FUJITSU

Introduction to
Windows Admin Center (WAC)

September 2019
Fujitsu Corporation
Version 1.0

This document provides an overview of Windows Admin Center, Microsoft's new management tool.

The information in this document is current as of September 2019. Please note that the contents are subject to change without notice.
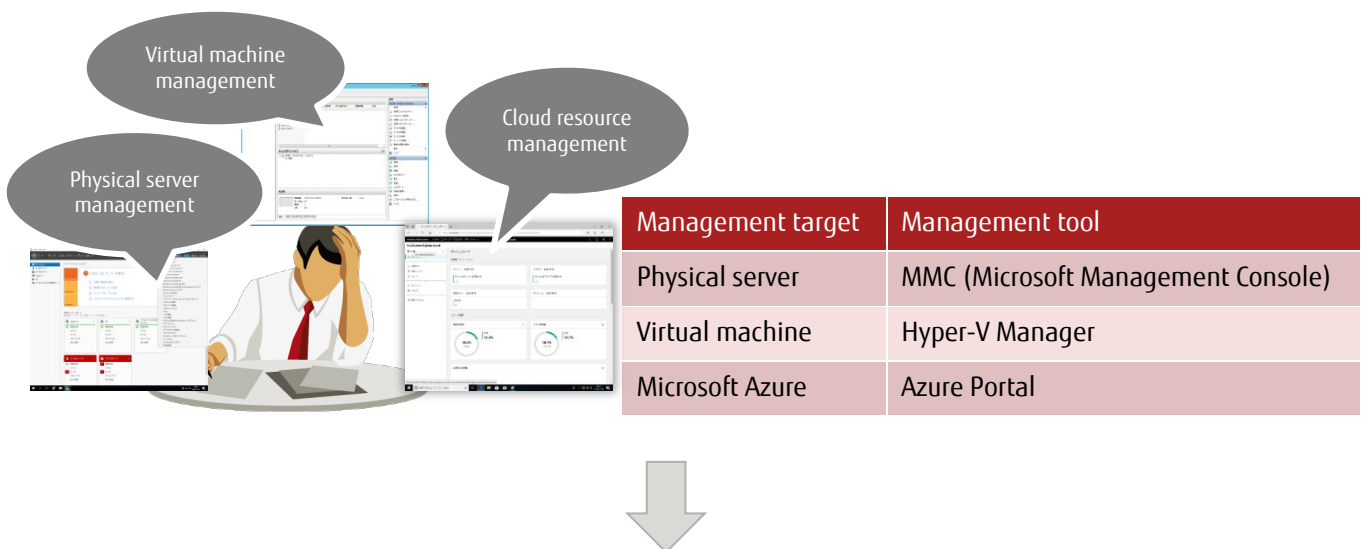
Contents

1. What is Windows Admin Center (WAC)?

Windows Admin Center (WAC) is Microsoft's new management tool that gives systems administrators full control over all aspects of server infrastructure, and enables integrated management of physical (on-premises) and cloud-based (Microsoft Azure) Windows Servers.

WAC reduces the need to use different management tools to manage different type of servers and can be used the same way on any type of server. Also, WAC contains many of the familiar tools currently used to manage Windows Servers, allowing systems administrators to operate more efficiently.

In the traditional mode of server management, systems administrators have to use different management tools for different types of servers.

