

# Customizing and Using the MX7000 graphical LCD control panel

## Revisions

Date	Description
Jan 2019	Initial release

## Acknowledgements

This paper was produced by the following members of the Dell EMC storage engineering team:

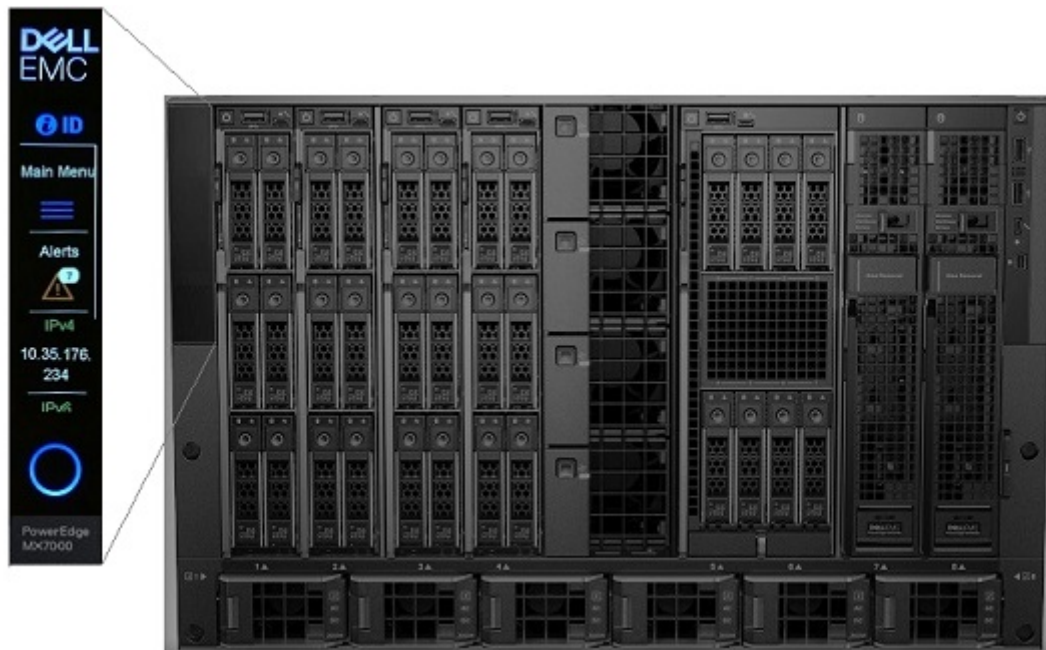
Author: Santosh Bidaralli and Christopher Poblete

# Table of contents

Revisions.....	2
Acknowledgements.....	2
Introduction .....	4
Identifying parts of the LCD panel .....	4
Navigating the LCD.....	5
Out-of-the-box initial deployment with LCD .....	6
Customizing the LCD display language.....	7
Customizing the LCD home menu.....	7
LCD operation modes.....	9
Help button.....	10
References.....	11

## Introduction

PowerEdge MX7000 next-generation modular chassis with the touch screen LCD on the left control panel provides an enhanced graphical capability to the at-the-box chassis management.



The graphical LCD panel provides the following:

- Overall chassis health status
- Fault list by subsystem when chassis state is not healthy
- Basic system information
- Management Module network settings and configuration
- Quick Sync 2 for OpenManage Mobile connectivity
- Chassis and sled system identify
- Chassis power off and firmware update notification

This technical whitepaper describes how you can custom configure and use the PowerEdge MX7000 graphical LCD control panel. Other features of the LCD are described in details in a separate technical white paper.

## Identifying parts of the LCD panel

Understanding the parts of the LCD panel helps you to effectively use its features. There are three sections to the LCD panel.

