Challenge Lab Sample Markdown Elements

Markdown styles that can be used:

!INSTRUCTIONS[](https://raw.githubusercontent.com/LODSContent/Challenge-V3-Framework/main/Templates/Sections/Toggle.md)

(When the "Hints Enabled" toggle above is set to "No", all Hint and Knowledge items in the lab will be hidden. In addition, all ShowGuided and ShowAdvanced sections will be hidden.)

In this section you will find the Markdown styles that we suggest using for Challenge Lab authoring. You can find additional help and syntax specific to the lab editor by using the **? - Help** menu option.

The lab editor follows most standard Markdown syntax rules beyond the lab editor customizations.

- Icon blocks will typically follow an associated task item that is listed as a bullet. All icon blocks are automatically indented one level.
- Use the Standard icon blocks for short statements or small quantities of detail.
- Use the Expandable icon blocks for details that should only be visible once expanded and for larger amounts of detail that would otherwise clutter the screen.

Challenge Labs Activity Blocks and Sections

These blocks and sections will typically be found in each activity within a challenge lab. When the "Hints Enabled" slider is set to "No", these items will be hidden. This is a special configuration designed for the Challenge labs environment.

```
#### Hint Blocks

>[!Hint] This is a standard Hint block. Hints will be hidden when hints are off.

:::ShowGuided(ShowGuided=Yes)
>[+hint] Expand this Hint for guidance on…
>
>- There must be at least one blank line before the expandable content.
>
> - Expandable hints are typically used for step-by-step style instructions.
>
```

> **Note**: All labs must include "Reviewer steps" that will allow a reviewer to complete the lab. Those steps should be included inside an Expandable Hint, like this one, wrapped in a Section with (ShowGuided=Yes). When the lab is in review, these steps can be made visible by setting a lab variable ShowSteps to True. For production, the ShowSteps variable can be removed or set to False.
>
> Hints will be hidden when hints are off.
>
:::

Knowledge block

:::ShowAdvanced(ShowAdvanced=Yes)
>[!knowledge] Want to learn more? Review the documentation on [creating Task #](https://docs.microsoft.com/ "Create Task # Guidance").
>
> This Knowledge block will be hidden when the ShowAdvanced lab variable is set to "False" or when hints are off by either setting the ShowHints variable to "No" or by using the toggle in the lab..
>
> If there is enough content, a Knowledge block will automatically be expandable.
>
> Knowledge items are typically used to provide additional detail that may be useful in completing the lab, such as links to product or vendor documentation.
>
> Knowledge items are hidden when hints are off.
>
> Knowledge items, like this one, wrapped in a Section with (ShowAdvanced=Yes) can be made visible by setting a lab variable ShowAdvanced to True. For Expert labs, the ShowAdvanced variable can be removed or set to False.
<!-- There MUST be a blank space here before the ::: end of section, or the Knowledge item will not be expandable. -->
:::

>[!knowledge] Want to learn more? Review the documentation on [creating Task #](https://docs.microsoft.com/ "Create Task # Guidance").
>
> This Knowledge item will be hidden when hints are off by either setting the ShowHints variable to "No" or by using the toggle in the lab.
>
> If there is enough content, a Knowledge block will automatically be expandable.
>

> Knowledge items are typically used to provide additional detail that may be useful in completing the lab, such as links to product or vendor documentation.
>
> This knowledge item is not wrapped in a ShowAdvanced=Yes section and therefore will be unaffected by the ShowAdvanced setting.

Begin Guided item section

```
:::ShowGuided(ShowGuided=Yes)
#### Guided items:
(Any item can be hidden by wrapping the markdown in a "ShowGuided" section. It will be hidden when hints are off or when the ShowGuided variable is set to False.)
<!-- Use for items that should be hidden when ShowGuided is disabled but are not included in hints/knowledge blocks.  -->
- Run the following command in a PowerShell session:

  ```powershell
  Get-Service

  Get-Service | Where Name -like *win* | Out-File .\WinServices.txt

  ```
:::
```

Begin Advanced item section

```
:::ShowAdvanced(ShowAdvanced=Yes)
#### Advanced items:
(Any item can be hidden by wrapping the markdown in a "ShowAdvanced" section. It will be hidden when hints are off or when the ShowAdvanced variable is set to False.)
<!-- Use for items that should be hidden when ShowAdvanced is disabled but are not included in hints/knowledge blocks.  -->
>[+] For additional help, review the following video on how to create an S3 bucket:
>
!video[Creating an S3 bucket](https://lodmanuals.blob.core.windows.net/lms/SkillChallLabFiles/VirtualMachine%20and%20TypeText.mp4)
>
:::
```

Additional Skillable Sections

These Skillable markdown items can be used to enhance a challenge lab with content that will be displayed at all times. Using Note, Help and Alert items can help call out detail within a lab and can serve to visually break up the wall of Hint and Knowledge items that would otherwise result.

Note blocks

>[!note] This is a standard Note block.

>[+note] Expand this Note for additional information about...
>
> Notes are typically used to call out something that be out of the ordinary in the lab environment, or that may not always be expected.
>
> There must be at least one blank line before the expandable content.
>

Help blocks

>[!help] This is a standard Help block.

>[+help] Expand this for additional Help about...
>
> Help items are typically used to assist with something in the lab environment such as logons, switching VMs, etc.
>
> There must be at least one blank line before the expandable content.
>

Alert blocks

>[!alert] This is a standard Alert block.

>[+alert] Expand this Alert for important details about...
>
> Alerts should be used to grab the student's attention for something very important that they should not miss.
>
> There must be at least one blank line before the expandable content.
>

Standard Markdown Elements

The following markdown styles can be used to present tables, code blocks and images within the lab content.

Tables

(To indent the table, preceed it with a bulleted item, then indent the table itself. There must be a blank line following the bullet before the table.)

- Perform task (...) using details in the following table:

Property	Value
Property 1	**Value 1**
Property 2	**Value 2**
Property 3	**Value 3**
Property 4	**Value 4**

Code blocks

(To indent the code block, preceed it with a bulleted item, then indent the content. There must be a blank line following the bullet before the code block.)

- Run the following command in a terminal session:

  ```bash
  code block
  ```

- Run the following command in a PowerShell session:

  ```PowerShell
  Get-Service
  Get-ChildItem
  ```

Inline code blocks:

Inline code blocks provide examples of code within a line of text that can be automatically typed within a VM or copied for pasting into the user's local console.

- Type the ```Get-Aduser -Identity 'User1'``` command to retrieve a user from Active Directory.

Type Text

Type text can be used to present text or commands that can be automatically typed within a VM.

- Type the +++Get-Aduser -Identity 'User1'+++ command to retrieve a user from Active Directory.

Copy Text

Type text can be used to present text or commands that can be copied and pasted into the user's local console, or for large quantities of text that can be copied and pasted into a Hyper-V VM with Enhanced Session Mode and Clipboard enabled.

- Copy the ++Get-Aduser -Identity 'User1'++ command to retrieve a user from Active Directory.

Images

- Indent an image following a bullet.

    !IMAGE[AdvancedLogo.png](AdvancedLogo.png)

>[+note] Images can also be included inside an expandable block.
>
> There must be at least one blank line before the expandable content.
>
> Images can be included inside the icon blocks. Provide at least one blank line (or 4 spaces at the end of the line) before the image:
>
>!IMAGE[AdvancedLogo.png](AdvancedLogo.png)

Videos

This is an example of an "iconless" block which can be used if none of the standard icons apply to the content of this section. However, videos can be embedded within any of the standard icon sections as well.

(Add the following video at the beginning of labs that use VMs.)

```
>[+]Review the following video on logging in to a Virtual Machine (VM)
>
>!video[Logging in to  a Virtual Machine
(VM)](https://lodmanuals.blob.core.windows.net/lms/SkillChallLabFiles/VirtualMachine%20and%20Ty
peText.mp4)
>


<br>
(When absolutely necessary, you can add more spacing between elements with one or more HTML br
tags.)
<br>
<br>
```

Samples of markdown icons with content.