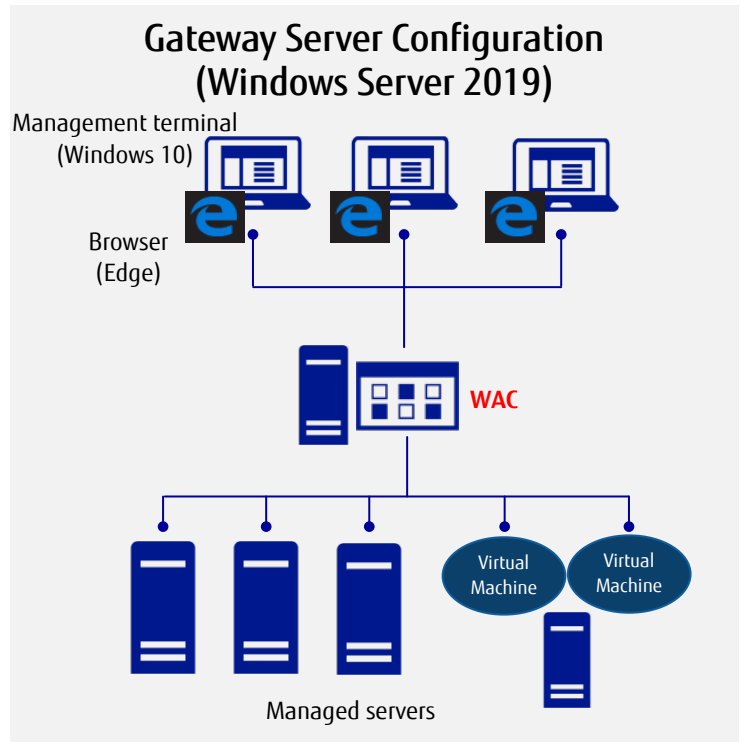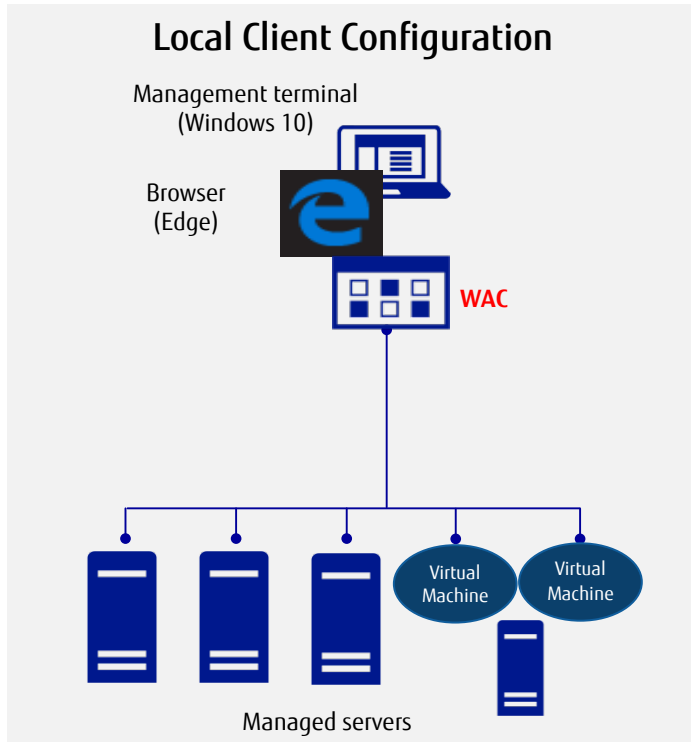| Management target	Management tool
Physical server	MMC (Microsoft Management Console)
Virtual machine	Hyper-V Manager
Microsoft Azure	Azure Portal

As an integrated management tool, with WAC it is possible to manage different types of servers, whether physical, virtual or cloud-based, reducing costs and gaining efficiency.

