NVDA Class Four  
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# Introduction

In this lesson, we'll discuss punctuation and symbol settings, NVDA Add-ons, and Input Gestures.

These features further fine-tune NVDA to suit your needs.

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# Punctuation/Symbol Pronunciation

Configure when punctuation and symbols are echoed and how they are pronounced in the “Symbol Pronunciation” dialog.

Open the Symbol Pronunciation dialog:

Open the NVDA menu "Preferences” submenu and Activate “Punctuation/symbol pronunciation.”

The Symbol Pronunciation dialog opens.

Configure the following:

* Filter by - Select which punctuation and symbols are displayed in the list box.
* Symbols - A list box of configured punctuation and symbols.
* Replacement - The replacement text for the selected punctuation or symbol.
* Level - Selects at what level punctuation or a symbol is echoed.
* Send actual symbol to synthesizer - Select when punctuation or a symbol is sent to the synthesizer rather than the replacement text.
* Add - Add punctuation or a symbol.
* Remove - Remove the selected punctuation or symbol.

Let’s discuss punctuation and symbols in detail.

## Add Punctuation or a Symbol

To add punctuation or a symbol to NVDA:

* Open the Symbol Pronunciation dialog
* Activate the “Add” button.
* The “Add Symbol” dialog opens.

The "Add Symbol" dialog has an edit box and buttons:

* Symbol - Type a symbol.

Activate the OK button to save the symbol and exit the “Add Symbol” dialog

Activate the Cancel button to cancel the changes and exit the “Add Symbol” dialog

The symbol is added to the list box. Focus is placed on the symbol.

Configure additional settings with the dialog controls:

* Replacement - input the symbol replacement text
  + To silence a character, insert a blank space.
* Level - Select the highest punctuation level at which the symbol is echoed.
  + The symbol is echoed at the selected level and below.
    - Some
    - Most
    - All
    - None
    - Character
* Send actual symbol to synthesizer - The actual symbol (not the replacement) is sent to the synthesizer.
  + Send the actual symbol to the synthesizer NVDA experiences unexpected results, such as unwanted pauses.
  + Choose from:
    - Always
    - Never
    - Only below symbol’s level

Activate the OK button to save the changes and exit the dialog.

Activate the Cancel button to cancel the changes and exit the dialog.

## Edit Punctuation or a Symbol

Edit punctuation or a symbol in the Symbol Pronunciation dialog.

* Open the Symbol Pronunciation dialog.
* Focus is on the symbols list box.
* Select a symbol to edit.

Configure the following:

* Replacement
* Level
* Send actual symbol to synthesizer.

Activate the OK button to save the changes and exit the dialog.

Activate the Cancel button to cancel the changes and exit the dialog.

## Remove Punctuation or a Symbol

Remove punctuation or a symbol in the Symbol pronunciation dialog.

Default punctuation and symbols can't be removed. Custom punctuation or symbols can be removed.

To remove punctuation or a symbol:

* Open the Symbol Pronunciation dialog.
* Focus is on a list box.
* Select a symbol to remove.
* Activate the “Remove” button.

The symbol is removed.

Activate the OK button to save the changes and exit the dialog.

Activate the Cancel button to cancel the changes and exit the dialog.

# NVDA Add-ons

The NVDA community creates Add-ons that enhance NVDA functionality.

Add-ons add features to NVDA or provide access to applications or devices.

To access Add-ons, use the Add-ons Store. The Add-ons Store is in the NVDA menu. Open the NVDA "Tools" submenu and activate “Add-ons Store.”

A warning screen opens. NVDA is an open-source application. Community members write most Add-ons.

NVDA warns that some may contain suspicious code. I have never experienced malware, but NVDA wants you to be aware of the possibility.

This warning screen has two controls:

* Don't show this again.
* OK

After acknowledging the warning, the NVDA Add-ons store dialog opens.

