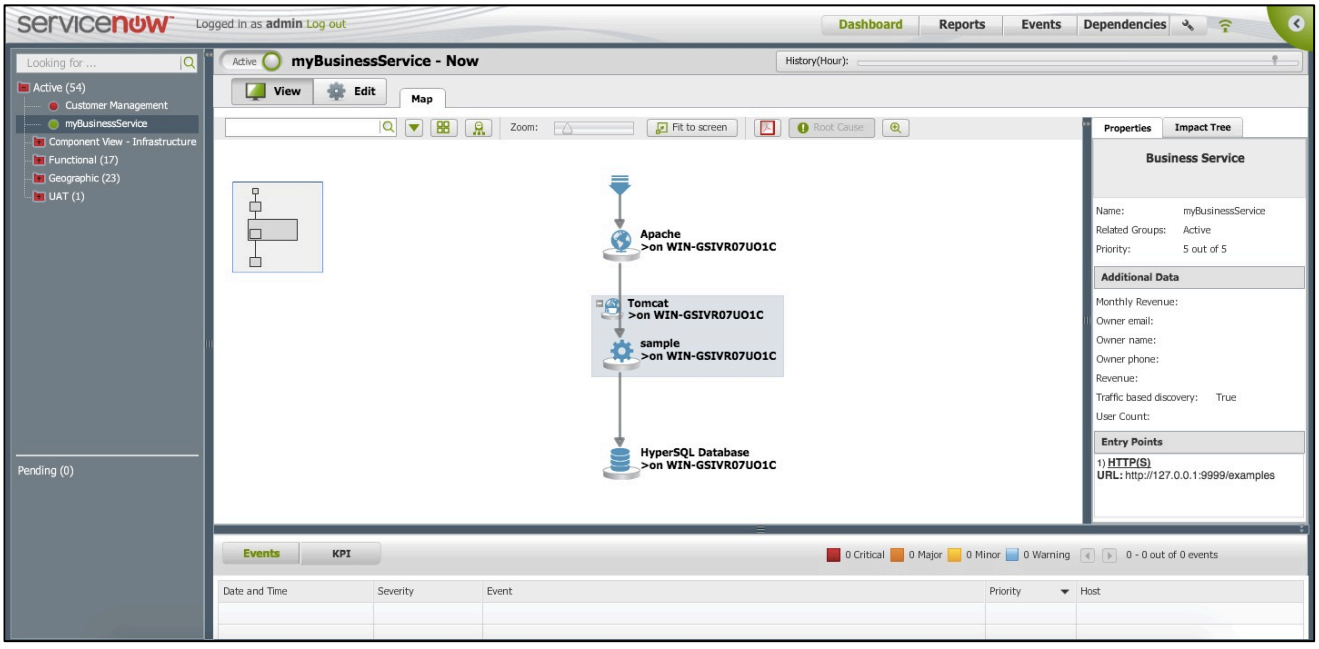
17. What is the reason for this?

18. Now that your Business Service is complete, you can click on the **Active/Inactive** switch to take it from **Pending** to **Active** and ensure regular re-discovery takes place.



Lab Success Verification

You should now have an Active Business Service and the Service Model should now look like this:



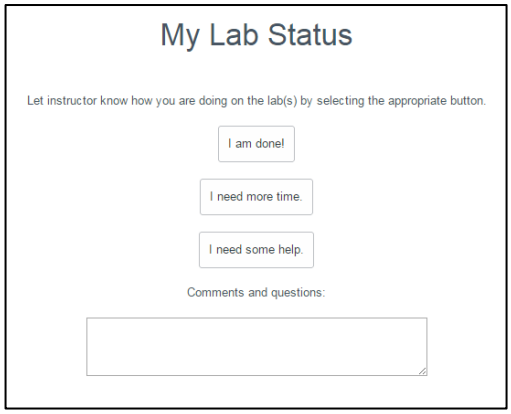
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Lab Progress

1. Navigate to **Lab Management -> Report Lab Progress**.



2. Click **I am Done!**



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Lab Goal

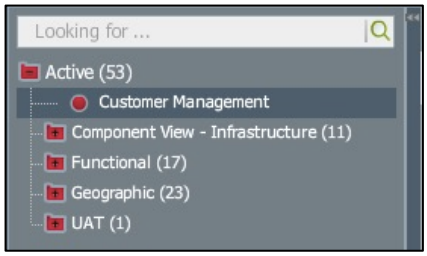
The purpose of this lab is to understand how to navigate a service map and understand the components and relationships within that map.

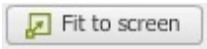
You will also see an example of how data related to a Business Service can exist “on-map” and “off-map.”

Lab 2.1 Navigate Service Map

Exploring the Customer Management Business Service

1. In the tree structure of live Business Services on the left-hand side of the ServiceWatch console, click **Customer Management**.