Management target	Management tool
Physical server	
Virtual machine	Windows Admin Center
Microsoft Azure	
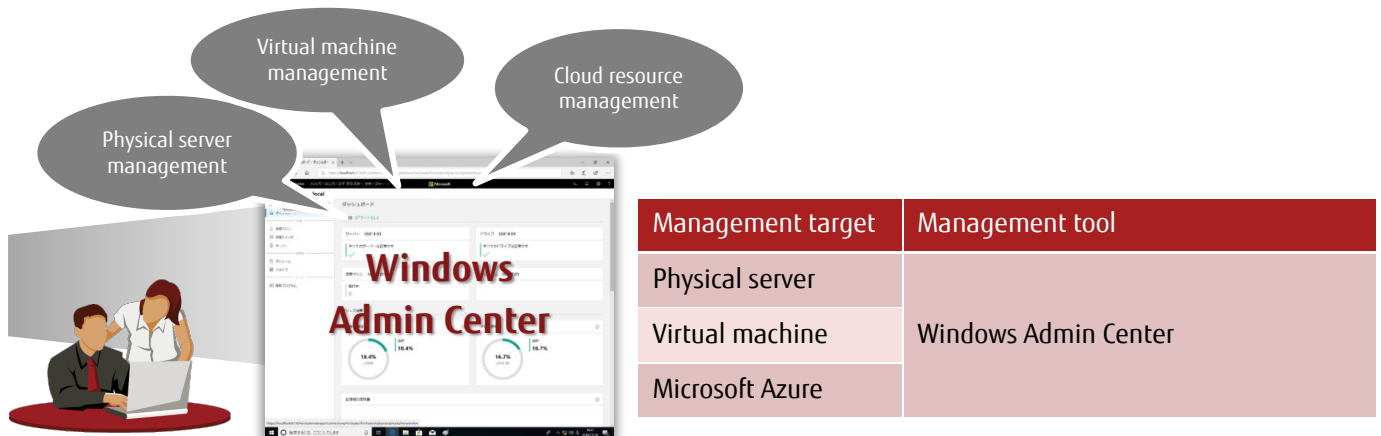
## Thus, WAC can reduce operating costs.

2. Usage and Configuration

- WAC is a browser-based management tool. The systems administrator can use Microsoft Edge to manage and operate each server with no Azure or cloud dependency.
- WAC can be downloaded from:
  https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/understand/windows-admin-center
- WAC can be used in the Local Client or Gateway Server configuration.
  - Install on Windows 10 for the Local Client, and on Windows Server 2019 for the Gateway Server.

3. Why You Should Use WAC

- WAC is the modern evolution and a successor of the traditional management tools, like Microsoft Management Console (MMC),Server Manager, Hyper-V Manager, etc.
  - According to Microsoft's policy, GUI function extensions will be developed for WAC and no longer for MMC. GUI consoles that will be offered only on WAC include:
    - Future additions to Windows Server 2019 features (Systems Insight)
    - Hyper Converged Infrastructure (HCI) features

  - After Windows Server 2019 is installed, a recommendation window with a brief explanation about WAC and a link for more details will be displayed when Server manager starts.
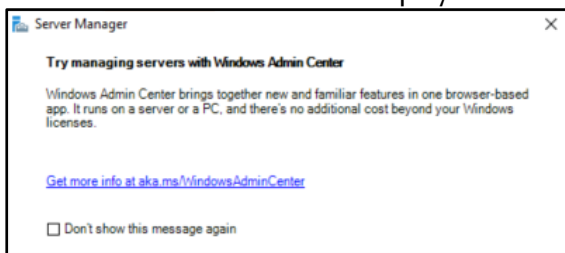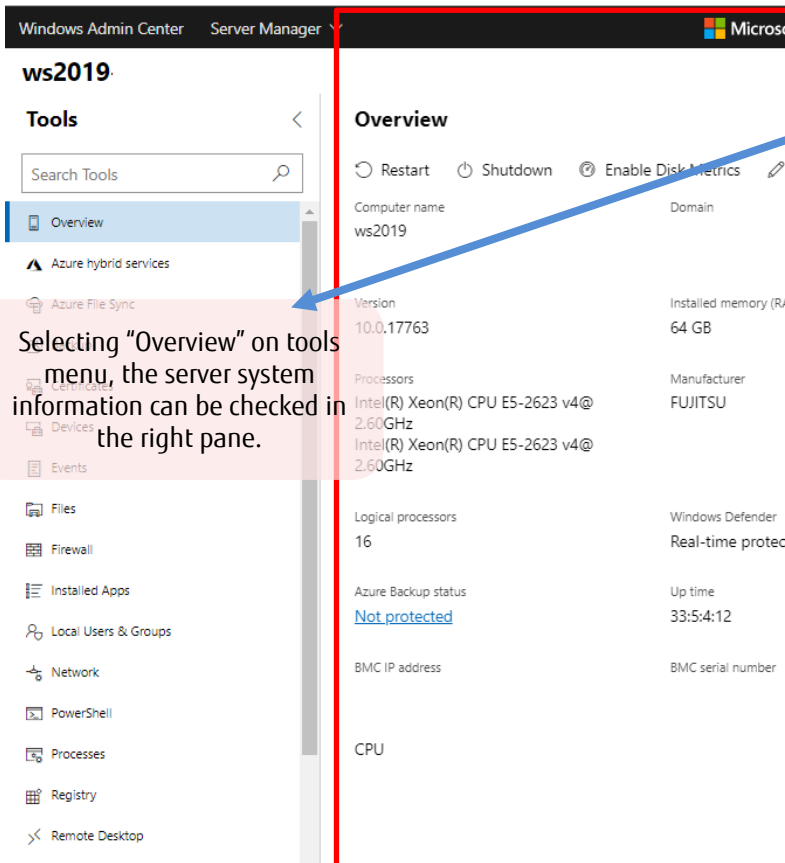

