knowledge15
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Lab Guide

Content Management System 201: Explore Custom Blocks

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Default Login / Password:

admin / Knowledge15

itil / Knowledge15

employee / Knowledge15

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Lab Goal

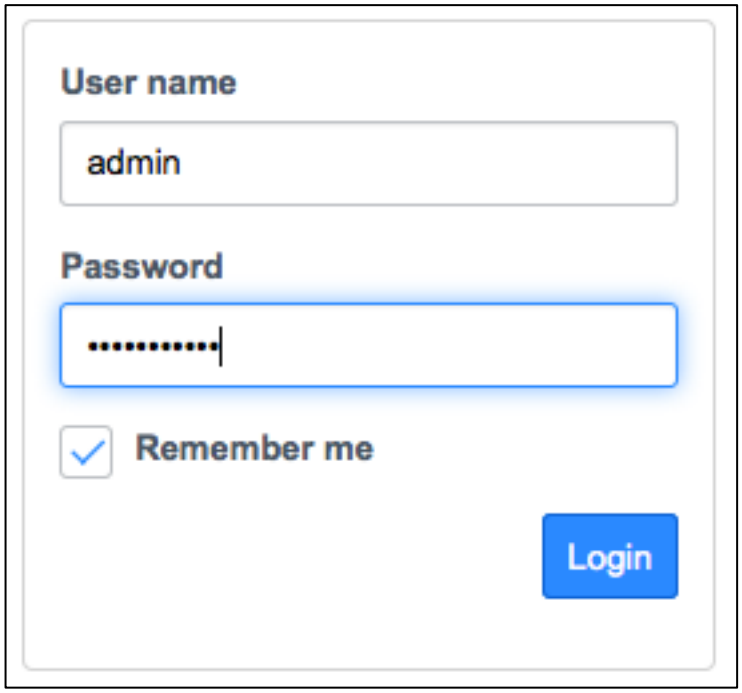
This lab explains how to create a slider using a custom block.

The following components make up the lab:

1.1 Create Slider and Slide Tables
1.2 Create Content Block Renderer
1.3 Create Slider
1.4 Add the Slider to CMS Site
1.5 Add Callback Functionality

Lab 1.1 Create Slider and Slide Table

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



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Create a Slider Table

1. Navigate to **System Definition > Tables**.
2. Click **New**.
3. Enter the following information:

   Label: **Slider**
   Name: **u_slider**
   Extends Table: **Content Block**
   Create Module: **Checked**

4. In the columns sections, create the following fields:

Column Label	Type
Auto	True/False
Controls	True/False
Mode	Choice
Pager	True/False
Pause	Integer
Speed	Integer

5. Right-click header and click **Save**.
6. Select **Mode** from the list of fields.
7. Navigate down to the **Choices** related list.
8. Create three new entries: **fade**, **horizontal** and **vertical** (Label and Value the same).

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Create a Slide Table

1. Navigate to **System Definition > Tables**.
2. Click **New**.
3. Enter the following information:

   Label: **Slide**
   Name: **u_slide**
   Extends Table: **Menu Section**
   Create Module: **Un-checked**

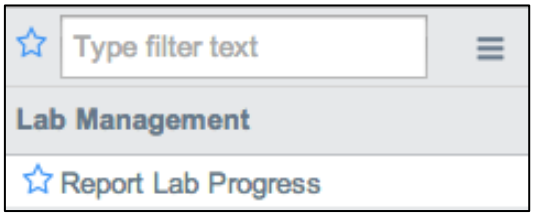
4. In the **Columns** sections create the following fields:

Column Label	Type	Reference
Slider	Reference	Slider
Background Color	String	

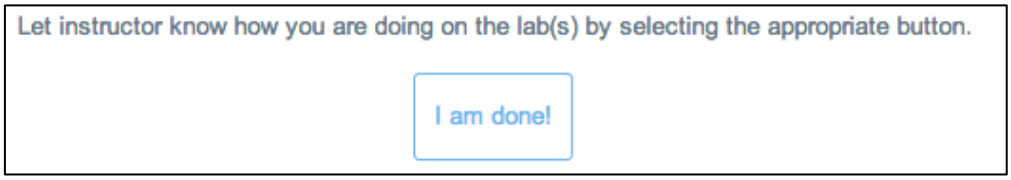
5. Right-click on header and click **Save**.