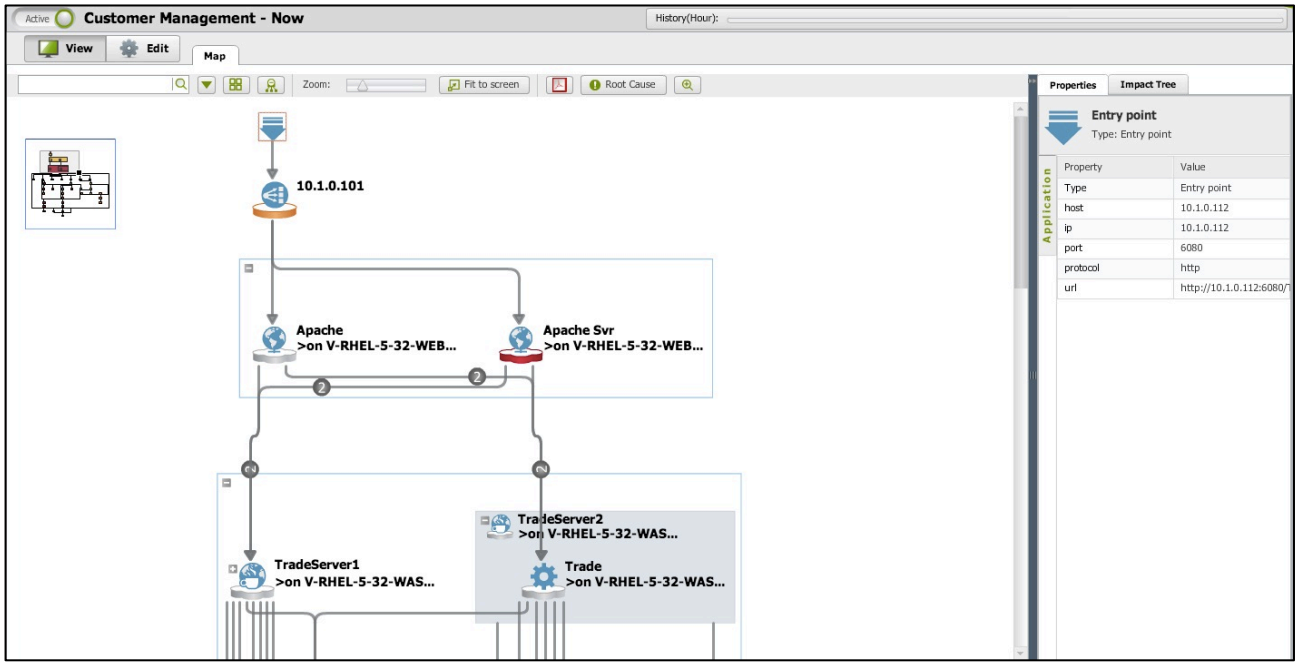


2. Now close the tree structure using the **double arrow** button at the top right of that section and also pull the **event window** at the bottom of the screen all the way down, this will give you some more screen to work with. Now click 

to resize the service map.

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3. To expand and resize the application nodes at the top end of the map slightly, first expand the **WAS Farm** and **TraderServer2** using the **+** buttons. Now resize the window using the **zoom slider** and left-click hold and drag so that the screen looks like this:



4. Click on the node **10.1.0.101**. Note what type of node is being represented here.

5. Click on the two lines that stem from **10.1.0.101** to the **Apache** servers. Each line represents an application connection. What is different about these two connections?

6. Click on one of the **Apache** nodes and pay attention to the **Properties** on the right-hand side of the console. Click through the **tabs** to familiarize yourself with the layers that are shown here. NOTE: We only visualize the application node on the map but the discovery process has also found the relationship to the virtual and physical servers involved here.

7. Now review both **TradeServer2** and **Trade** nodes individually by clicking them and viewing the properties. What are the technical differences between these two nodes?

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Lab Goal

The purpose of this lab is to show how you can navigate from a Business Map and uncover the supporting Network Infrastructure and Storage Paths.

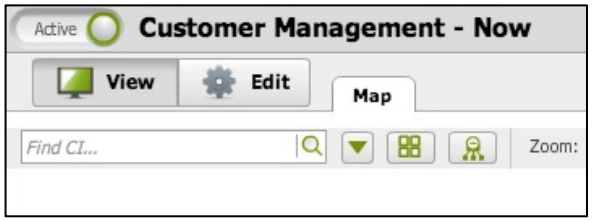
Lab 2.2 Show Network and Storage Path

Exploring the Network Paths

1. Resize the **Customer Management** service map using the 

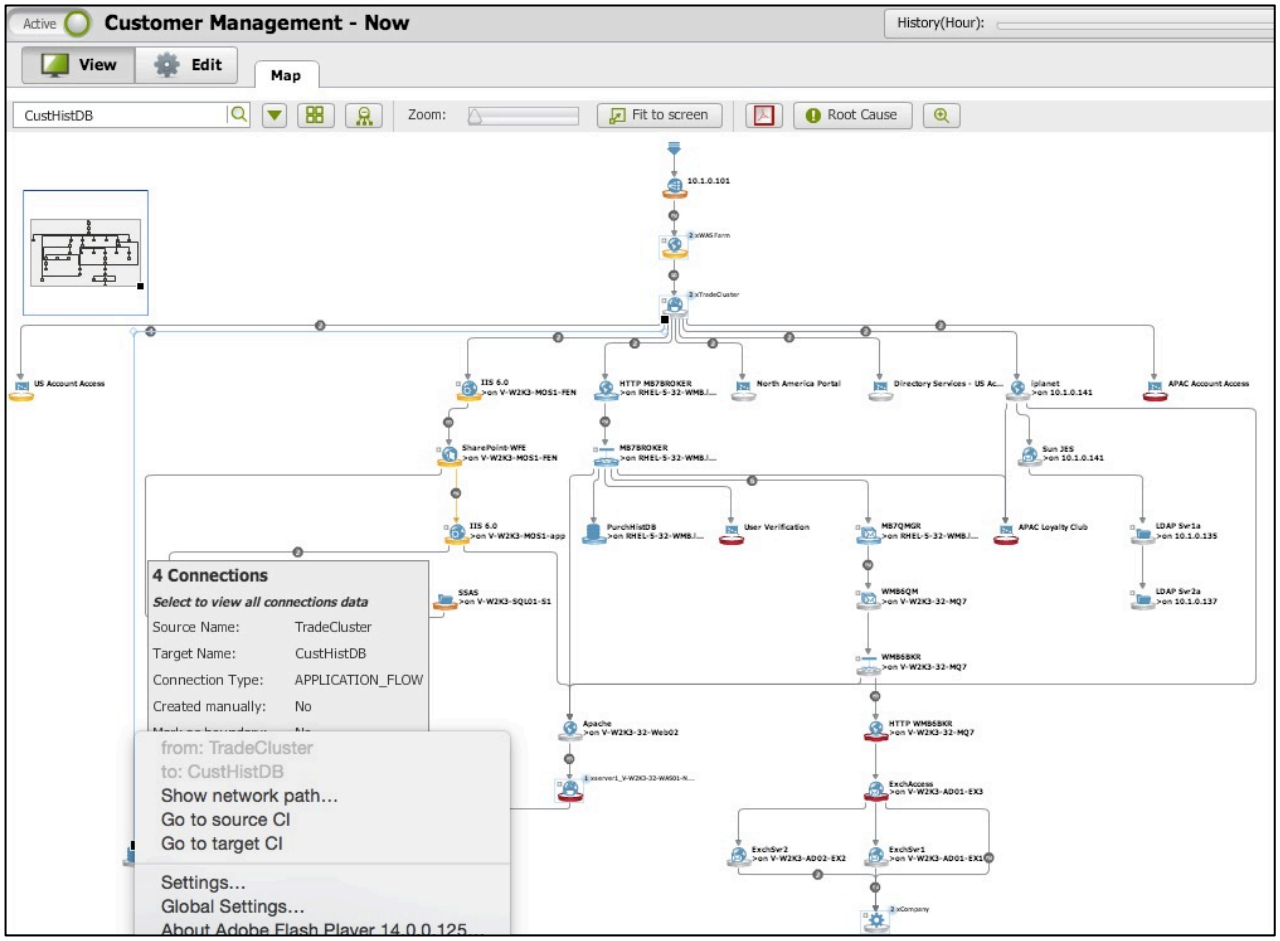
button so you can see the whole map.