  - WAC supports all Windows Servers installation options, such as Desktop Experience with GUI, ServerCore with GUI and Container (Nano Server). And WAC enables that even though the installation options are different, they are managed in the same way.

Consider use WAC that can be installed on Windows Server 2016 or newer to improve efficiency and reduce systems operating costs.

System Center is recommended as before for Large Scale System or Fine Grained operation and management.

4. Functions Managed by WAC

■ WAC can manage various server functions according to each server configuration.

WAC's management screen (Server Manager)

Functions

Selecting "Overview" on tools menu, the server system information can be checked in the right pane.

Server Manager
- Overview
- Azure hybrid services
- Azure File Sync
- Backup
- Certificates
- Devices
- Events
- Files
- Firewall
- Installed Apps
- Local Users & Groups
- Network
- PowerShell
- Processes
- Registry
- Remote Desktop
- Scheduled Tasks
- Services
- System Insights

Failover Cluster Manager

- Overview
- Nodes
- Roles
- Updates
- Virtual Machines
- Virtual Switches

Hyper-Converged Cluster Manager

- Dashboard
- Virtual Machines
- Virtual Switches
- Virtual Networks
- SDN Monitoring

WAC will continue to be revised and manageable functions will increase in the future.
For the latest information of manageable functions, please consult:
https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/overview

5. Features

1) New features of Windows Server 2019 are available only on WAC

"Systems Insight", a new feature of Windows Server 2019, predicts and analyzes the consumption of server resources (CPU / network / storage / volume).

The current resource consumption status can be checked using PowerShell. But using WAC is possible to check the current consumption, consult the past consumption and also forecast future consumption.
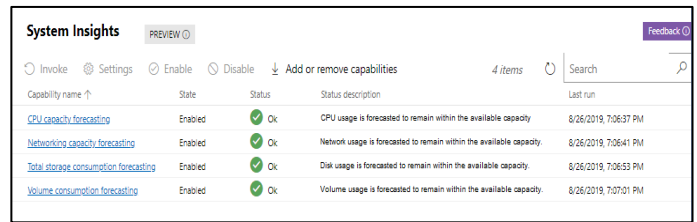
■ Status check of each resource
　　The images below show how the status check of each source is shown on WAC compared to PowerShell.

