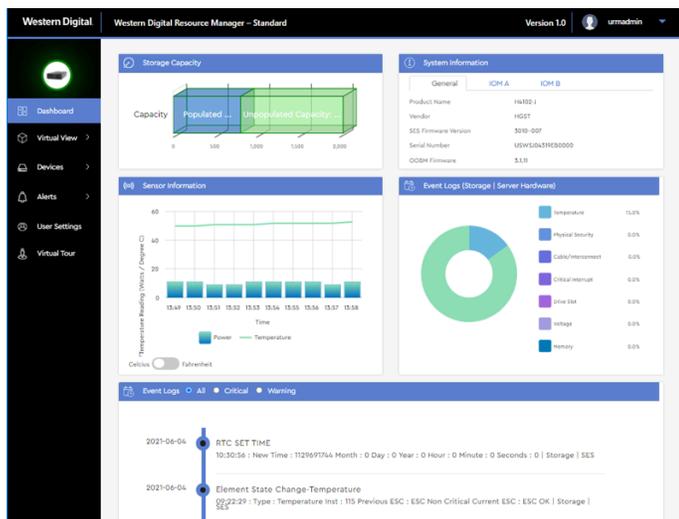


## Overview

Resource Manager Standard Edition is an in-band monitoring and management application for Western Digital hybrid storage platforms. It runs on the host operating system (Windows® or Linux®), using a RESTful interface to present a real-time status of the platform's storage health and management controls to the browser in the form of an intuitive GUI.



## Feature Highlights

- Consolidated monitoring dashboard
- Platform health at-a-glance
- Sensors view with thresholds
- Drive monitoring
- IOM firmware update
- Zoning (custom & predefined)\*
- Email alerts

## Supported Platforms

- Ultrastar® Data102
- Ultrastar Data60
- Ultrastar Serv60+8

## Dashboard

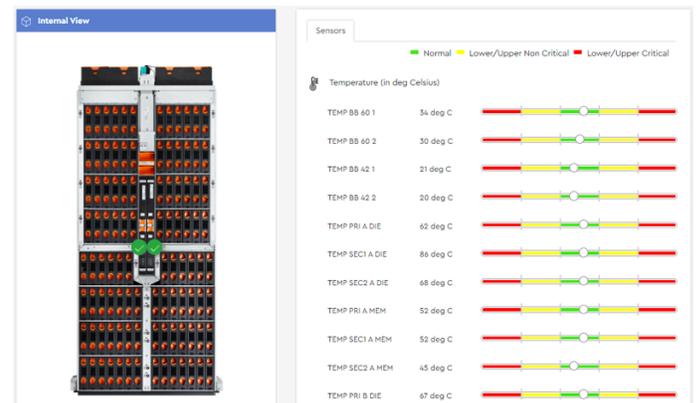
The dashboard is a consolidated monitoring page that displays the most critical platform data, such as populated/unpopulated storage capacity, system information (serial number, SEP & OOBM FW versions), IOM information (MAC & IP addresses), BMC firmware version\*\*, and the last 10 minutes of sensor readings (refreshed approximately every 60 seconds). Events are displayed in a categorized pie chart and a chronological list, filterable by severity.

\* Not applicable for Ultrastar Serv60+8

\*\* Ultrastar Serv60+8 only

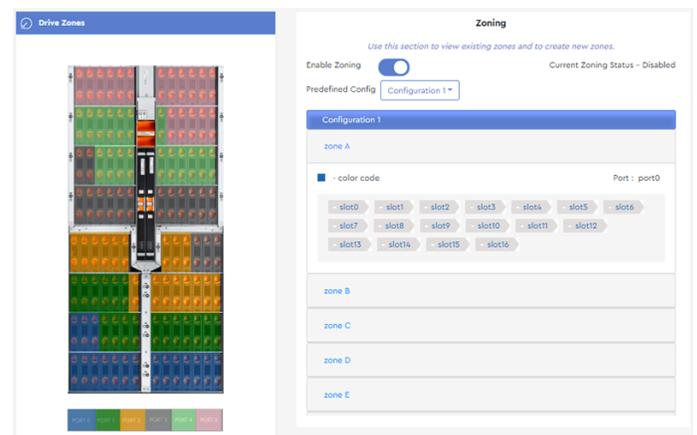
## Virtual View

Internal, front, and rear virtual views provide real-time status and sensor information for the components visible from each of these perspectives, such as drives, system fans, IOMs, and PSUs.



## Devices

The Devices section provides information and controls for the platform's major components. Visit the Drives page to check the status of all drives at-a-glance, or click a specific drive to view its general information, sensor data, and performance statistics. Use the Zoning page to select from several predefined zoning configurations, or group specific drives to create your own custom configuration. Zones and associated ports are color-coded for easy identification. Use the IOM page to upgrade firmware, reset the enclosure and/or IOMs, set/clear nicknames, and add/edit OOBM configuration details. Or visit the Sensors page to check the status and readings for all sensors in the enclosure.



## Alerts & User Settings

Use the Alerts section to set up email notifications, configure SMTP settings, check event logs, and download log files. Or configure user accounts and details such as IDs, roles, email addresses, and passwords from the User Settings section.

## General Information

Visit the Western Digital Business Support Center at <https://portal.wdc.com/s/> to download the Resource Manager Standard Edition:

1. Log in to your support account and choose the **Downloads** option.
2. Under **Identify Product**, select **Resource Manager**, your operating system, and the current version of the Resource Manager Standard Edition.
3. Under **Select Files for Download**, expand the **Documentation** and **Software Binaries** menus, and select the binary file(s) for your platform(s).
4. Under **Review & Download Files**, review your selections. If you selected more than one file, choose the desired archive file format and click **Download All**.
5. Unzip/extract the archive file to the desired directory on the host server.

For installation and use instructions, refer to the Resource Manager Standard Edition *User Guide*.

For software release notes, refer to the Resource Manager Standard Edition *Release Notes*.

## Compatible Operating Systems

Operating System	Version
Red Hat® Enterprise Linux® (RHEL)	7.6, 8.0, 8.2
CentOS	7.6, 8.0, 8.2
SUSE Linux Enterprise Server (SLES)	12 (sp3), 15 (sp1)
Ubuntu	14.04, 16.04, 18.04
Oracle® Linux	8.2
Windows Server®	2016, 2019

## Required Firmware

Firmware	Version
SEP	3010-007 or later
OOBM	3.1.11 or later

## Compatible Browsers

Browser	Version
Chrome	83.0.4103.97 or newer
Firefox	68.9.0esr (64-bit) or newer
Internet Explorer, Microsoft Edge, and Safari are not currently supported.	

## Required Software

Software	Version	Notes
Apache HTTP Server™	2.4.46	Linux only
Internet Information Services (IIS)	IIS 10	Windows only
URL Rewrite	2.1	Windows only
Python®	3.6	Windows & Linux
Python Modules:		Windows & Linux
pip	9.0.1	
Flask	1.1.2	
Flask-Cors	3.0.8	
PyMongo	3.11.0	
Requests	2.18.4	
PyJwt	2.0.1	
json2html	1.3.0	
waitress	2.0.0	
Paste	3.5.0	
Python Modules:		Windows only
pywin32	300	
psutil	5.8.0	
MongoDB™	4.4	Windows & Linux
WDDCS Tool	2.0.6.0	Windows & Linux
ipmi_utils	3.1.7	Windows & Linux for Ultrastar Serv60+8
sg_utils	1.42	Windows & Linux