2. Using the **Find CI** search box type **cust** and then click on the **CustHistDB** item that appears. On the map, the **CustHistDB** should now be flashing with a yellow highlight.



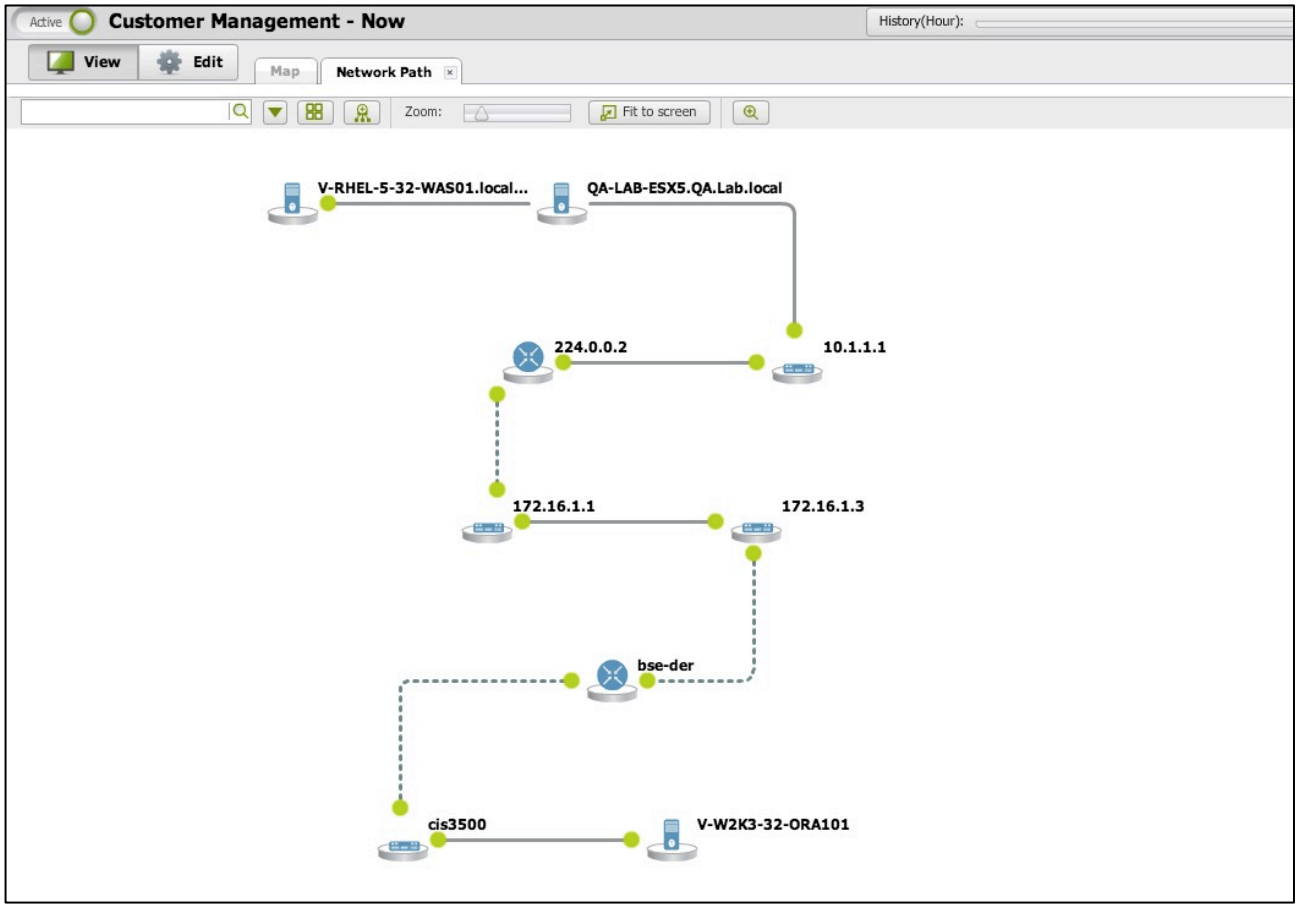
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3. You should see two connection lines feeding into the **CustHistDB**. Right-click the connection that stems from the **TradeCluster** and click **Show Network Path**. Then click any of the four options that pop up.



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4. You should now see a new tab in the console window with the network path shown. Notice we are now looking at server-to-server from end-to-end with network devices in between. Solid lines represent discovered connections, dotted lines represent inferred paths.