These examples show how lists, images, tables and code blocks can be embedded within an expandable
section in the style used for a typical Challenge lab.

```
- Task 1.

:::ShowGuided(ShowGuided=Yes)
>[+hint] Expandable section with a list.
>
> There must be at least one blank line before the expandable content.
>
> Provide detailed steps to complete the task here...
>
> Lists can be included inside the icon blocks:
>- Item 1
>- Item 2
>- Item 3
:::

:::ShowAdvanced(ShowAdvanced=Yes)
>[!knowledge] Want to learn more? Review the documentation on [creating Task
#](https://docs.microsoft.com/ "Create Task # Guidance"). Knowledge items are hidden
when hints are off.
:::

- Task 2.

:::ShowGuided(ShowGuided=Yes)
>[+hint] Expandable section with an image.
>
> There must be at least one blank line before the expandable content.
>
```

> Provide detailed steps to complete the task here...
>
> Images can be included inside the icon blocks:
>
>!IMAGE[AdvancedLogo.png](AdvancedLogo.png)
:::

:::ShowAdvanced(ShowAdvanced=Yes)
>[!knowledge] Want to learn more? Review the documentation on [creating Task #](https://docs.microsoft.com/ "Create Task # Guidance"). Knowledge items are hidden when hints are off.
:::

- Task 3: Perform the task using the values from the following table:

Property	Value
Property 1	**Value 1**
Property 2	**Value 2**
Property 3	**Value 3**
Property 4	**Value 4**

:::ShowGuided(ShowGuided=Yes)
>[+hint] Expandable section with a table.
>
> There must be at least one blank line before the expandable content.
>
> Provide detailed steps to complete the task here...
>
> You can embed a table inside any of the icon blocks:
>
>|Property|Value|
>|:--|:--|
>|Property 1|**Value 1**|
>|Property 2|**Value 2**|
>|Property 3|**Value 3**|
>|Property 4|**Value 4**|
:::

:::ShowAdvanced(ShowAdvanced=Yes)
>[!knowledge] Want to learn more? Review the documentation on [creating Task #](https://docs.microsoft.com/ "Click here for more information"). Knowledge items are hidden when hints are off.
:::

Variables

Variable	*Value*	Description/Impact
Difficulty	Guided [or] Advanced [or] Expert [or] Getting Started |Logo and Alert in Summary section for Expert
cloudEnvironment	None [or] CloudSlice	Shows/hides Cloud slice alert in overview
Global[JobRole] |**GlobalAdministrator**: *Administrator* **GlobalAnalyst**: *Analyst* **GlobalArchitect**: *Architect* **GlobalDataScientist**: *Data Scientist* **GlobalDeveloper**: *Developer* **GlobalDataEngineer**: *Data Engineer* **GlobalDevOpsEngineer**: *DevOps Engineer* **GlobalSecurityEngineer**: *Security Engineer* **GlobalBusinessUser**: *Business User*	Used in overview description
GlobalCompany	*Hexelo*	Used in overview description
GlobalIntroduction	[blank]	Custom text option above Understand scenario in overview
GlobalReqHeader	[blank]	Custom text option below Requirement titles
GlobalReqFooter	[blank]	Custom text option below Check your work
GlobalSummary	[blank]	Custom text option below series list in summary
ShowHints	*Yes* [Guided, Advanced, Getting Started] *No* [Expert]	Shows/Hides all hints/knowledge blocks
ShowToggle	*Yes* [Advanced, Guided, Getting Started] *No* [Expert]	Shows/Hides Hints toggle on Requirement pages
ShowGuided	*Yes* [Guided, Getting Started] *No* [Advanced, Expert]	Shows/Hides Guided hints wrapped in ShowGuided
ShowAdvanced	*Yes* [Guided, Advanced, Getting Started] *No* [Expert]	Shows/Hides Advanced content wrapped in ShowAdvanced
ShowActivity	*Yes* [Guided, Advanced, Getting Started] *No* [Expert]	Shows/Hides Check your work sections wrapped in ShowActivity
Debug	*False*	Used in Dev for script testing (Not a required variable, but if there should always be False)
Series	*[LOD# Prefix]* Example: AZ900	Populates Series list in summary from GitHub
LabMode	*Select Lab Mode*	Used for lab mode toggle (Not a current feature)
ShowLabMode	*Yes*	Used for lab mode toggle (Not a current feature)