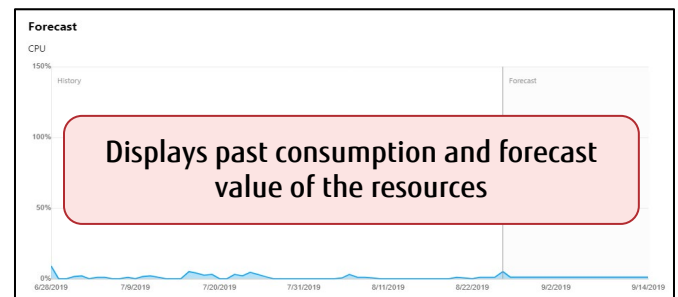PowerShell   WAC

■ Past consumption and future consumption forecast
　　The function of displaying past consumption and forecast future consumption has been incorporated on WAC.

PowerShell   WAC

No feature to display past consumption data and future consumption forecast transition

Displays past consumption and forecast value of the resources

2) Features that were previously provided with previous management tools are also easy to manage using WAC
　　For example, the maintenance of disks in the HCI (Hyper Converged Infrastructure) configuration had to be done using PowerShell commands. To replace a disk in HCI configuration, it is necessary to execute several disk status check and status change commands. On the other hand, using the WAC, disks replacement can be done by simply clicking on the status change operation while visually checking the disk status on the management screen.

HCI configuration on Windows Server 2016 Only by PowerShell

HCI configuration on Windows Server 2019 Possible to check with GUI when using WAC
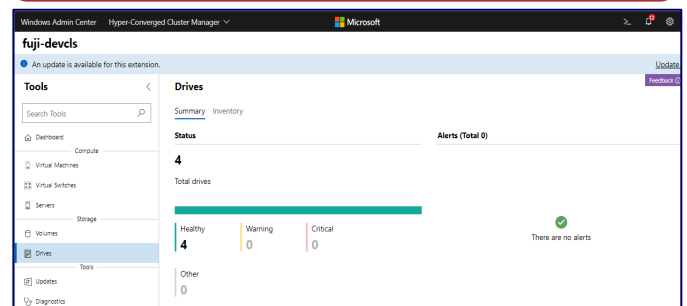
3) Microsoft Azure's functions is available on WAC (Azure hybrid services)

Deployments of Windows Server can be extended to the cloud by using Microsoft Azure hybrid services. These cloud services provide an array of useful functions.

The Microsoft Azure hybrid services tool in WAC consolidates all the integrated Microsoft Azure services into a centralized hub where you can easily discover all the available Microsoft Azure services that bring value to your on-premises or hybrid environment.

An example of Microsoft Azure hybrid services usage
➢ Possibility to manage virtual machines on Microsoft Azure

It is possible to manage Windows Server virtual machine as well as on-premises virtual machines
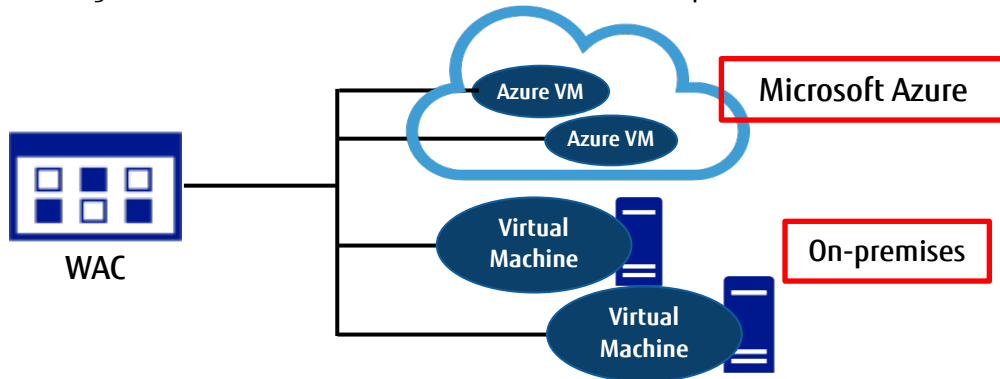
➢ Possible to link Microsoft Azure features to the on-premises environment