5. How is the network information discovered?

6. Close the tab at the top to return to the main **Customer Management** map.

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Exploring Storage

1. Use the **Find CI** search box again, search for **NetApp**, and select the item that appears.

2. Click on the highlighted **NetApp FAS270** and view the details within the properties area. Pay particular attention to the green links below the main properties that show granular details. Click on the links to access more information on the four items:

    - LUN masking
    - Storage Pools
    - Storage Volumes
    - Volume to pool mappings

3. How many volume mappings are there?

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Lab Goal

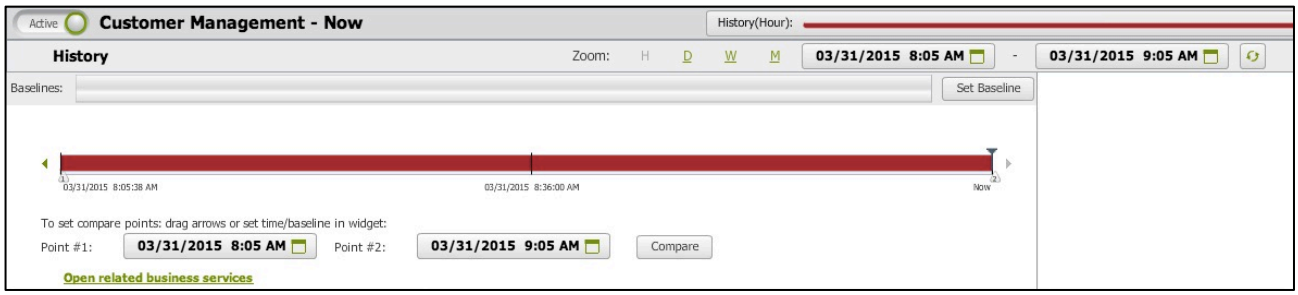
The purpose of this lab is to show how you can compare a Business Map with an older version of itself to identify what exactly has changed over that time period.

Lab 2.3 Using the History Comparison Bar

Creating a Comparison View

1. Navigate to the service map for the **Customer Management** business service.

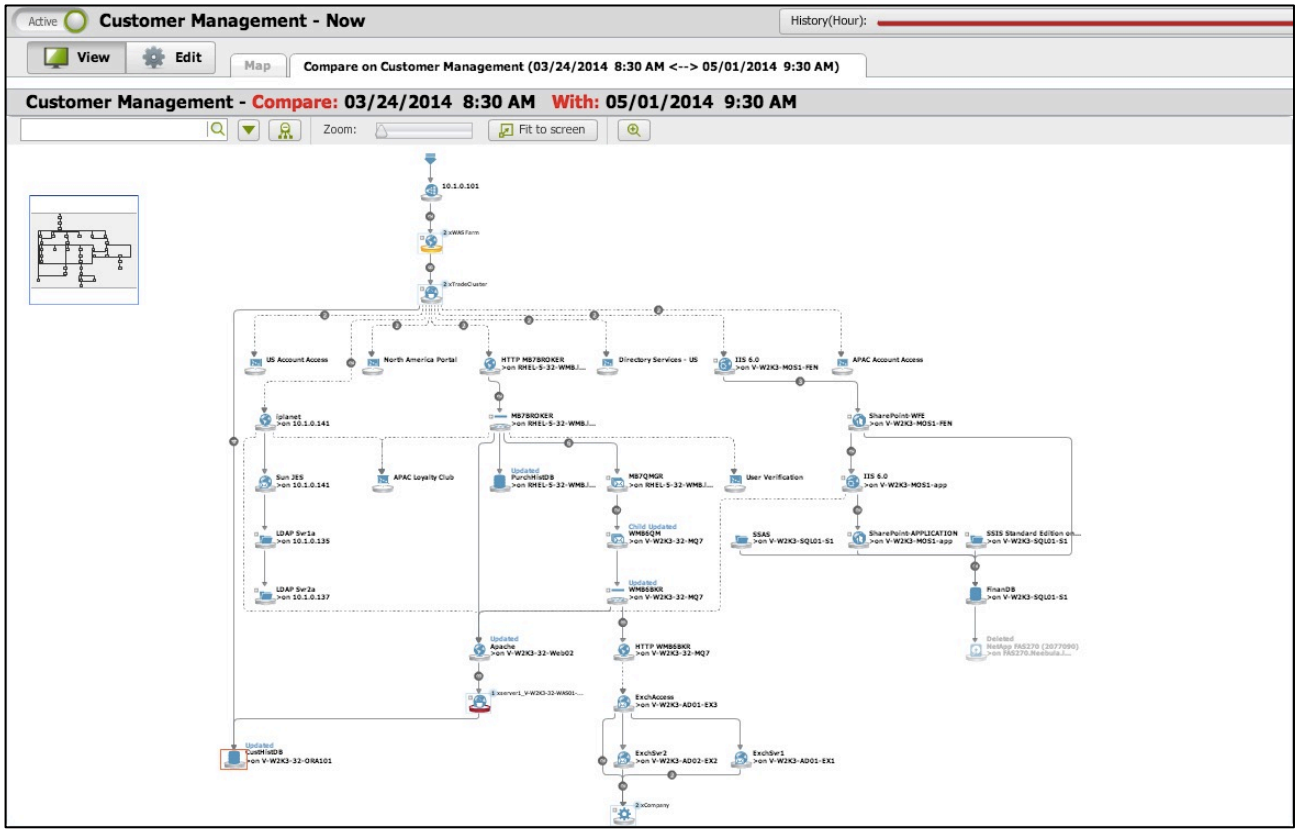
2. Just above the map window on the right-hand side is a **History Bar**, click on this bar to reveal a new menu that should look like this:



3. This menu is used for two jobs that relate to history of the map. The first is to show planned and unplanned changes in the environment by inserting green or gray markers on the history timeline. We demo this later. The second is to build a new service map view based on a comparison of two date/time entries. We test this now.