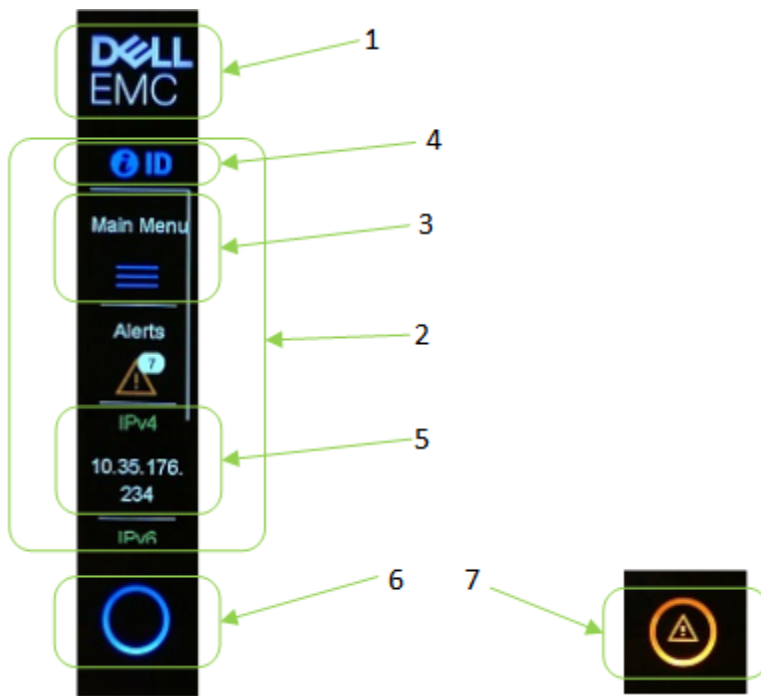


Figure 1 Parts of the LCD panel

The top section of the LCD is the logo (Figure-1 item 1). The logo is always lit when there is AC power input to the chassis and the Management Module is functional. The logo has no response to touch.

The middle section of the LCD is the active touch screen (Figure-1 item 2) where the user interaction occurs. The screen is arranged as a menu that contains buttons. Each button (Figure-1 item 3) contains a combination of icon and text. A button can contain just an icon (Figure-1 item 4) or just texts (Figure-1 item 5).

When idle, the active touch screen section is in the OFF state (sleep) and shows a blank screen. Touching any part of the screen section will turn ON the screen (wake-up) and shows the Home menu. If the screen in the ON state is idle for 10 minutes, the screen will go to the OFF state.

The bottom section of the LCD is combination of status LED and an activation icon (Figure-1 item 5). It responds to touch. The combo section can be in an OFF state or ON state. In an ON state, the LED can be solid/blinking color blue (Figure-1 item 6) or amber with warning sign (Figure-1 item 7).

When idle, the combo section is in the ON state while the active touch screen section is OFF. Touching the combo section will turn OFF the combo section and will turn ON the active touch screen section.

## Navigating the LCD

The LCD panel is vertically oriented with dimension of 15.66 mm wide by 62.64 mm tall with viewable resolution of 120 by 480 pixels. It supports touch and has no physical buttons. Navigating the LCD is touch based.

The interactive display in the LCD consists of a menu that contains a series of buttons arranged vertically. Each button has a text box and an optional icon. When a menu has more buttons that can fit within the viewable screen, a scroll bar (Figure-1 item 1) appears as a white line on the right side of the screen. To see more buttons to appear, you can swipe (Figure-1 item 3) the screen up or down. To select a button on the menu and display its content, press or touch the button (Figure-1 item 2).

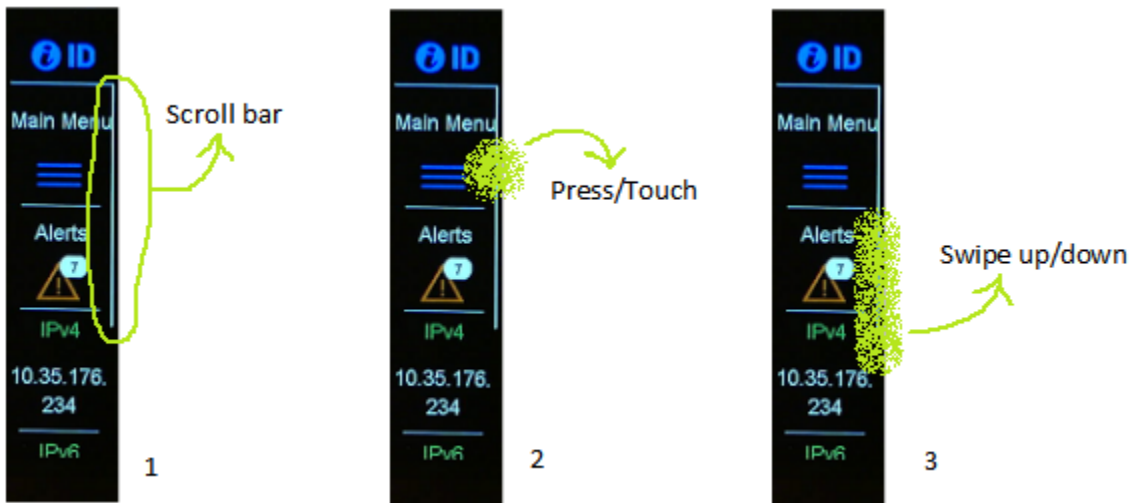


Figure 2 LCD navigation guide

As a guide, the user touch interaction in the figures in this document is depicted as a light green airbrush. Although it is seemingly located at the corner of the screen so that it does not block the button text/icon, the actual press or touch is more effective if done in the middle.

