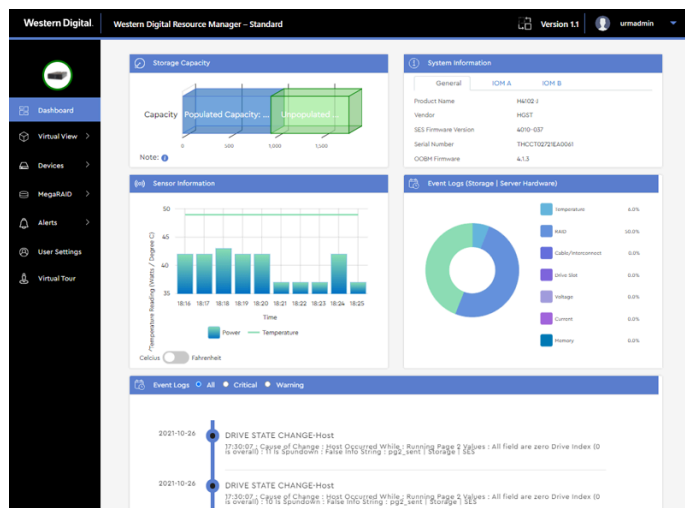


Overview

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

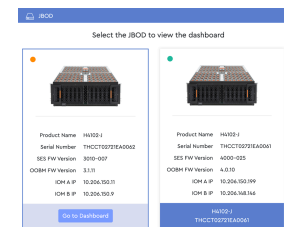
- Multiple JBOD support
- Multiple Broadcom® MegaRAID® or HBA support¹
- Virtual presence view with components & sensor status
- Drive monitoring & LED management
- Zoning configuration (custom & predefined²)
- Alerts & notifications

Dashboard

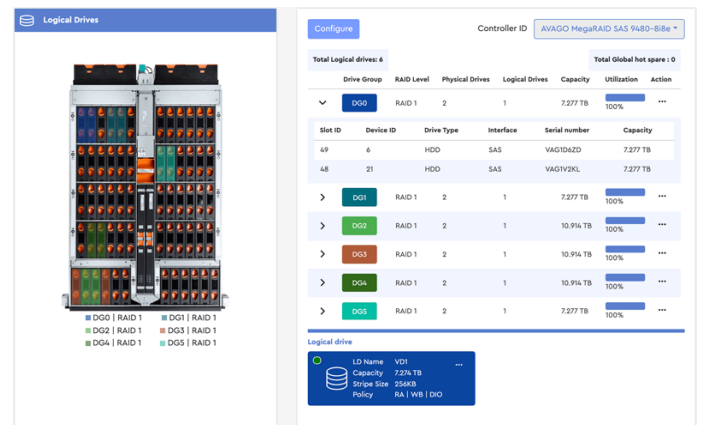
View a consolidated monitoring page displaying the most critical platform data, such as populated/unpopulated storage capacity, system information (serial number, SEP & OOBM FW versions), IOM information (MAC & IP addresses), BMC firmware version³, and the last 10 minutes of sensor readings (refreshed approximately every 60 seconds). Events are displayed in a categorized pie chart as well as a chronological list, filterable by severity.

Multiple JBODs

Manage up to four platforms of the same type⁴ with a single host in a daisy-chain configuration², or two platforms in a direct-attach configuration.

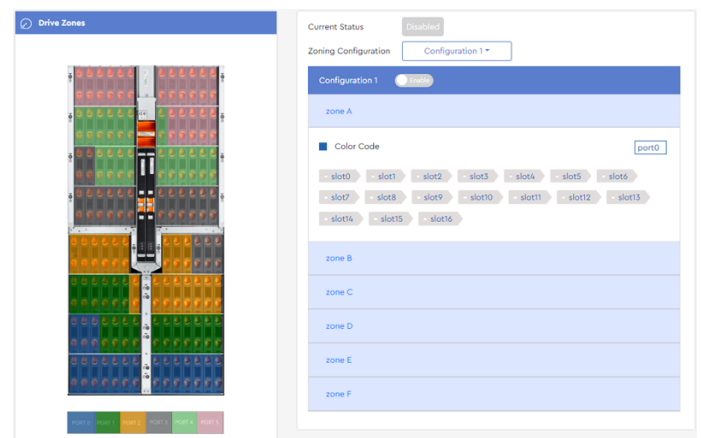


MegaRAID



Select any MegaRAID controller detected in the host, toggle from JBOD to RAID mode, view settings and information, and upgrade firmware. Group drives and hot spares, assign a RAID level, and allocate capacity to logical drives. View a consolidated listing of RAID information for each configured drive group and detailed information for associated drives.

Devices



See the health of all drives at-a-glance, or select a specific drive to view its information, sensor data, and performance statistics. Select a predefined zoning configuration, or group specific drives to create your own. Upgrade IOM firmware, reset the enclosure and/or IOMs, and configure OOBM details. Check the status, readings, and thresholds of all sensors in the enclosure.

¹ Only supported Broadcom MegaRAID controllers or HBAs.

See your platform's *Compatibility Matrix* for details.

² Ultrastar® Data60 & Data102 only

³ Ultrastar Serv60+8 only

⁴ Up to four Ultrastar Data60s or two Ultrastar Data102s

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, 8.3
CentOS	7.6, 8.0, 8.2, 8.3
SUSE Linux Enterprise Server (SLES)	12 (sp3), 15 (sp1)
Ubuntu	16.04, 18.04, 20.04
Debian	10.9
Oracle® Linux	8.2
Windows Server®	2016, 2019

Compatible Browsers

Browser	Version
Chrome	83.0.4103.97 or newer
Firefox	68.9.0esr (64-bit) or newer

Supported Platforms

Ultrastar Data102, Data60, Serv60+8

Required Firmware

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

Required Software

Software	Version	Applicable OSs & Platforms
Apache HTTP Server™	2.4.46	Linux only
Internet Information Services (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	
Flask-RESTful	0.3.9	
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 ⁵	2.1.4.0	Windows & Linux
ipmiutil	3.17	Windows & Linux for Ultrastar Serv60+8
sg_utils	1.42	Windows & Linux

⁵ Included with Resource Manager installation