Progress Report

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



2. Click **I am done!**



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Lab Goal

Lab 1.2 Create Content Block Renderer

This lab explains how to create a content block renderer.

1. Navigate to **System UI > UI Macros**.
2. Click **New**.
3. Enter the following information:

   Name: **render_u_slider**

4. Copy and paste the code below in the XML field.

```
<?xml version="1.0" encoding="utf-8"?>
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide" xmlns:j2="null"
xmlns:g2="null">

<g:requires name="jquery.min.jsdbx" />
<g:requires name="jquery.bxslider.min.jsdbx" />

    <!-- First we will return a list of all slides linked to the current slider -->
    <g:evaluate>
      var sectionGR = new GlideRecord('u_slide');
      sectionGR.addQuery('u_slider', current.sys_id);
      sectionGR.addQuery('active', 'true');
      sectionGR.orderBy('order');
      sectionGR.query();
   </g:evaluate>

   <!-- We will start a counter to keep track of how many slides are being rendered
-->
   <g:evaluate>
     var count = 0;
   </g:evaluate>

    <!-- Load cms_menu_functions to determine if the user can view the slide -->
    <g:cms_menu_functions />


    <j:if test="${sectionGR.hasNext()}">

        <!-- Create the elememnts that will wrap the slides -->
        <div id="slider_${current.sys_id}" class="slider_wrapper">
            <div class="slider">
                <ul class="bxslider_${current.sys_id}">
                    <j:while test="${sectionGR.next()}">
```

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```
                        <j:if test="${canViewMenu(sectionGR)}">
                            <g:evaluate>count++;</g:evaluate>

                            <!-- Start rendering the slide -->
                            <li width="100%" style="background-
color:${sectionGR.u_background_color};">
                                <g:cms_menu_set_url_and_target
link_sysid="${sectionGR.getUniqueValue()}" />
                                <a href="${jvar_link_url}"
target="${jvar_link_target}">
                                    <img class="cms_menu_section_blocks_image_left"
src="${sectionGR.image.getDisplayValue()}"
title="${sectionGR.second_level_text.getDisplayValue()}" />
                                </a>
                            </li>

                        </j:if>
                    </j:while>
                </ul>
            </div>
        </div>

        <!-- Use the below variables to determine if we should put a pager and
controls on the slider -->
        <g:set_if var="jvar_auto" test="${count &gt;  1}" true="${current.u_auto}"
false="false" />
        <g:set_if var="jvar_controls" test="${count &gt; 1}"
true="${current.u_controls}" false="false" />
        <g:set_if var="jvar_pager" test="${count &gt; 1}" true="${current.u_pager}"
false="false" />