*TIP: For a more responsive swipe, lightly touch the screen, then slowly and lightly make a sliding movement.*

## Out-of-the-box initial deployment with LCD

MX7000 out-of-the-box and AC power is applied, the first time you see the LCD screen will show you the initialize wizard starting from the Select Language menu (Figure-3 item 1). See “Customizing the LCD display language” section for more info.

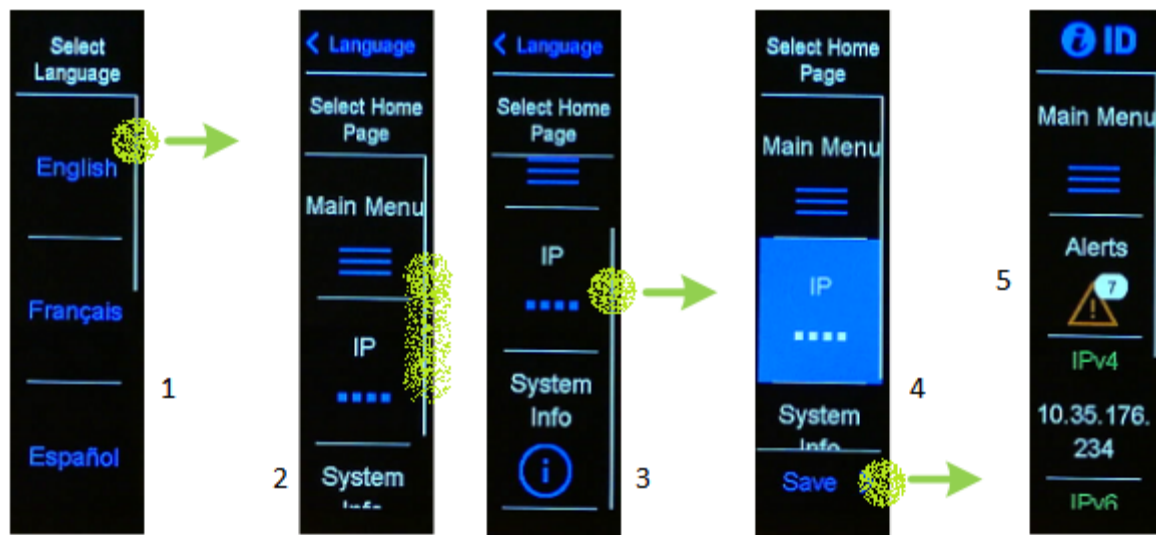


Figure 3 - Initial deployment with LCD

After selecting the LCD text language, the next menu shows you the Select Home Page (Figure-3 item 2). Swipe the screen to show more selection (Figure-3 item 3). See “Customizing the LCD home menu” section for more info. When selected, the menu button shows blue highlight (Figure-3 item 4). Press the Save button (Figure-3

item 4) for the selection to take effect. The selected Home menu (Figure-3 item 5) is displayed and the wizard is complete.

## Customizing the LCD display language

The LCD display language can be customized to a limited language selection.