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4. Using **Point #1** and **Point #2** at the bottom left of the menu, add the dates **03/24/2014** and **05/01/2014** and then click **Compare**. You should now see a new tab created with the date range that you selected.



5. On the map you should now see some new icons, mainly **Updated** or **Deleted**.

6. What attribute has been updated on **PurchHistDB**?

7. What item has been deleted from the map during this period?

Lab Progress

1. Navigate to **Lab Management -> Report Lab Progress**.

2. Click **I am Done!**

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Lab Goal

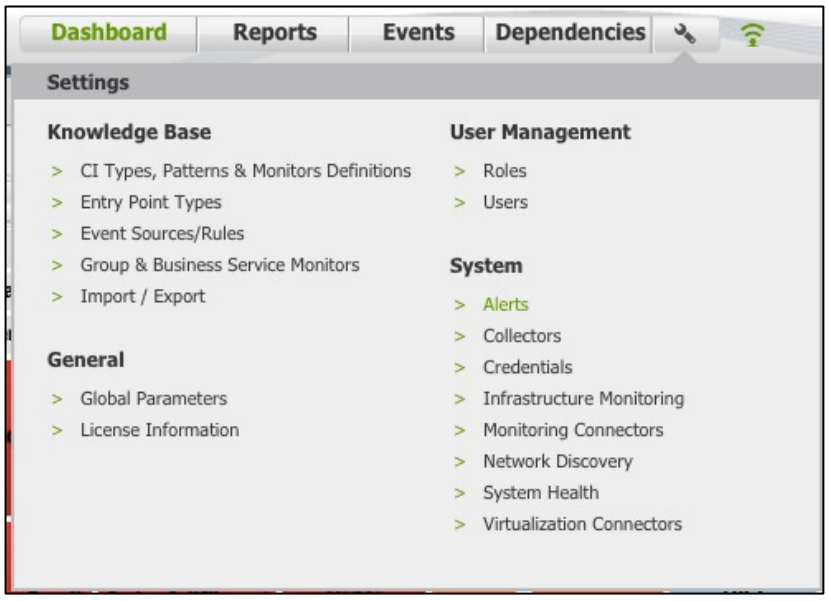
The purpose of this lab is to configure the integration between ServiceWatch and ServiceNow CMDB and Change Management.

The infrastructure and credentials have all been taken care of already so that the lab can focus on the actual discovery element.

Lab 3.1 Integrate to CMDB and Change

Create an Alert within ServiceWatch for a Topology Change

1. Click on the **wrench** icon and select **Alerts**.



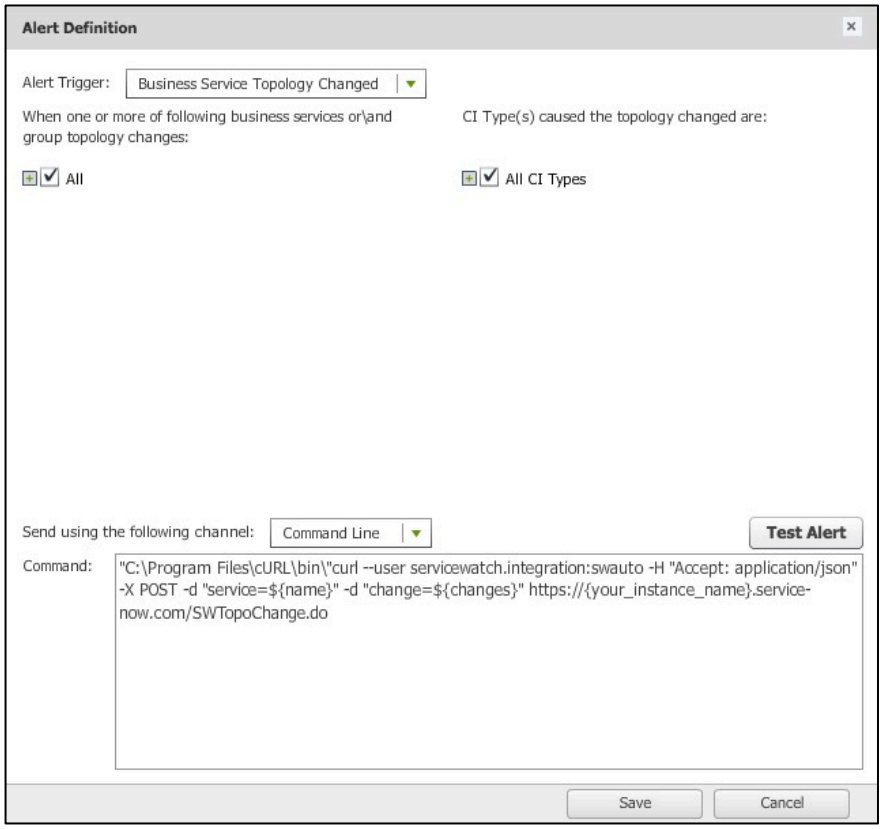
2. At the top right-hand corner of the **Alerts** table, click the **plus** sign to create a new alert.

3. Define the Alert with the following parameters:

   - Alert Trigger: **Business Service Topology Changed**
   - When one or more of following business services or\and group topology changes: **All**
   - CI Type(s) caused the topology changed are: **All CI Types**
   - Send Using the Following channel: **Command Line**

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4. Paste the **command line text** from the **Toplogy Change Alert** Knowledge article within your ServiceNow instance into the **Command: field**. NOTE: Remember to replace **{*your_instance_name*}** with the name of your own instance.