The following are available:

* An Add-ons list box.
  + It may take a moment for the list to propagate.
  + Select an Add-on to hear its details, including:
    - Name - The Add-on name.
    - Status - The Add-on status (Running, disabled, etc.).
    - Version - The Add-on version.
    - Author - The Add-on author's name and email address.
* Description - The Add-on description
* Actions - This button opens a drop-down list:
  + Install - install the add-on.
  + Homepage - Open the Add-on homepage.
  + License - Open a webpage with license information.
  + Source code - Open a webpage through which the source code is downloaded.
  + Community Reviews - Open a webpage with add-on reviews.
* Other Info - A read-only edit box with Add-on information.
* Install from external source - The add-on is installed from a downloaded file.
* Close - Close the Add-ons Store dialog.
* Channel - Filter the Add-ons list to show only Add-ons matching the selected option:
  + Stable - The add-on has been tested and is ready for use by the NVDA community. This is the default option.
  + Beta - The add-on is in its testing phase. It is available for community testing, feedback, and continued development.
  + Dev - The add-on is available for other developers and is not ready for community use.
* Include incompatible Add-ons - NVDA includes incompatible add-ons in the add-ons list.
* Search - Search the add-ons list with this edit box.

Let’s discuss Add-ons in detail.

## Add-on Store Property Sheets

The Add-on store has property sheets. Property sheet tabs are at the top of the Add-on Store dialog.

Add-on store property sheets are:

* Installed Add-ons
* Updateable Add-ons
* Available Add-ons
* Installed Incompatible Add-ons

Each property sheet has a list box listing relevant add-ons.

All property sheets have similar controls with one exception.

The "Updateable Add-ons" and "Available Add-ons property sheets have a "Include incompatible add-ons" checkbox.

The "installed Add-ons" and "Installed Incompatible Add-ons" property sheets have a combo box that filters the list box to show:

* All - show all add-ons.
* Enabled - show enabled add-ons.
* Disabled - show disabled add-ons.

Let's discuss Add-on management.

## Search for Add-ons

Search for Add-ons in the Add-ons store search edit box.

* Open the Add-ons store.
* Focus in the search-edit box
* Insert a search term or text string.
* Navigate to the add-ons list box to review search results.

Clear the search box to restore the add-ons list.

## Install Add-ons

Install add-ons in the NVDA Add-on store.

* Open the Add-on Store.
* Select an add-on to install.
* To install multiple add-ons, use list box selection commands to select multiple add-ons.
* There are two ways to install add-ons:
  + Activate the add-on to open a drop-down list and activate "Install."
  + If multiple add-ons are selected, Press ENTER to open a drop-down list with one option. Activate "Install selected add-ons."

To install an add-on from a downloaded file:

* Open the Add-on Store
* Activate the "Install from external source" button.
* The "Choose Add-on Package File" dialog opens.
* The dialog has the same layout as the Open and Save dialogs.
* Select an add-on file and activate the "Open" button.

NVDA installs the add-on or add-ons. Each installation step is announced.

Activate the Close button to exit the Add-ons Manager.

If an installed add-on requires an NVDA restart, NVDA opens a restart prompt Window.

Download some Add-ons and enjoy NVDA’s new functionality!

## Add-on Help

Many Add-ons have custom help documentation.

Access help documentation on the Add-ons Homepage.

To review Add-on help:

* Open the Add-ons Store.
* Select an Add-on in the Add-ons list.
* Available add-ons are subject to the selected property sheet.
* Activate an add-on or the "Actions" button.
* Activate "Honepage."

A web page opens with Add-on file downloads and documentation.

Review the webpage to access help documentation.

Some add-ons don't provide help documentation as they provide obvious functionality, or the developer opted not to provide documentation.

## Remove Add-ons

Remove add-ons in the Add-ons Store.

To remove an Add-on:

* Open the Add-ons Store.
* Select an Add-on in the Add-ons list.
* To remove multiple add-ons, use list box selection commands to select multiple add-ons.
* Available add-ons are subject to the selected property sheet.
* Activate an add-on or the "Actions" button.
* Activate "Remove."
* To disable or remove multiple selected add-ons
  + Press ENTER to open a drop-down list
  + Select and activate “Remove selected add-ons.”

Removed add-ons are uninstalled and removed from the computer and add-on list.

Removed add-ons can be re-installed in the "Available" property sheet list box.

Activate Close the button to exit the Add-ons Store.

If a removed add-on requires an NVDA restart, NVDA opens a restart prompt Window.

## Enable and Disable Add-ons

Enable and disable add-ons in the Add-ons Store.

To enable or disable Add-ons:

* Open the Add-ons Store.
* Select an Add-on in the Add-ons list.
* To manage multiple add-ons, use list box selection commands to select multiple add-ons.
* Available add-ons are subject to the selected property sheet.
* There are two ways to install add-ons:
  + Activate an add-on to open a drop-down list and activate "enable" or "disable."
  + If multiple add-ons are selected, Press ENTER to open a drop-down list. Activate "enable selected add-ons" or "disable selected add-ons."