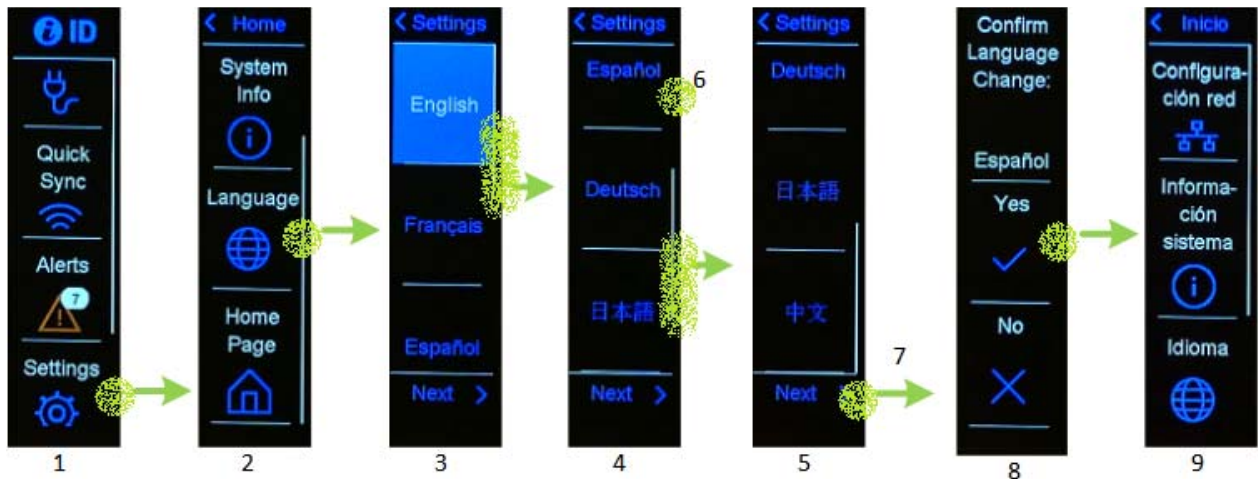


Figure 4 - Steps to customize the LCD language

From the main menu (Figure-4 item 1), select the “Settings” button. Then select “Language” button from the settings menu (Figure-4 item 2). The next menu shows you the list of available languages that the LCD display support. Swipe to scroll to view the list (Figure-4 items 3-5). Supported languages:

- English
- French
- Spanish
- German
- Japanese
- Chinese

Press to select the language of choice (Figure-4 item 6) and then press the “Next” button at the bottom (Figure-4 item 7). The next menu asks you to confirm your choice (Figure-4 item 8), it displays your selection. Making a selection takes you back to the Settings menu. Figure-4 item 9 shows you the Settings menu after selecting the Spanish language.

## Customizing the LCD home menu

The LCD home menu can be customized so that it shows the information you'd like to see first.

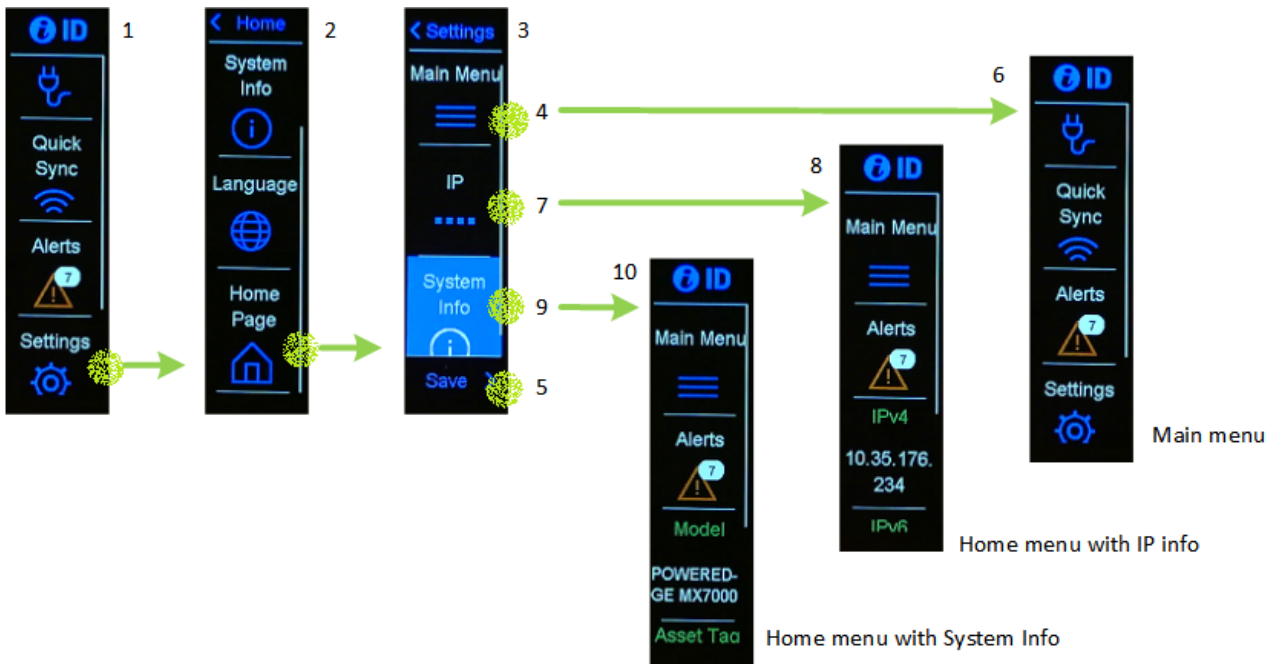


Figure 5 - Steps to customize the LCD home menu

From the main menu (Figure-5 item 1), select the “Settings” button. Then select “Home Page” button from the settings menu (Figure-5 item 2). The next menu shows you the list of available home menu types (Figure-5 item 3). Swipe to scroll to view the list.