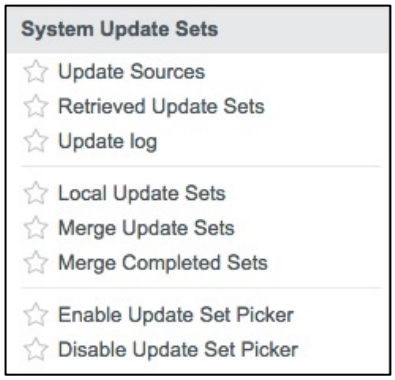


5. Click **Save**.

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Configure ServiceWatch Integration in ServiceNow

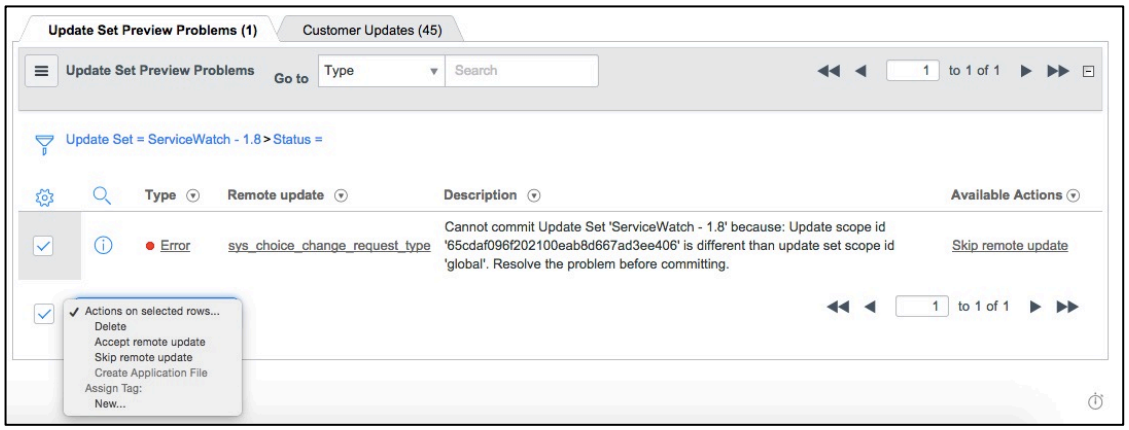
1. Log into your ServiceNow instance using the credentials provided.
2. From the **ServiceWatch Integration** KnowledgeBase article, download the **ServiceWatch - 1.8.xml** file.
3. Navigate to **System Update Sets > Retrieved Update Sets**.



4. Click on the Related Link **Import Update Set from XML**.
5. Select the **ServiceWatch – 1.8.xml** file you just downloaded and click **Upload**.
6. Open the **uploaded Update Set** and click **Preview Update Set**.
7. Close the **Update Set Preview** message box once the preview has completed.

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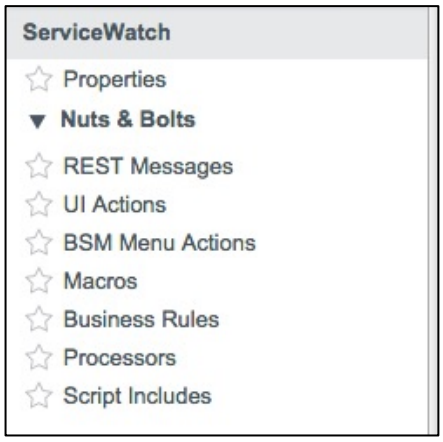
8. If you have any preview problems, scroll to the **Update Set Preview Problems** section, select any errors and then click **Accept remote updates**.



9. Click **Commit Update Set**.

10. Close the **Update Set Commit** message window once it has been committed.

11. Once your navigator has refreshed, navigate to **ServiceWatch > Properties**.



12. Enter the following values into the ServiceWatch Properties:

- Push changes from ServiceNow -> ServiceWatch: **Yes**
- ServiceWatch Host: **[enter your ServiceWatch host ip address, e.g. 54.210.215.208]**
- ServiceWatch User Name: **admin**
- ServiceWatch Password: **[ServiceWatch password provided at start]**

13. Click **Save**.

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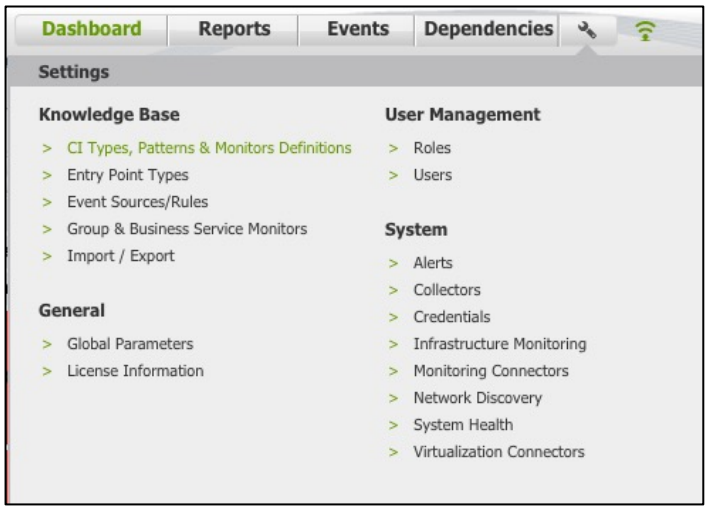
Lab Goal

The purpose of this lab is to trigger an unplanned change to the topology of a Business Service and understand how this can be tracked and managed via ServiceNow Change Management.

Lab 3.2
Trigger Unplanned Change

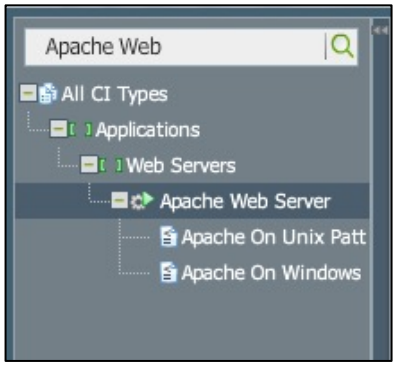
Log on to Your ServiceWatch Training Instance

1. Click on the **wrench** icon and then select **CI Types, Patterns & Monitors Definitions**.



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2. Type **Apache Web** into the search/filter box at the top left to narrow down the patterns.