Functions that can be executaed in on-premises environment when using WAC	Microsoft Azure features to link
Configure on Microsoft Azure the replication protection of on-premises Hyper-V Virtual Machine	Azure Site Recovery
Schedule backup of on-premises server's system status, files and folders on Microsoft Azure	Azure Backup
Centrally manage update program distribution of Hyper-V Virtual Machine on on-premises and Microsoft Azure	Azure Update Management

For more details of the WAC and Microsoft Azure Hybrid Services, please consult:
https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/azure/

Note: To use WAC's Azure hybrid service, an Microsoft Azure subscription is required in addition to a Windows license.

6. WAC Extensions
■ **Extensions**
- WAC is built as an extensible platform where each connection type and tool is an extension that can be installed, uninstalled and updated individually. Microsoft and 3rd party developers has the ability to build tools and solutions beyond the current offerings.
- Fujitsu offers *Fujitsu ServerView Health* and *Fujitsu ServerView RAID*.

■ By using the WAC extension provided by Fujitsu, PRIMERGY / peripheral devices operation can be checked and managed with only the WAC screen.
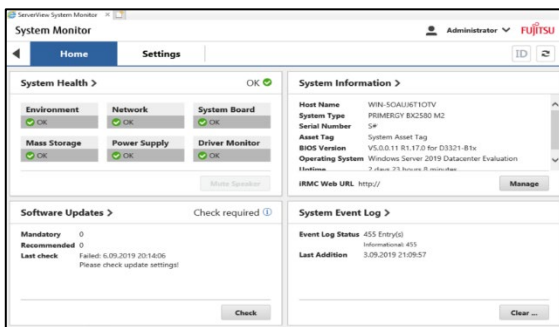
➢ Fujitsu ServerView Health

The Fujitsu ServerView Health extension for WAC uses the CIM providers of installed ServerView Agents to visualize the health of Fujitsu PRIMERGY server components within the WAC.
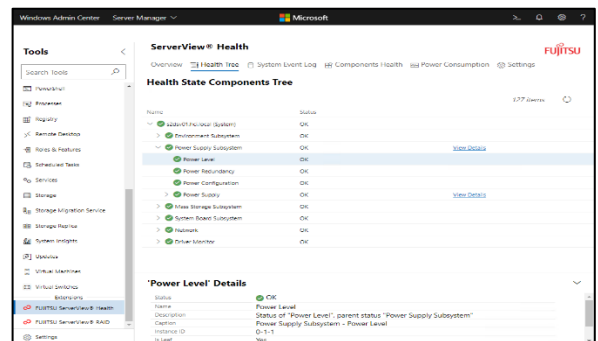
Fujitsu ServerView Health
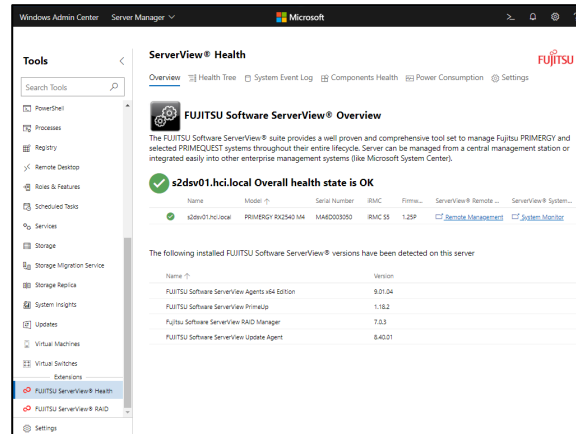
Information that require multiple maintenance tools of ServerView to be viewed (event log and hardware) can be centrally checked