        <!-- Call the javascript function to start the slider -->
        <script>
          $j('.bxslider_${current.sys_id}').bxSlider({
            mode:'${current.u_mode}',
            auto:${jvar_auto},
            speed:${current.u_speed},
            pager:${jvar_pager},
            controls:${jvar_controls},
            pause:${current.u_pause},
            nextText:'',
            prevText:''
          });
        </script>
    </j:if>
</j:jelly>
```

5. Click **Submit**.

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Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.
2. Click **I am done!**

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Lab Goal

This lab explains how to create a slider based on any image you choose.

Lab 1.3 Create Slider

1. Navigate to **Slider > Sliders**.
2. Click on **New**.
3. Right-click header and select **Configure > Form Layout**.
4. Add the following Field to the form and click **Save**:

   Name

5. Right-click header and select **Configure > Related Lists**.
6. Add the **Slide > Slider** related list and click **Save**.
7. On the slider form enter the following information:

   Name: **Sample Slider**
   Control**s: True**
   Pager**: True**
   Auto: **True**
   Mode: **horizontal**
   Speed: **500**
   Pause: **4,000**

8. Right-click **h**eader and select **Save**.
9. Scroll to the **Slides** related list.
10. Click **New**.

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11. Right-click header and select **Configure > Form Layout**.

12. Add the **Background Color** field.

13. Click **Save**.

14. Create two slides using the following information.

    Name: **Choose any name for the slide**
    Redirect to: **The specified URL**
    URL: **http://www.servicenow.com**
    Left Image: **Upload any image to use as a slider**
    Background Color: **gray**

Progress Report

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

2. Click **I am done!**

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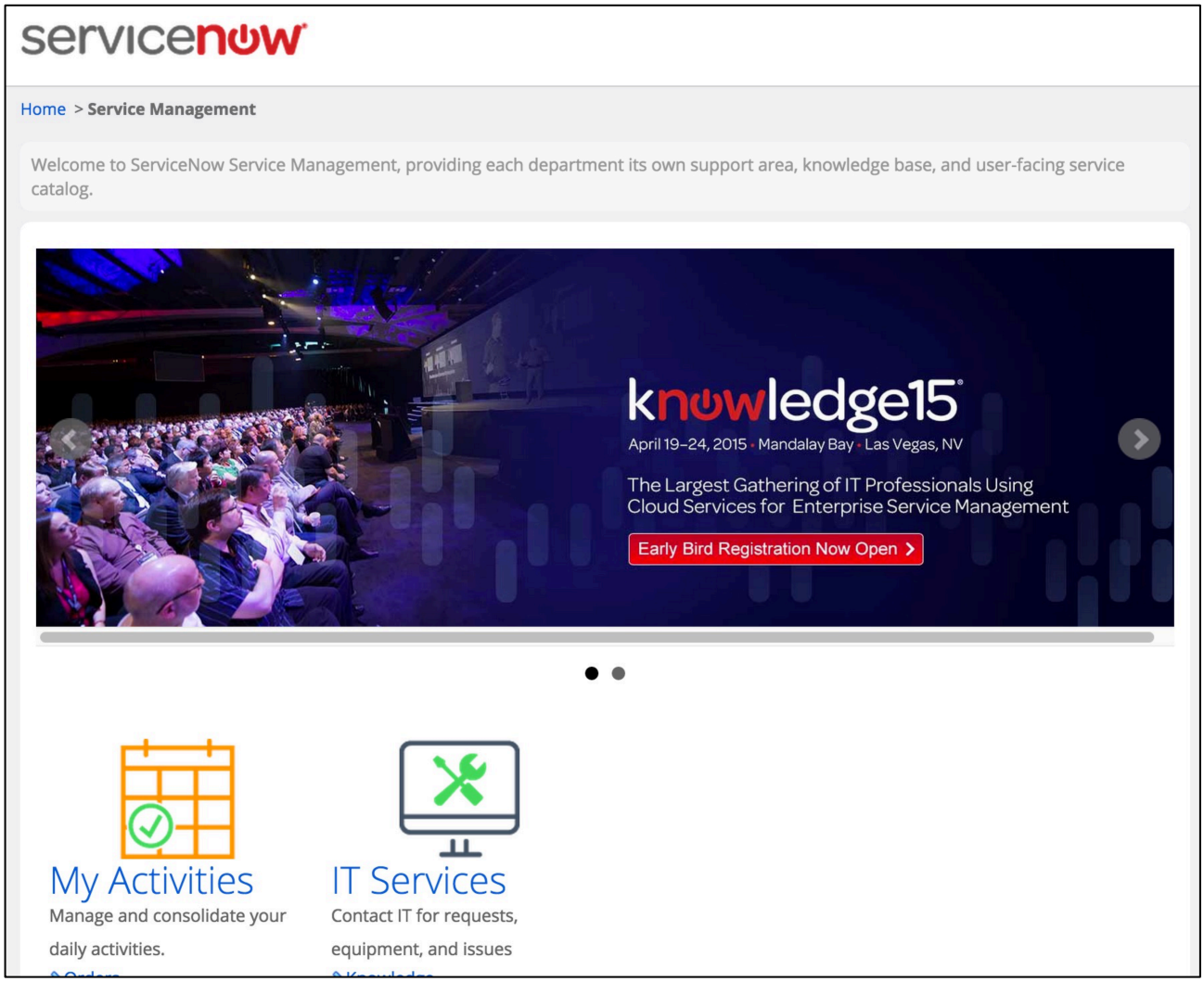
Lab Goal

This lab will show how to add the previously created slider to your site

Lab 1.4
Add Slider to CMS Site

1. Navigate to **Content Management -> Pages**.
2. Open the page **Service Management.**
3. Click **Edit Page**.
4. Click **Add Content**.
5. Search for the slider (e.g., 'Sample Slider') you created in the previous lab.
6. Click the first **Add Here** button.
7. Close the **Add Content** dialog window and click **Preview**.

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Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.
2. Click **I am done!**

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Lab Goal

This lab will show how to add callback functionality to your slider

Lab 1.5 Add Callback Functionality

1. Navigate to **Slider > Sliders** and open your Slider.
2. Open one of the slides, right-click the header and click **Configure > Form Layout**.
3. In the **Create New Field** section create the following fields:

Column Label	Type
Callback Text	String
Callback URL	URL

4. Add them to the **Selected** list and click **Save**.
5. Set the new field values as follows for your 2 slides:

Slide	Callback Text	Callback URL
Slide 1	Open Incidents	incident_list.do?sysparm_query=active=true
Slide 2	Open Changes	change_request_list.do?sysparm_query=active=true

6. Navigate to **Content Management > IFrames** and click **New**.

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7. Set the values as follows:

Name	Slide IFrame
Frame Name	gsft_main
Sizing	Expand to fit content

8. Click **Submit**.
9. Navigate to **Content Management -> Pages**.
10. Open the page **Service Management**.
11. Click **Edit Page**.
12. Click **Add Content**.
13. Search for the slider (e.g., 'Slide IFrame') you just created.
14. Click the first **Add Here** button.
15. Drag the Slider above the newly-added IFrame.
16. Navigate to **System UI > UI Macros** and open **render_u_slider**. Replace XML with:

```
<?xml version="1.0" encoding="utf-8"?>
<j:jelly trim="false" xmlns:j="jelly:core" xmlns:g="glide" xmlns:j2="null"
xmlns:g2="null">
    <g:requires name="jquery.min.jsdbx" />
    <g:requires name="jquery.bxslider.min.jsdbx" />

    <!-- Set the style for the callback text -->
    <style>
        .callback-text {
            position: absolute;
            right: 20%;
            left: 20%;
            bottom: 50px;
            color: white;
            font-weight: 900;
        }
    </style>

    <!-- First we will return a list of all slides linked to the current slider -->
    <g:evaluate>
```

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```
        var sectionGR = new GlideRecord('u_slide');
        sectionGR.addQuery('u_slider', current.sys_id);
        sectionGR.addQuery('active', 'true');
        sectionGR.orderBy('order');
        sectionGR.query();
    </g:evaluate>

    <!-- We will start a counter to keep track of how many slides are being rendered
-->
    <g:evaluate>
        var count = 0;
        var index = 0;
    </g:evaluate>

    <!-- Load cms_menu_functions to determine if the user can view the slide -->
    <g:cms_menu_functions />
    <j:if test="${sectionGR.hasNext()}">
        <!-- Create the elememnts that will wrap the slides -->
        <div id="slider_${current.sys_id}" class="slider_wrapper">
            <div class="slider">
                <ul class="bxslider_${current.sys_id}">
                    <j:while test="${sectionGR.next()}">
                        <j:if test="${canViewMenu(sectionGR)}">
                            <g:evaluate>count++;</g:evaluate>
                            <!-- Start rendering the slide -->
                            <li width="100%" style="background-
color:${sectionGR.u_background_color};">
                                <g:cms_menu_set_url_and_target
link_sysid="${sectionGR.getUniqueValue()}" />
                                <a href="${jvar_link_url}"
target="${jvar_link_target}">
                                    <img class="cms_menu_section_blocks_image_left"
src="${sectionGR.image.getDisplayValue()}"
title="${sectionGR.second_level_text.getDisplayValue()}" />
                                </a>

                                <!-- Display the callback text over the image -->
                                <div class="callback-
text"><h1>${sectionGR.u_callback_text}</h1></div>
                                <!-- Set the callback URL into a hidden field for
each slide -->
                                <input id="slide_${index.toString()}" type="hidden"
name="iframeURL" value="${sectionGR.u_callback_url}" />

                            </li>
                            <!-- increment the index -->
                            <g:evaluate>index++;</g:evaluate>
                        </j:if>
                    </j:while>
                </ul>
            </div>
```

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```
        </div>

        <!-- Use the below variables to determine if we should put a pager and
controls on the slider -->
        <g:set_if var="jvar_auto" test="${count &gt;  1}" true="${current.u_auto}"
false="false" />
        <g:set_if var="jvar_controls" test="${count &gt; 1}"
true="${current.u_controls}" false="false" />
        <g:set_if var="jvar_pager" test="${count &gt; 1}" true="${current.u_pager}"
false="false" />