3. Select the **Apache Web Server** to see the CI Type Definition.

4. Select the **version** attribute and check the **Editable** column.

CI Attributes

Name	Description	Display Name	Type	Key	Required	Editable	Searchable
alternate_label	GUI alternate display label	Alternate Label	String			✓	✓
app_processes		Application Processes	Table				✓
app_services		Application Services	Table				✓
conf_file	httpd.conf file location	Configuration file	String	✓	✓		✓
extended_attr		Extended Attributes	Table				✓
home_dir	Apache install path	Home directory	String				✓
label	GUI display label	Label	String				✓
location		Location	String			✓	✓
processes_with_creation_time		Processes with creation time	Table				
tracked_files		Tracked Files	Table				
version	Software version	Software version	String	✓	✓	☑	✓

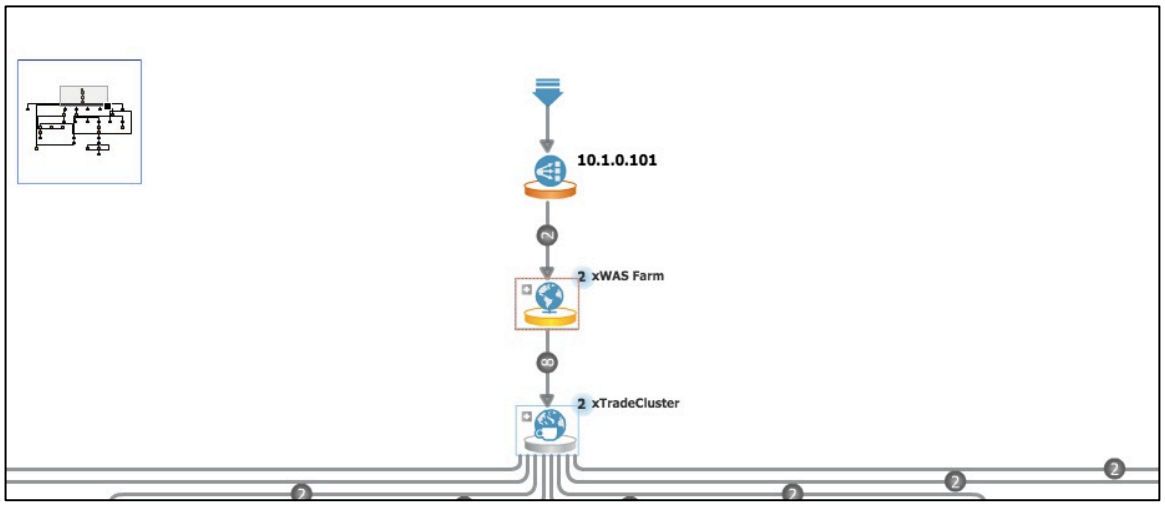
5. Click **Save**.

6. Within the banner, click **Dashboard** to take you back to the home screen.

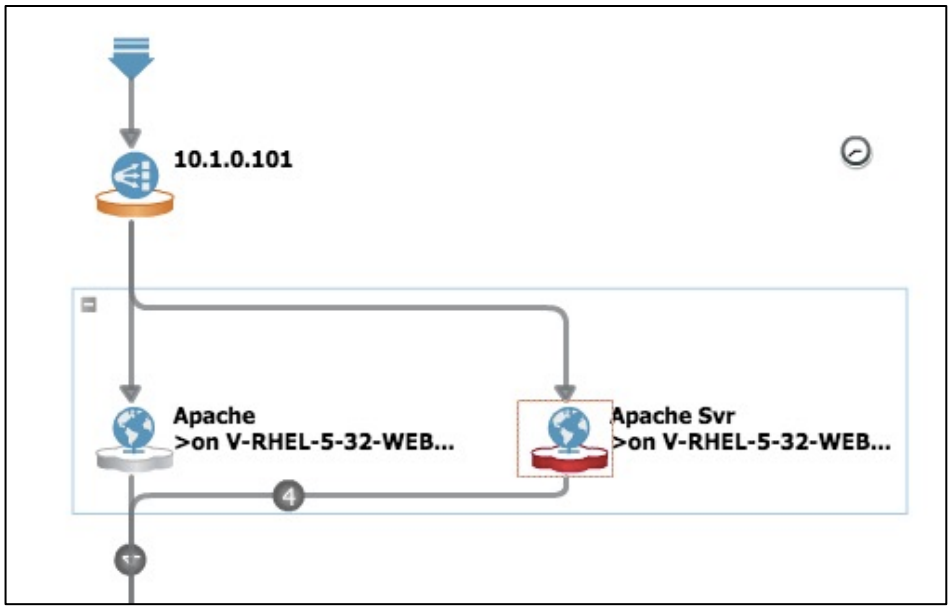
7. From the list of Business Services on the left, select **Customer Management**.

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8. At the top of the Service map and just below the load balancer, zoom into the **WAS Farm** cluster.

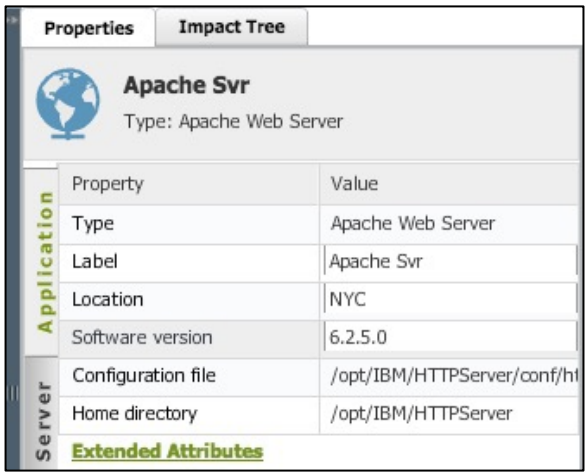


9. Expand the **WAS Farm** cluster and select the right-hand **Apache Web Server**.



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10. In the properties list on the right-hand side of the screen, manually update the Software version: **6.2.5.0**



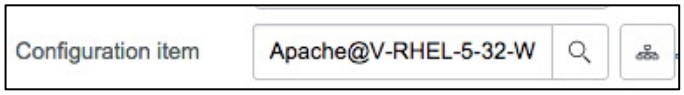
11. Within your ServiceNow instance, navigate to **Change > Open**.