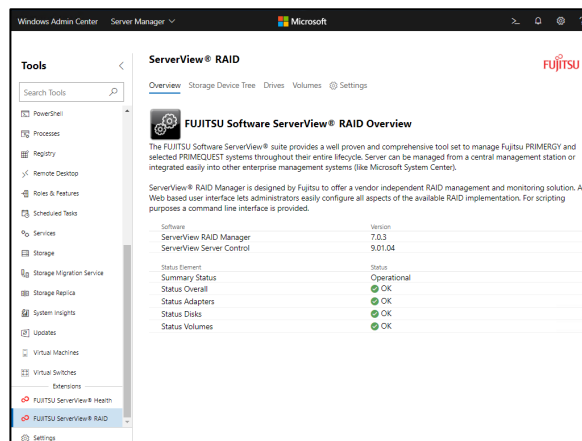## System Monitor (a feature of ServerView)

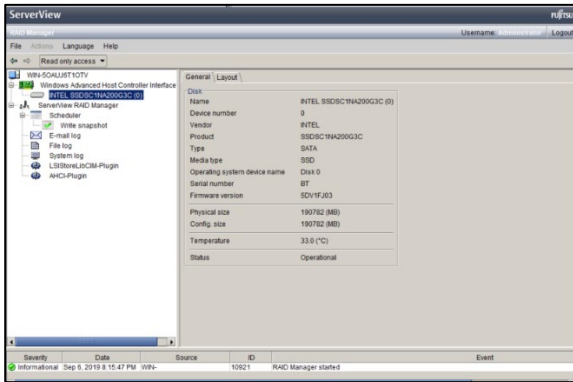## Fujitsu ServerView Health

➤ Fujitsu ServerView RAID
The Fujitsu ServerView RAID extension for WAC uses information provided by the ServerView RAID Manager to visualize the health of RAID and AHCI storage components within the WAC.
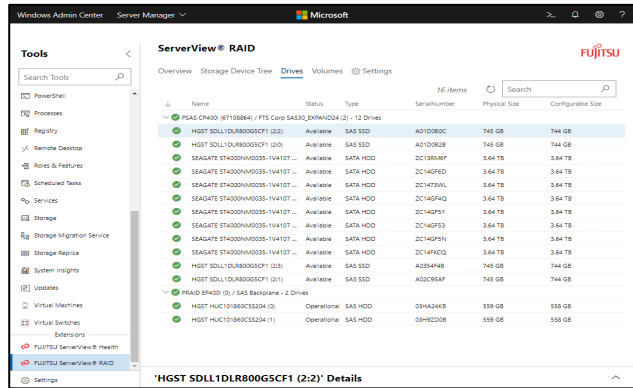
Fujitsu ServerView RAID

Information that is shown individually on ServerView RAID Manager, such as RAID cards / disks, can be checked centrally.

ServerView RAID Manager

Fujitsu ServerView RAID

- How to add extensions
  New extensions published by Microsoft and other developers can be searched, installed and updated individually without having to update the entire WAC installation. It is also possible to configure a separate NuGet feed or file share and distribute extensions to use internally within your organization.

  - Users can add extensions in the following ways:
    - Download from Microsoft's official website
      https://msft-sme.myget.org/gallery/windows-admin-center-feed
    - If the WAC is configured online, the extension can be installed from within the WAC.

  - Features installed by extensions are also available offline.

7. References

➢ **WAC's Lifecycle Policy**
- Supported based on Microsoft's latest Lifecycle Policy.

- Microsoft states that only the latest version of Windows Admin Center is serviced and supported, and users must stay current by upgrading to the latest Windows Admin Center release within 30 days of availability to remain supported.
  Please access Microsoft's official website for details.
  https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/support

➢ **If any problem occur with WAC, please access the following published information of Microsoft.**

- Windows Admin Center troubleshooting
  https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/support/troubleshooting

- Windows Admin Center known issues
  https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/support/known-issues

- Windows Admin Center Event Logging
  https://docs.microsoft.com/en-us/windows-server/manage/windows-admin-center/use/logging