        <!-- Call the javascript function to start the slider -->
        <script>
            var slider = $j('.bxslider_${current.sys_id}').bxSlider({
            mode:'${current.u_mode}',
            auto:${jvar_auto},
            speed:${current.u_speed},
            pager:${jvar_pager},
            controls:${jvar_controls},
            pause:${current.u_pause},
            nextText:'',
            prevText:'',
            onSlideAfter: function(){
                switchSlide();
            }
            });
            function switchSlide() {
                //get the URL from the hidden field
                var theURL = $j('#slide_' + slider.getCurrentSlide()).val();
                $j('#gsft_main').attr('src', theURL);
            }
            $j(document).ready(function() {
                //load the iframe when the page first loads
                switchSlide();
            });
        </script>
    </j:if>
</j:jelly>
```

17. Click **Update**.

18. Navigate to **Content Management -> Pages**.

19. Open the page **Service Management** and click **View Page**.

Progress Report

1. Navigate to **Lab Management> Report Lab Progress**.
2. Click **I am done**.

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Lab Goal

This lab will show how to leverage public methods of a JavaScript library in your custom content block. First, we will add our own button to advance the slide manually. Second, we will display the number of slides in our slider.

Lab 1.6 Public Methods

1. Navigate to **Slider > Sliders** and open your Slider.
2. Un-check **Auto** and click update.
3. Navigate to **System UI > UI Macros** and open **render_u_slider**.
4. Replace the content of script block at the bottom of the macro with this (only the content between **<script>** and **</script>**). The new code is highlighted in **RED**.

```
var slider = $j('.bxslider_${current.sys_id}').bxSlider({
mode:'${current.u_mode}',
auto:${jvar_auto},
speed:${current.u_speed},
pager:${jvar_pager},
controls:${jvar_controls},
pause:${current.u_pause},
nextText:'',
prevText:'',
onSlideAfter: function(){
    switchSlide();
}
});
function switchSlide() {
    //get the URL from the hidden field
    var theURL = $j('#slide_' + slider.getCurrentSlide()).val();
    $j('#gsft_main').attr('src', theURL);
}
$j(document).ready(function() {
    //load the iframe when the page first loads
    switchSlide();

          //add a click event handler for our custom next button
          $j('#my-slider-next').click(function(){
                slider.goToNextSlide();
                return false;
          });
});
```

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5. Add the following code after the **</script>** closing tag.

```
<button id="my-slider-next" type="button" style="background-
color:red;color:white;margin-bottom:25px;">Next Slide</button>
```

6. Click **Update**.
7. Navigate to **Content Management -> Pages**.
8. Open the page **Service Management** and click **View Page**.
9. You will notice that the slides no longer advance automatically. Click your new red **Next Page** button to advance the slides manually.
10. Navigate to **System UI > UI Macros** and open **render_u_slider**.
11. Replace the content of script block at the bottom of the macro with this (only the content between **<script>** and **</script>**). The new code is highlighted in **RED**.

```
var slider = $j('.bxslider_${current.sys_id}').bxSlider({
mode:'${current.u_mode}',
auto:${jvar_auto},
speed:${current.u_speed},
pager:${jvar_pager},
controls:${jvar_controls},
pause:${current.u_pause},
nextText:'',
prevText:'',
onSlideAfter: function(){
    switchSlide();
}
});
function switchSlide() {
    //get the URL from the hidden field
    var theURL = $j('#slide_' + slider.getCurrentSlide()).val();
    $j('#gsft_main').attr('src', theURL);
}
$j(document).ready(function() {
    //load the iframe when the page first loads
    switchSlide();

          //add a click event handler for our custom next button
          $j('#my-slider-next').click(function(){
                slider.goToNextSlide();
                return false;
          });

          //set the slide count
          $j('#slide-count').html(slider.getSlideCount());
});
```

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12. Add the following code after the </script> closing tag.

```
<h2>My Slider Has <span id="slide-count"></span> Slides</h2>
```

13. Click **Update**.

14. Navigate to **Content Management -> Pages**.

15. Open the page **Service Management** and click **View Page**. You should see something similar to the following below your slider:



Progress Report

1. Navigate to **Lab Management > Report Lab Progress**.
2. Click **I am done**

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