12. There will be a **new Change** at the top of your list, open up that Change.

13. Note the **Type** of Change and also look at the **automated description** provided within the **Change Request**.

14. You can see that the **Configuration Item** field has been populated with the relevant CI.

15. Next to the **Configuration Item** field, click on the **BSM Map** icon.



16. Take a few moments to view the Service Map and note the relationships between the Apache Server and the other components.

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Lab Goal

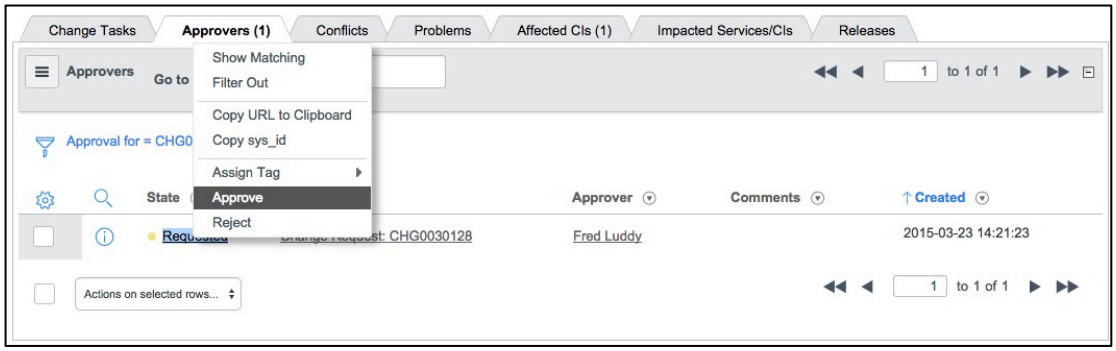
The purpose of this lab is to create a scheduled change and ensure that ServiceWatch is aware a change is about to happen.

Once completed, the next step is to confirm that a change has been processed.

Lab 3.3 Create Scheduled Change

Log on to Your ServiceWatch Training Instance

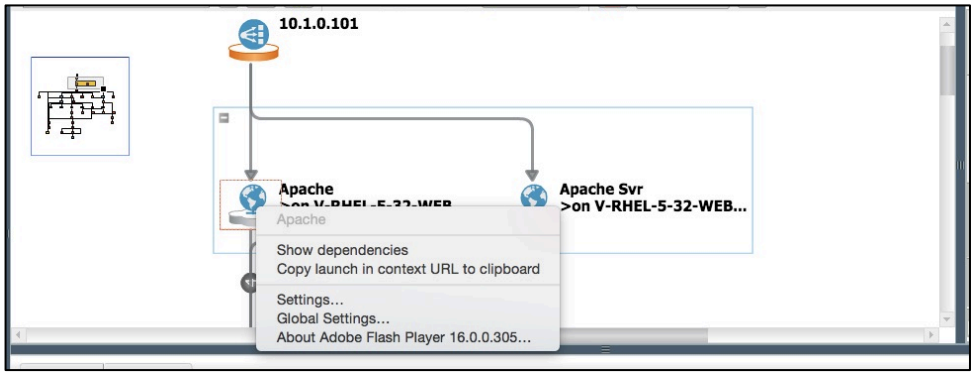
1. Navigate to **Change > Create New**.
2. Complete the following fields with these values:
   - Configuration Item: **Apache@V-RHEL-5-32-WEB02.localhost.localdomain**
   - Short Description: **Load 6.2.5.0 HotFix**
   - Description: **Bring Apache Server up to the latest version 6.2.5.0**
   - Planned Start Date: **[select today's date and the start of the current hour]**
   - Planned End Date: **[select today's date and two hours from now]**
3. Click the **Request Approval** button in the header bar.
4. Scroll down to the **Approvers** section, right-click **Requested** and select **Approve**.



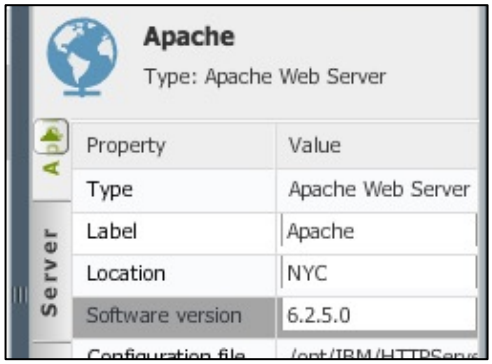
5. Open your ServiceWatch instance and display the Customer Management service map.

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6. Zoom in and expand the **WAS Farm** cluster just below the **Load Balancer**.
7. Right-click on the left-hand **Apache Web Server** and select **Show Dependencies**.



8. You now see all the connected CIs and related Business Services.
9. Click the **Scheduled Changes** button at the top right.
10. You now see the proposed Change is listed.
11. Return to the **Dashboard** and manually update the Software Version: **6.2.5.0**



12. Navigate back to your ServiceNow instance and to **Change > Open**.
13. Open your recently created **Change Request** and within the **Notes** section view the **Activity**.
14. Update the **Change State** to **Closed Complete**.
15. Click the **Update** button to save the Change Request.
16. Navigate to your ServiceNow instance and click on the **History** bar at the top right.

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17. Using the same techniques as in Lab 2.1, refresh the timeline to display from the current time the last two hours.

18. Look at the two changes you made as part of the labs, and note the differences in the way they are flagged.

Lab Progress

1. Navigate to **Lab Management -> Report Lab Progress**.

2. Click **I am Done!**

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