

# **Accessibility Guide for PerforMax3 Courseware**

## ***Purpose:***

This document describes the conventions and techniques used to ensure that the full functionality of PerforMax3 courseware is accessible to all users. Familiarity with these conventions will be helpful for users of assistive technology.

## ***Courseware Organization:***

The courseware consists of a set of screens or “pages” containing training content text, interactive learning objects and a training assessment. All courses are structured using the same layout. Navigation through each course is linear, using the controls on the navigation menu. The course layout includes the following pages:

- Title Page
- Overview Page with Learning Objectives
- Content Pages (typically 20 to 50)
- Conclusion Page
- Assessment Instructions Page
- Assessment Pages (typically 5 to 10)
- Assessment Results Page

## ***Page Layout:***

The central rectangular area of each page is used to display the relevant training content. The items used in this part of the page include text, images, active buttons and links, and media players.

The top portion of the page contains the course title and any brand associated with the content owner.

The bottom portion of the screen consists of a horizontal bar used to display instructions and to display the page count. The navigation menu is located at the bottom most part of the screen with the “next page” control on the right-hand corner.

Each page contains an anchor to mark the top of the page. The top anchor is the first object in the page tab sequence. As each new page

is loaded the browser focus will be on the top of page anchor. This anchor is not visible.

### ***Reading order of Content:***

In some cases, the visual layout of the page may be different from order or sequence of information accessible through screen readers. This is done to ensure that any relevant instructions for use of the page are vocalized at the appropriate time.

When hidden text fields are revealed as the user activates an on-page link or button, the text will be in line or in sequence with link or button.

### ***Heading Mark-up:***

Heading mark-up is used extensively in the courseware to help users of screen reader assistive technologies identify and locate specific types of information, such as instructions, and to help them orient themselves on the training pages. The following heading mark-up level conventions are used throughout:

- <h1> for course or lesson title
- <h2> for topic or section title
- <h3> for page headings
- <h4> for question stem or statement
- <h5> for feedback information
- <h6> for instructions

### ***Instructions:***

User instructions are provided on each page. Instructions are displayed at the same location on each page, near the bottom of the page. Instruction fields are always marked using the <h6> heading so they can be readily accessed using assistive technology. The page reading order may be altered from the visual layout in order to ensure instructions are vocalized before the active items to which they refer are encountered. On some pages, additional instructions may be revealed as the user explores the content on the page.

The wording of instructions is free of visual reference to objects on the page.

### ***Active Items and Controls (button/links):***

Content pages frequently contain active items that are used to reveal additional information. Visually, these items resemble "buttons" but to users of screen reading assistive technologies they will be image – link pairs or just links. By convention, these items are referred to as "button/links".

Each button/link includes an alternative text tag. Some button/links also include captions or labels. The tag and label when taken together, will describe the purpose or function of the button/link. When more than one button/link is used on a page, the alternative text tag and label together will uniquely identify each button/link. Instructions are provided that direct the user to interact with button/links.

To the largest extent possible the alt tag and caption information vocalized by the screen readers is succinct, avoiding redundancy and unnecessary verbiage.

The "state" of button/links, such as checkboxes, is communicated by "pre-pending" the word "selected" to the alternate text tag for the button/link. In this way the state of selected objects is accessible.

All button/links are keyboard-accessible using the tab key and enter key combination. The tab order or sequence of button/links is intended make the courseware easy to use. The enter key can be used to trigger any button/links once the browsers focus is fixed on the item.

When button/links are used to dynamically reveal additional information, the revealed text will be inline with the button/link, occurring next in the sequence of items on the page.

### ***Navigation Menu:***

The navigation menu is a set of controls or button/links located at the bottom of the page. The menu is deliberately positioned below the page content so that users of assistive technology are not required to traverse or skip past the button/links to get to the page content. The Navigation Menu is organized so that the most frequently used button/link, the next button, is first in the tab order. The tab sequence for the navigation menu advances the browser focus from the right to left starting with the next button/link and ending on the exit button/link. The list of navigation functions is defined below:

- Next Page – select to advance to the next page of the training
- Previous Page – select to move to backward to the previous page
- Topic Menu – select to jump to the topic menu page
- First Page – select to return to the first page of training
- Print This Page – select to print a copy of the current page
- Training Assessment – jump forward to the start of the training assessment
- Information About this Program – navigate to a resource page with help files, version information and other legal and technical information about the courseware
- Exit Lesson – select to leave or close the courseware

### ***Using the Assessment and Self-check Pages:***

Each assessment or self-check page contains instruction text, a question statement or stem, multiple choice answers and a control to submit the answer. These page types also include a feedback field used to display feedback text after the answer selection is submitted. Assessment pages are not “forms” but are keyboard accessible and are accessible to individuals using screen readers. Each of the key fields used on these pages is identified using heading markup as follows:

Instructions – heading 6

Question stem – heading 4

Feedback – heading 5

An off-screen anchor is used on these pages to hold the browser focus when the page is first entered. The anchor precedes all the other items on the pages. This starting point enables keyboard users to tab to the first answer selection with one keystroke and helps prevent the accidental selection of the first answer choice before the user has review the page instructions and question statement.

For screen readers, the reading order on assessment pages begins with the instructions followed by the question stem. The group of selectable answer choices follows next. These button/links are keyboard accessible. The button/link label contains the answer text. Answer choices are registered by clicking or by pressing the enter key. The “submit” button/link follows the answer choices. Immediate feedback is provided in the feedback field that follows the submit button/link in reading order. An anchor has been added to the assessment and self-check pages immediately preceding the feedback field. Answers cannot be changed once they have been submitted.

The "next page" button/link is hidden until an answer has been submitted.

### ***Assessment Results Page***

The assessment results page follows the last of the training assessment pages. This page is updated dynamically to display the outcome of the training assessment. After successful completion of the assessment with a passing score, the user is instructed to exit. If a passing score is not achieved the user can review the training and retake the assessment by selecting the "first page" button/link or exit and retake the training at another time.