The action is taken

Activate the Close the button to exit the Add-ons Store.

If an enabled or disabled add-on requires an NVDA restart, NVDA opens a restart prompt Window.

## Update Add-ons

Update add-ons in the Add-ons Store "Updateable Add-ons" property sheet:

* Select an add-on to update.
* To update multiple add-ons, use list box selection commands to select multiple add-ons.
* There are two ways to update add-ons:
  + Activate the add-on to open a drop-down list and activate "Update."
  + If multiple add-ons are selected, Press ENTER to open a drop-down list. Activate "Update selected add-ons."

NVDA updates the add-on or add-ons.

Activate the Close button to exit the Add-ons Store.

If an updated add-on requires an NVDA restart, NVDA opens a restart prompt Window.

# Input Gestures

 The Input Gestures dialog configures NVDA keyboard commands, braille display input, and touch gestures.

In the Input Gestures dialog:

* Review configured keyboard, braille, and touch commands
* Search for commands
* Add commands
* Remove commands

Focus must be in an application with which NVDA commands are associated to use the Input Gesture dialog.

To configure gestures for Browse mode, focus in a browser. To configure gestures for Microsoft Word, focus in Microsoft Word.

The Input Gestures dialog is in the NVDA menu.

Open the NVDA menu "Preferences” submenu and activate “Input Gestures.”

The Input Gestures dialog opens.

Only focused application commands are displayed.

Dialog controls are:

* Filter By - Input a search string. Search results are displayed in a tree view below the edit box.
  + Clear the edit box to restore the default tree view.
* Tree View - The tree view displays gestures with which commands are or can be configured.

Navigate the tree view with Windows tree view navigation.

Listen carefully as you navigate the tree view.

The remaining commands are buttons:

* Add - Add a gesture
* Remove - Remove a gesture
* Reset to Factory Defaults

Practice navigating the dialog and listen to the tree view options. Expand the actions associated with commands.

Ensure you understand the dialog layout and how to access dialog controls before managing input gestures.

## Add an Input Gesture

Add commands in the Input Gestures dialog. Add commands to actions.

Multiple commands can be added to a single action.

To add an Input Gesture:

* Focus in an application.
* Open the Input Gestures dialog.
* Select a tree view action to add a command.
* Activate the “Add” button.
* A new entry is added to the tree view and is highlighted.
* Type a keyboard command.
* Select an option from the drop-down menu:
  + Add the command to the current layout (Desktop or Laptop).
  + Add the command to all layouts.

The command is added to the tree view.

Activate the OK button to save the changes and exit the dialog.

Activate the Cancel button to cancel the changes and exit the dialog.

## Remove an Input Gesture

Remove an Input Gesture in the Input Gestures dialog.

To remove a gesture:

* Open the Input Gestures dialog.
* Select an action from which to remove a command.
* Expand the action and select the command to remove.
* Activate the “Remove” button.

The command is removed from the action.

Activate the OK button to save the changes and exit the dialog.

Activate the Cancel button to cancel the changes and exit the dialog.

## Restore Input Gesture Factory Defaults

Restore factory defaults in the Input Gestures dialog.

* Open the Input Gestures dialog.
* Activate the Reset to factory defaults button.
* NVDA prompts to confirm the action.

Answer yes, and Input Gesture factory defaults are restored.

# Conclusion

Using the skills in this lesson, you can interact with and enable a variety of powerful NVDA and add-on features.

NVDA configurations are easily reset to factory defaults And the Add-on store provides complete control over Add-ons.

The ability to quickly restore factory defaults makes NVDA a safe screen reader to explore and try new features.

# Exercises

1. Open the Symbol Pronunciation dialog and configure the punctuation and symbol settings to suit your needs.
2. Add a new symbol to NVDA using the Symbol Pronunciation dialog.
3. Edit an existing symbol in the Symbol Pronunciation dialog.
4. Remove a custom symbol from the Symbol Pronunciation dialog.
5. Explore the NVDA Add-ons store and find an Add-on that enhances NVDA functionality.
6. Install an Add-on from the NVDA Add-ons store.
7. Search for an Add-on in the NVDA Add-ons store.
8. Filter the Add-ons list in the NVDA Add-ons store to show only Add-ons matching a selected option.
9. Use the Add-on store property sheets to manage your Add-ons.
10. Install an Add-on from an external source.

--END--