- Selecting “Main Menu” type (Figure-5 item 4), the home menu looks like Figure-5 item 6.
- Selecting “IP” type (Figure-5 item 7), the home menu looks like Figure-5 item 8.
- Selecting “System Info” type (Figure-5 item 9), the home menu looks like Figure-5 item 10.

After making a selection, press the “Save” button (Figure-5 item 5). The selected home menu displays next.

Expanded view of home menu types

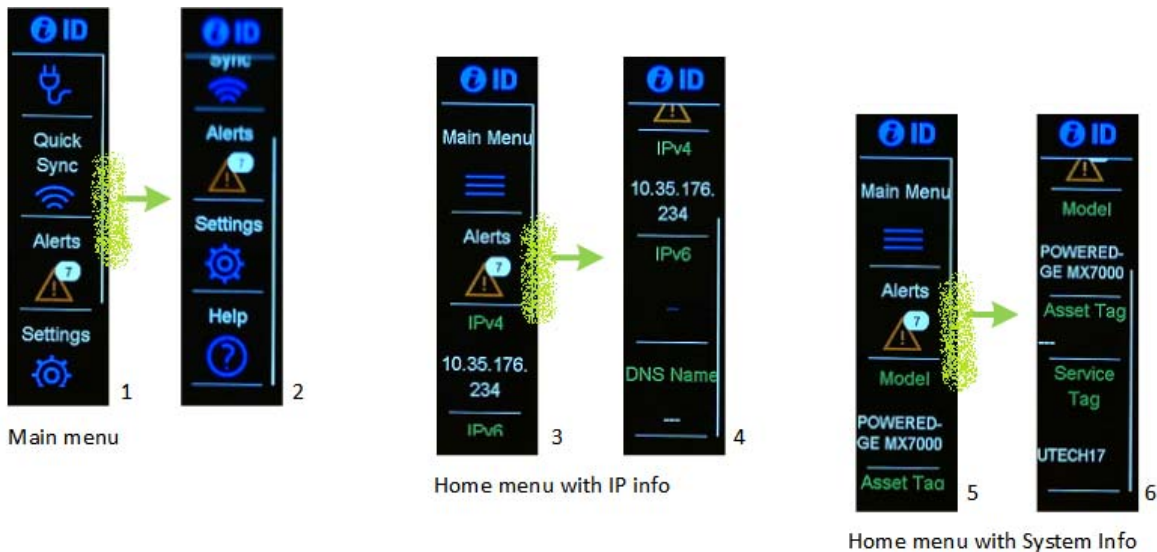


Figure 6 Different types of home menu



Figure-6 shows you what information is displayed for each home menu type.

## LCD operation modes

There are three operation modes for the LCD active touch screen. The mode cannot be changed from the LCD itself. To change the mode, go to the OpenManage Enterprise Modular GUI at Home page > Settings > Local Access Configuration > LCD > LCD Access.

### View and modify mode

The View and modify mode is the default mode where all LCD menus and functionality are operational.

### View-only mode

The View-only mode prevents configuration changes and certain LCD customization changes. In this mode, the Management Module network settings cannot be edited. The LCD language setting cannot be edited.



Figure 7 - Network settings in LCD View-only mode

In the networks setting, the “Edit” button is missing when the LCD is in View-only mode.

### Disabled mode

The Disabled mode prevents access to all menus with limited exceptions.

## Help button

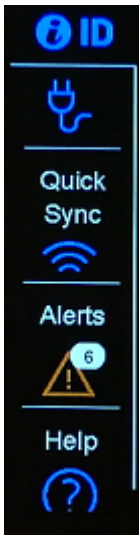


Figure 8 Home menu in LCD Disabled mode

In Disabled mode, the home menu shows a limited set of buttons:

- Identify button – can be selected and system identify feature is functional.
- Power off icon – can be selected to see informational message.
- Quick Sync – can be selected and the Quick Sync feature is functional.
- Alerts – cannot be selected. Simply shows you if there are any alerts present and the count.
- Help – can be selected to see informational message.

## Help button

Pressing the “Help” button from the Main menu (Figure-9 item 1) shows you the QR code and the URL (Figure-9 item 2) that can be used to find more information about the specific PowerEdge MX7000 chassis using its service tag.



Figure 9 - Help button

## References

- OpenManage Mobile (OMM) is a mobile device client application for systems management that supports PowerEdge MX7000. See the OMM User' s Guide for more information.
- OpenManage Enterprise Modular (OME-M) is the chassis management firmware embedded in the Management Module for PowerEdge MX7000. See the OME-M User' s Guide for more information.